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Contextual differences in the moderating effects of price consciousness and social desirability in pay-what-you-want (PWYW) pricing

Abstract

This research explores the trade-offs that customers make between different economic, social, and psychological considerations to arrive at a pay-what-you-want (PWYW) pricing decision. Specifically, it examines the differences in the moderating effects of price consciousness and social desirability on customers' PWYW pricing decisions between private and public contexts. Three empirical studies are used to test the hypotheses. The findings reveal that the internal reference price and fairness perception positively affect the PWYW prices. These effects are moderated negatively (attenuated) by price consciousness and positively (enhanced) by social desirability. Moreover, the moderating effect of price consciousness is stronger in the private context, while the moderating effect of social desirability is stronger in the public context. These findings offer novel insights on the cognitive process underlying the trade-off between economic and socio-psychological boundary conditions (i.e., price consciousness and social desirability) that drive contrasting effects on customer decision-making in PWYW pricing.

Keywords: Fairness perception, internal reference price, pay-what-you-want, PWYW, price consciousness, social desirability

1. Introduction

Pay-what-you-want (PWYW) is a participative pricing strategy under which sellers delegate full pricing control to buyers and cannot withdraw the offer irrespective of the price that buyers agree to pay. This means that buyers decide the price they want to pay with this possibly including paying nothing (Bertini & Koenigsberg, 2014; Gneezy et al., 2010; Kim et al., 2009; Kunter, 2015; Machado & Sinha, 2012; Roy, 2015). Customers perceive PWYW pricing as being fairer and more satisfactory, as they play an active role in deciding the prices (Haws & Bearden, 2006). This helps to attract a wider range of buyers including price-sensitive customers who would otherwise be priced out of the market (Kim et al., 2009). Although buyers can choose to pay nothing under PWYW pricing, they rarely do so due to various social considerations, such as concerns about social disapproval (Kim et al., 2014a), social distance from the seller (Kim et al., 2014a; Kunter, 2015), and managing their self-impression in the presence of others (Roy et al., 2021).

Customers' decisions in PWYW pricing are guided by many possibly competing considerations (Roy, 2015), including a diverse range of variables: economic (e.g., internal reference price), psychographic (e.g., fairness perception), social (e.g., altruism), and situational (e.g., loyalty and satisfaction) (Kim et al., 2014a; Kim et al., 2009). For example, price-conscious customers may prefer paying lower prices to maximize their economic benefits, but this may incur the social cost of being embarrassed if they are seen to be miserly or unfair. Hence, customers are likely to make their pricing decisions by trading off the relative importance of the economic, social, and psychological implications of these decisions (Ashworth et al., 2005). However, past PWYW studies mainly focus on the direct effects of the relevant variables and ignore the complex interactive cognitive mechanism that may drive the trade-off involved in making PWYW pricing decisions. Thus, it is still not clear how do customers balance the competing economic (e.g., internal reference price, price

consciousness), social (e.g., social desirability) and psychographic (e.g., fairness perception) considerations in the context of PWYW pricing and the moderating impact of these variables on each other's effects (Roy et al., 2016a, 2016b).

Specifically, customers' concerns about social approval and management of their self-impression may vary based on whether they are in a private or public context, as they are likely to be apprehensive about what others may think of their observed behavior (Ariely et al., 2008). Customers usually behave more pro-socially in public than in private, showing less price sensitivity and a willingness to pay more (Andreoni & Petrie, 2004; Wakefield & Inman, 2003). These observations indicate that customers' PWYW pricing decisions may involve a complex cognitive process of making trade-offs between competing economic, social, and psychographic considerations with possibly significant variations between private and public contexts. However, existing research is largely silent about this cognitive process and the differences between private and public contexts, which we address in this study.

Past research shows that complete freedom to pay any price under PWYW pricing may attract price-conscious customers to buy the products or services being offered (Roy, 2015). Once inside the PWYW environment, the internal reference price and fairness perception are two widely reported variables that influence customers' pricing decisions (Kim et al., 2009; Roy et al., 2016a, 2016b). In line with adaptation-level theory (Helson, 1964), customers adapt to the given environment and judge the environmental stimuli in relation to their internal standard: in doing so, they adjust their internal standard (i.e., the internal reference price) in relation to the given environmental or price-related cues (Alford & Biswas, 2002; Campo & Yagüe, 2007). This indicates that the direct effect of the internal reference price on customers' PWYW decisions is likely to be moderated by other variables in the environment. Likewise, the direct effect of customers' fairness perceptions on their PWYW decisions may depend on social norms (Xia et al., 2004) and the relative importance of competing economic

and socio-psychological considerations (Ashworth et al., 2005), thus indicating that these considerations have possible moderation effects on decision making by customers.

Therefore, the primary purpose of this research is to offer better insight on customers' cognitive process of trading off between competing economic and socio-psychological interests while arriving at a PWYW pricing decision. The current research also examines if price consciousness and social desirability interact with customers' internal reference price and fairness perception while they are deciding what PWYW price they will pay. We focus on social desirability, a relatively stable customer trait that influences customers' decisions in a more enduring manner compared to their self-image and social image (Adams et al., 2005). Although price-conscious customers are likely to have a lower internal reference price due to their intrinsic motivation to pay low prices (Bell & Lattin, 2000), we argue that this utilitarian consideration involves a social cost as it may create a negative social impression as indicated by impression management theory (Tedeschi, 1981).

These two interacting variables (price consciousness and social desirability) have a contrasting impact on customer decision making, wherein customers enact a trade-off mechanism to arrive at a PWYW pricing decision. This is based on prior work suggesting that individual difference variables can indeed act as moderators in psychology and pricing decisions (Alford & Biswas, 2002; Borkenau & Ostendorf, 1992). This research also examines the differences in the moderating effects of price consciousness and social desirability in a private context compared to a public context. We propose a parsimonious model with these moderation effects and test our hypotheses using three empirical studies.

We begin this paper by reviewing the relevant extant literature to develop the conceptual framework and specific hypotheses to be tested. We then describe the three empirical studies used to test these hypotheses. Study 1 uses a survey of undergraduate students in a classroom using hypothetical scenarios to represent a private setting, while Study 2 uses a survey with

customers after their actual dining experience in a restaurant using PWYW pricing to represent a public setting. These studies provide mixed evidence about the moderating effects of price consciousness and social desirability on the impact of the internal reference price and fairness perception on PWYW prices. Finally, Study 3 uses an online experiment with members of an online customer panel to manipulate the social context (private vs. public) and social desirability (low vs. high) to directly test all our hypotheses. Finally, we discuss our findings, their conceptual contributions, and managerial implications along with some limitations of the study and avenues for future research.

2. Theoretical background and hypotheses

Past research explores the influence of many social, psychographic, and economic variables that serve as antecedents or moderators of PWYW pricing decisions. These include altruism, price consciousness, fairness perception, income, loyalty, satisfaction and internal reference prices (Kim et al., 2009); shared social responsibility (Gneezy et al., 2010); social distance and external reference prices (Kim et al., 2014a); anticipated guilt and shame (Kunter, 2015); involvement (Roy, 2015); product knowledge and perceived quality (Weisstein et al., 2016); social desirability (Roy et al., 2016a); social visibility and purchase motivation (Roy et al., 2016b); types of involvement, perceived crowding, and time pressure (Sharma et al., 2020).

Most past studies explore the direct impact of these factors on prices actually paid by customers under PWYW pricing or on their willingness to pay (WTP), based on the allocation of internal reference prices to either of these two dependent variables. When making a payment in a PWYW setting, customers pay greater attention on the self in the presence of others which makes them anchor the price they are willing to pay, based on their internal reference price (Roy et al., 2021). Extant research in economics (e.g., Fehr & Schmidt, 1999; Rabin, 1993) and PYWY pricing (e.g., Kunter, 2015; Kahsay & Samahita, 2015) shows that customers are strongly motivated by concerns of fairness. Thus, the internal

reference price and fairness perception are the two essential factors that directly influence customers' PWYW pricing decisions. We next further discuss the direct effects of these two factors on customers' PWYW pricing decisions.

2.1 Internal reference price (IRP) and fairness perception (FP)

The internal reference price (IRP) is like an internal compass that resides in customers' memories and is shaped by actual, fair, or other price concepts (Garbarino & Slonim, 2003; Lowengart, 2002). It is different from the external reference price (ERP) which is based on actual price stimuli available in the retail environment (Mazumdar & Papatla, 2000; Mazumdar et al., 2005). In this context, seminal experiments by Thaler (1985) and their replication by Ranyard et al. (2001) show that, in the absence of an ERP, the IRP has a significant effect on prices paid by customers and is considered an immediate antecedent to pricing outcomes. In PWYW pricing, the absence of an ERP leads to customers relying on their IRP to arrive at pricing decisions (Kim et al., 2009). Extant research confirms the positive influence of the IRP on prices paid by customers in PWYW settings (Kim et al., 2014b; Kunter, 2015; Roy, 2015; Roy et al., 2016a). Roy et al. (2016a) show the IRP's mediating role on the influence of altruism, social desirability, and price consciousness on customer attitudes, future intentions, and willingness to pay. They assume that the IRP is a malleable endogenous factor that can be shaped by other customer traits; however, the cross-sectional design of their study prevents a rigorous test of this assumption.

Fairness perception is a judgment of whether an outcome or the process to reach the outcome is reasonable and/or acceptable (Bolton et al., 2003). It involves a cognitive process of comparing an outcome with another comparative outcome or a pertinent standard and/or norm (Xia et al., 2004). Accordingly, in the case of price fairness, the outcomes to be compared are prices, where the price being judged is compared to the price in the reference transaction to decide if the price is fair or unfair. Dorn and Suesmair (2017) mention that,

although customers' PWYW pricing decisions often depend on their cognitive process involving the IRP and whether it covers the cost of producing and selling the product, they also intend to be fair to the company. In PWYW pricing, fairness perception is an important driver of WTP as customers have full control over the prices they pay (Kim et al., 2009). Chung (2017) mentions that customers' perceptions of price fairness play an important role in PWYW decisions when the following factors are available: quality of the product/service, self-image, satisfaction, communication message, face-to-face interactions, and suggested prices. Extant research shows empirical evidence that fairness perception positively impact the PWYW prices paid by customers (e.g., Kahsay & Samahita, 2015; Kunter, 2015). However, Kim et al. (2009) find mixed results with a significant positive impact of fairness on PWYW pricing only for theatre tickets and not for restaurants and hot beverages.

In this research, we extend the above lines of argument relating to the direct effects of the IRP and fairness perception. We argue that customers' IRP is flexible and involves subjective adjustments influenced by various contextual factors (Kalyanaram & Winer, 1995; Thaler, 1985). Customers adapt to the given context and tend to adjust their internal benchmark for a product's price (Alford & Biswas, 2002; Campo & Yagüe, 2007). This is in line with Nieto-García et al. (2017) who find a non-linear quadratic effect of the IRP on customers' WTP: with the IRP price increasing, WTP increases at an increasing rate until it reaches a threshold, after which customers' WTP increases at a decreasing rate.

Similarly, customers like to ensure a fairness equilibrium and to reciprocate by participating in an equitable relationship, depending on the social context (Kunter, 2015), to avoid cognitive dissonance associated with participating in an unfair transaction (Kim et al., 2014a; Marett et al., 2012). These findings clearly indicate that the direct effects of the IRP and fairness perception on customers' PWYW price decisions are likely to be influenced by other socio-psychological and contextual variables. We shed light on this by exploring the

differences in the moderating effects of a social variable (social desirability) and an economic variable (price consciousness) on how the IRP and fairness perception influence PWYW pricing decisions. We also consider the social context to be the third variable and examine whether the moderating influences of price consciousness and social desirability vary between private and public contexts.

2.2 Price consciousness (PCO) as a moderator

Price consciousness (PCO) is defined as an intrinsic motivation to seek lower prices (Alford & Biswas, 2002; Lichtenstein et al., 1988). Price-conscious customers have a lower threshold for price acceptability (Ofir, 2004), are more likely to buy on sale, and have a “lower price is better” attitude (Lichtenstein et al., 1988; Ofir, 2004). Price consciousness (PCO) is an inherent motivation to look for lower prices (Alford & Biswas, 2002; Bell & Lattin, 2000); however, these customers may pay higher prices if they see value in a product offering (Roy, 2015). Past research supports the view that price-conscious customers may prefer a price deal not only for financial incentives but also for other socio-psychological incentives, such as the inference that they are smart shoppers (Schindler, 1998) or enjoyment of the hedonic benefits (e.g., pride and entertainment) associated with lower prices (e.g., Chandon et al., 2000; Honea & Dahl, 2005). A guaranteed low price may be signaled to price-conscious customers by PWYW pricing, and they may be able to verify its attractiveness and enjoy associated hedonic benefits, such as pride and entertainment (Alford & Biswas, 2002).

Lichtenstein et al. (1988) mention that price-conscious customers may not always prefer to pay the lowest available price but do so only when expensive alternatives cannot be justified. In this context, customers generally use their IRP as an anchor for their WTP (Soule & Madrigal, 2015; Chao et al., 2015) and then decide upon the price by considering the given environmental factors (Garbarino & Slonim, 2003). This cognitive process is influenced by customers’ level of price consciousness (Roy, 2015). Therefore, we argue that price-

conscious customers may show a much greater tendency to rely on their IRP for this comparison, especially in PWYW pricing and in the absence of any external reference price (ERP). Based on this, we hypothesize as follows:

H1a. Price consciousness (PCO) negatively moderates (weakens) the positive effect of the internal reference price (IRP) on the PWYW prices (WTP), such that the effect of the IRP on WTP is weaker (stronger) for high (low) price-conscious customers.

As we next argue, PCO may also explain the mixed findings about the influence of fairness perception on the PWYW prices that customers are willing to pay. For example, Kim et al. (2009) find no main effect for either fairness perception or PCO for the restaurant and cinema categories in their study. Similarly, Marett et al. (2012) do not find a main effect of either fairness perception or PCO on the prices paid by participants. To explain these inconclusive results, we return to the conceptualization of fairness perception, finding that price fairness judgment stems from consideration of how the seller determines the price and whether the price is affordable to everyone, particularly with reference to the importance of the respective product exchange (Maxwell, 1995). This indicates that customers rely on their beliefs about the respective exchange norms and refine their price fairness judgments based on the given situation in which the exchange is happening (Xia et al., 2004). We posit that the effect of fairness perception on customers' PWYW pricing decisions is likely to depend on their levels of PCO and the social context in which customers make their pricing decisions.

In other words, buyers' fairness perception could be challenged by their motivation to seek lower prices, especially due to the uncertainty inherent in PWYW pricing, as customers must decide their own prices (Machado & Sinha, 2012). Prior research also shows that when faced with uncertainty, customers may demonstrate higher price sensitivity and less favorable pricing decisions (Erdem et al., 2002), a finding replicated in PWYW pricing research by Roy (2015). We argue that, in addition to the above, the motivation to save money and the

resulting positive emotions (e.g., pride and enjoyment) may also loom larger in comparison to the negative emotions that may arise from the incongruent social goals associated with paying low prices. Accordingly, we hypothesize as follows:

H1b. Price consciousness (PCO) negatively moderates (weakens) the positive effect of fairness perception (FP) on the PWYW prices (WTP), such that the effect of fairness perception (FP) on WTP is weaker (stronger) for high (low) price-conscious customers.

2.3 Social desirability (SD) as a moderator

Social desirability (SD) is a consumer trait described as a need to gain social approval via culturally acceptable and appropriate behavior (Adams et al., 2005, Marlow & Crowne, 1961). When a behavior is prosocial, many psychological barriers get in the way and customers may feel social pressure to inflate their desirable traits (Fisher, 1993; Jang & Irwin, 2021). Customers are often motivated to convey a desirable impression to others to avoid losing social approval and to enhance their self-image through consuming products and services, the consumption of which is guided by social norms (Kastanakis & Balabanis, 2012). Thus, social desirability contributes to a good impression and self-enhancement (Ones et al., 1996). Customers with lower knowledge about prices try to guess prices more accurately as they are driven by social desirability motives (Damay et al., 2011). Similarly, customers who redeem coupons can convey an impression of cheapness which might lower the coupon user's social desirability in the eyes of an observer (Ashworth et al., 2005). Social desirability thus seems to be an underlying motive guiding customers' pricing decisions.

Past research shows that customers may use pricing as a tool for impression management in PWYW pricing, by paying higher than normal prices, to avoid being seen as poor or cheap. (Lynn, 1990; Lynn et al., 2013). Further, current research posits that prosocial behaviors such as making donations are best captured by direct measures such as asking people how much they want to donate (Jang & Irwin, 2021). Kunter (2015) reports similar findings, with

customers paying higher prices in a PWYW setting to avoid being seen as selfish or unfair, and to avoid the feelings of shame or guilt associated with paying lower prices. We extend this line of argument by focusing on a more nuanced role of social desirability – its moderating role in the direct effects of the IRP and fairness perception on WTP. Based on extant literature (Jang & Irwin, 2021), we think WTP is a direct measure of people’s prosocial behavior in the context of PWYW payments. Under PWYW pricing, although the IRP acts as an anchor towards WTP in the absence of any explicit pricing cue (Kim et al., 2009), eventually prices paid by customers are likely to be influenced by the perceived importance of projecting an image or the importance of behaving in a socially approved manner. In such a situation, the flexible nature of customers’ IRP and its subjective adjustments (Kalyanaram & Winer, 1995; Thaler, 1985) reflect their desire to behave in a socially approved manner or the importance that they attach to this behavior.

Besides, in line with adaptation-level theory (Helson, 1964), customers may adapt their IRP based on given environmental cues, such as gaining social approval. Mak et al. (2015) find that social interaction, such as communication between customers before payment, contributes to establishing a norm and fostering social influence on customers’ cognitive mindsets which are eventually reflected in their higher payments. Similarly, reference prices can be influenced by types of ego-centric bias, such as the “spotlight effect” (Roy et al., 2021). Moreover, if customers are experiencing difficulty in determining an appropriate price in PWYW pricing, they may even prefer an alternative low fixed-price option to avoid a negative image (Gneezy et al., 2014). Therefore, social desirability may become a strong incentive for customers when adapting their IRP in the PWYW environment (Ariely et al., 2008; Santana & Morwitz, 2011) and eventually they may end up paying more. Therefore, **H2a.** Social desirability (SD) positively moderates (strengthens) the positive effect of the internal reference price (IRP) on the PWYW prices (WTP), such that the effect of the IRP on

WTP is stronger (weaker) for customers with high (low) social desirability (SD).

As we next argue, social desirability may strengthen the impact of a pro-social motive, such as fairness perception, based on social sciences experiments on dictator games in which fairness considerations and social desirability influence the allocation of a fixed sum between giver and receiver (Franzen & Pointner, 2012, 2013). In other words, participants in these games share resources for reasons of social desirability and reciprocation in addition to pro-social motivations. Hence, researchers argue that prices paid in PWYW pricing may also be driven by norms of reciprocity and pro-social motivations, such as fairness perception and altruism (ALT) (Kim et al., 2009). Research also confirms that social desirability may combine with ALT and PCO to affect the prices that customers are willing to pay in a PWYW setting (Roy et al., 2016a). In addition, Dorn and Suessmair (2017) find that customers' WTP PWYW prices significantly increases when they engage in face-to-face interaction while paying and when the level of social interaction during payment is visible to a third party. Recent findings show that types of ego-centric bias and the presence of others can influence PWYW prices (Roy et al., 2021; Viglia & Abrate, 2014). We extend these lines of research by arguing that social desirability may not only have a direct impact on customers' PWYW pricing decisions, but it may also enhance fairness perception's impact by strengthening customers' pro-social motivations and their exposure to reciprocity norms. Their motive to signal fairness to others may induce them to pay more (Andreoni & Bernheim, 2009). Hence, **H2b.** Social desirability (SD) positively moderates (strengthens) the positive effect of fairness perception (FP) on the PWYW prices (WTP), such that the effect of FP on WTP is stronger (weaker) for customers with high (low) social desirability (SD).

2.4 Social context (private vs. public) as a moderator

Past research argues that individuals' adherence to distributive justice is influenced by their concern for the impressions they make on themselves, namely, their self-image, and on

others, that is, their social image (Greenberg, 1983). Self-image refers to how an individual sees himself/herself; on the other hand, social image connotes how a person likes to be seen by others (Sirgy, 1982). Both self-image and social image may work simultaneously (Malär et al., 2011; Rabbanee et al., 2020) despite differences in their purpose. These findings indicate that customers' impression-making efforts are likely to be driven by their self-image motive (privately) and their social-image motive (publicly). In PWYW pricing, past studies reveal inconsistent findings with a positive effect (Kim et al., 2009), a negative effect (Gneezy et al., 2012), or even no effect (Machado & Sinha, 2012) of social visibility (i.e., private and public) on PWYW pricing decisions. In addition, it is still unknown how customers make a PWYW decision when the two contrasting effects of economic and social considerations interact with the given setting, that is, the private context vs. public context.

Customers become “less price sensitive in social consumption situations” and “less likely to select the lowest priced alternative in the presence of others due to perceived negative connotations, such as being perceived as “cheap” or unable to afford the higher priced alternatives” (Wakefield & Inman 2003, p. 206). One PWYW study shows that customers allocate a higher share of their IRP to the prices they are willing to pay, under the influence of intrinsic motivations in private (for self-image) than in public (for social image) (Roy et al., 2016b). Therefore, we hypothesize that price consciousness (PCO), as an intrinsic motivation (Alford & Biswas, 2002), would have a stronger effect in private than in public, as follows:

H3. The negative moderating influence of price consciousness (PCO) on the effects of (a) internal reference price (IRP) and (b) fairness perception (FP) on the PWYW prices (WTP) is stronger in private (vs. public) context.

Past research shows that people's altruistic behavior is influenced by whether they are seen by others while doing a good deed as they are concerned about how others may think about and evaluate their behavior (Ariely et al., 2008). For example, studies on the role of

confidentiality and anonymity in charitable events show that people donate more money when others can see them (i.e., public) than otherwise (i.e., private) (Andreoni & Petrie, 2004; Soetevent, 2005). Even in PWYW pricing, social visibility (i.e., face-to-face interaction with the seller) makes customers pay non-zero prices as they conform to social norms and do not want to appear cheap (Kim et al., 2009). In this context, one PWYW study shows that a higher proportion of customers' IRP is allocated to the prices they are willing to pay when under the influence of extrinsic or altruistic motivations in public than when in private (Roy et al., 2016b). Therefore, we posit as follows that social desirability as an extrinsic motivation (Marlow & Crowne, 1961) would have a stronger impact in the public context (for social image) than in the private context (for self-image):

H4. The positive moderating influence of social desirability (SD) on the effects of (a) the internal reference price (IRP) and b) fairness perception (FP) on the PWYW prices (WTP) is stronger in a public (vs. private) context.

Figure 1A presents the conceptual model with all the hypotheses. We ran three studies to test the hypotheses and Figure 1B shows how the three studies relate to each other.

< Insert Figure 1A and Figure 1B about here >

3. Study 1 – Student survey (Private context)

3.1 Sample and procedure

We used a self-administered structured questionnaire, with hypothetical scenarios about a PWYW restaurant, to collect data from 300 undergraduate students (average age of 21 years; 57% male). About half the participants earned a monthly income between one and two thousand Australian dollars per month and 42% less than one thousand Australian dollars per month. We used hypothetical scenarios in this study as ethical concerns would have been raised by any negative impact of this research on a real firm's revenues or profits (Johnson & Cui, 2013). Furthermore, hypothetical scenarios have been employed in recent PWYW

research (Viglia et al., 2019). We chose university students as they are frequent customers of food and beverage outlets and they frequently participate in these research settings (Machado & Sinha, 2012). Moreover, PWYW prices that students are willing to pay are significantly different from those paid by the general population (Roy, 2015; Roy et al., 2016a, 2016b).

The survey questionnaire described a PWYW restaurant that offers good food in a nice ambience without charging customers a fixed price, allowing customers to pay any amount of money for the food they eat (Viglia et al., 2019). Participants were asked to imagine that they had dined at this restaurant and were satisfied with the food, ambience, and service. Next, they recorded the price they would be willing to pay for a meal in this restaurant (their WTP) and the price for a similar meal at a similar restaurant (internal reference price [IRP]). Reporting their own prices individually in the absence of other customers would be akin to private consumption (e.g., shopping alone) as prior research suggests that such consumption behavior is unlikely to be influenced by social forces (Wakefield & Inman, 2003). Finally, participants responded to question items relating scales for fairness perception, price consciousness, social desirability, altruism, and product involvement, as well as their demographic information such as gender, age, and monthly income.

3.2 Measures

This study used a 3-item price consciousness scale (Donthu & Gilliland, 1996); a 5-item social desirability scale (Hays et al., 1989); a 5-item altruism scale; and a 1-item fairness perception scale (Kim et al., 2009; Bergkvist & Rossiter, 2007; Das & Roy, 2019), all of which used 7-point Likert scales (1 = strongly disagree to 7 = strongly agree); and product involvement (PI) measured with a 9-item semantic differential scale (Zaichkowsky, 1985).

3.3 Data analysis

We began by testing the measurement model using confirmatory factor analysis (CFA) with AMOS (v.22.0) software to assess the psychometric properties of all scales (Anderson &

Gerbing, 1988). The measurement model shows a close fit ($\chi^2 = 425.53$, $df = 188$, $\chi^2/df = 2.26$, CFI = .93; NFI = .90, TLI = .92, RMSEA = .055, SRMR = .049) with the values of all the indices better than their recommended cut-off values (Hu & Bentler, 1999). All parameter estimates are high ($> .60$) with significant loadings ($p < .001$) on their respective factors, except one item for price consciousness, one for social desirability, and three for product involvement, all of which were dropped due to low factor loadings. All scales also have high average variance extracted (AVE) values (.51 to .64) and composite reliability values (.75 to .82), thus showing convergent validity and high internal consistency, respectively. Finally, the square roots of the AVE values for all constructs are higher than their correlations with all the other constructs, thus showing discriminant validity (Fornell & Larcker, 1981). Table 1 shows all the scale items and Table 2 shows the correlations and psychometric properties of all the scales for all three studies.

< Insert Tables 1 and 2 about here >

We used multiple moderated regression analysis to test all our hypotheses with WTP as the dependent variable, with standardized scores of all independent variables and their interaction terms used to avoid multicollinearity (Aiken & West, 1991). We also added the three demographic variables as control variables, along with altruism and product involvement. Table 3 shows the results for all three studies.

< Insert Table 3 about here >

First, the direct effects of *IRP* ($\beta = .59$; $p < .001$) and *FP* ($\beta = .14$; $p < .001$) on *WTP* are significantly positive but the *PCO X IRP* ($\beta = .01$; $p > .05$) is not significant; hence, H1a is not supported. However, the interaction of *PCO X FP* ($\beta = -.08$; $p < .05$) is significant and negative, as hypothesized. Hence, H1b is supported. Next, the interactions of *SD X IRP* ($\beta = .01$; $p > .05$) and *SD X FP* ($\beta = -.03$; $p > .05$) are not significant; showing no support for H2a and H2b. Among the control variables, only *ALT* ($\beta = -.09$; $p < .05$) has a significant effect

unlike the other variables, PI ($\beta = .06; p > .05$) and unlike demographic variables such as age ($\beta = .06; p > .05$), gender ($\beta = .01, p > .05$) and income ($\beta = .02; p > .05$). Overall, the regression model explains 66% of variance (adj. $R^2 = .66$) in WTP , the dependent variable.

3.4 Discussion

In Study 1, we used a survey among university students to study the direct effects of IRP and fairness perception on customers' PWYW pricing decisions and the moderating effects of price consciousness (PCO) and social desirability on these effects. As expected, we find that both IRP and fairness perception positively influence WTP. Price consciousness (PCO) also negatively moderates the effects of fairness perception on WTP; hence, highly price-conscious customers are more likely than low price-conscious customers to consider that paying lower prices is fairer to the seller. However, social desirability does not seem to moderate the effects of IRP and fairness perception on WTP, with the reason possibly being that we operationalized social desirability as a relatively stable customer trait rather than as a situational variable directly related to PWYW pricing decisions made by customers.

These findings have important implications. Prior research shows that PCO negatively affects PWYW prices (Roy, 2015), but it is not clear how it may interact with IRP and fairness perception in PWYW pricing. Thus, the moderating role of PCO may be dominant over the role of social desirability in a private context. Hence, customers in a private context seem to be affected more by PCO than by social desirability. Thus, further investigation is clearly needed on the differences in the interactive effects of IRP, PCO, and social desirability between different consumption contexts (e.g., private vs. public). This study also has a few limitations. First, we used undergraduate students as participants in the PWYW setting. We tried to mitigate the limitations of our sample by choosing a context that was highly relevant to students but our sample is relatively younger with a lower disposable income so our findings may not be generalizable to the broader customer population.

Moreover, we examined the moderating role of social desirability in a private context where it is perceived to be less discernible. Social desirability is likely to have an apparent impact in a real-life consumption situation where participants respond individually without social influences rather than in a survey. Finally, in this study, we recorded the prices that participants were willing to pay, rather than the actual prices paid by customers in real life. We address all these limitations in Study 2 as explained in the next section.

4. Study 2 – Field survey (Public context)

4.1 Sample and procedure

In this study, we collaborated with a restaurant operating in Western Australia that uses PWYW pricing, wherein customers can pay any amount of money for their meal including a price of zero. We approached customers as they walked out after finishing their meal. Past research has engaged a similar method with individual shoppers targeted within a specific shopping context, for example, after buying a frozen pizza in a supermarket or after finishing a PWYW meal (Kim et al., 2009; Wakefield & Inman, 2003). Furthermore, this PWYW restaurant setting would be considered as public as prior research argues that customers experience an actual restaurant in a social context with individuals dining in the presence of other customers (Wakefield & Inman, 2003; Wood, 1989). This is in line with Wakefield and Inman (2003) who argue that when customers make product decisions in front of others, they are concerned about what others are thinking and, thus, are susceptible to social influences. For example, Roy et al. (2016) show that payment decisions are influenced by the presence of others. More recently, as argued by Roy et al. (2021), even if a person is on his/her own, the mere presence of other customers could trigger a “spotlight effect” with the target perceiving himself/herself to be the focus of attention of those around him/her (Roy et al., 2021).

We collected 253 responses over a three-week period, of which five were discarded for incomplete answers, leaving a final sample of 248 for further analysis. Unlike participants in

Study 1, most (90.3%) Study 2 participants were above the age of 21 years with an average age of approximately 29 years. About two-thirds (63%) had an income higher than A\$2,000 per month. Participants completed a structured questionnaire using similar scale items to those in Study 1, as well as disclosing the price they paid for their meal.

4.2 Data analysis and results

We began by testing the measurement model using confirmatory factor analysis (CFA) with AMOS (v.22.0) software and found a close fit ($\chi^2 = 261.40$, $df = 164$, $\chi^2/df = 1.59$, RMSEA = .049, CFI = .96, NFI = .90, TLI = .95, SRMR = .043) with the values of all fit indices better than the recommended cut-off values. All the parameter estimates are high (> .60) with significant loadings ($p < .001$) on their respective factors, except for two social desirability items and one product involvement item, which were dropped due to low factor loadings. All scales also show high values for average variance extracted (AVE) (.54 to .68) and construct reliability (.75 to .82). Finally, the square roots of the AVE values for all the constructs are higher than their correlations with all the other constructs, thus showing discriminant validity (Fornell & Larcker, 1981). Table 1 shows the descriptive statistics for all the scale items, while Table 2 shows the correlations and psychometric properties for all constructs for all three studies. As in Study 1, we standardized all the independent variables and their interaction terms to avoid multicollinearity. Following Study 1, we tested the structural path model using all the independent variables (*IRP*, *FP*, *PCO*, and *SD*) and their interactions with control variables (*ALT*, *PI*, age, gender, and income) as predictors, and price paid as the dependent variable. Table 3 shows the regression results for all three studies.

First, the direct effects of *IRP* ($\beta = .16$; $p < .05$) and *FP* ($\beta = .14$; $p < .05$) on price paid are significant. However, the interactions of *PCO X IRP* ($\beta = -.08$; $p > .05$) and *PCO X FP* ($\beta = -.07$; $p > .05$) are not significant; hence, H1a and H1b are not supported. Next, the interaction of *SD X IRP* ($\beta = .03$; $p > .05$) is not significant but that of *SD X FP* ($\beta = .14$;

$p < .05$) is significant and positive; thus, H2a is not supported but H2b is supported. Among the control variables, *ALT* ($\beta = .00$; $p > .05$), *PI* ($\beta = .03$; $p > .05$), and age ($\beta = .03$; $p > .05$) do not have significant effects, unlike gender ($\beta = -.12$; $p < .05$) and income ($\beta = .16$; $p < .05$). Overall, the model explains 22% of variance (adjusted $R^2 = .20$) in PWYW prices.

4.3 Discussion

The results from Study 2 show that none of the interactive effects of PCO with IRP and fairness perception have a significant influence on the price paid by customers. On the other hand, the interactive effect of social desirability with IRP has a negative influence on price paid. This indicates that the positive interactive effects of social desirability and fairness perception are dominant over the interactive effects of PCO and IRP on price paid by customers in a social and/or public context. In summary, the moderating role of PCO is found to be significant in the private context of Study 1; the moderating role of social desirability is partially supported (H2b is supported but not H2a) in Study 2. These results show differences between private and public contexts in the effects of PCO and social desirability on WTP for PWYW pricing. However, both Studies 1 and 2 are based on survey design and are used to manipulate private and public contexts separately, which may not provide a rigorous test of our hypotheses. Hence, despite offering external validity to our arguments, both these studies may not provide internal validity of our findings. We address these limitations in Study 3 as described in the next section.

5. Study 3 – Online experiment

5.1 Sample and procedure

We used a between-subjects experimental design: 2 (social context: private vs. public) X 2 (social desirability: low vs. high) with 384 members of an Australian online customer panel (34% male) who were randomly assigned to one of four experimental conditions. This sample was quite different from our earlier two studies, as participants in the sample were not

confined to students (Study 1) and were spread across Australia (unlike Study 2 participants who were all from a single city). The average age (36 years) and monthly income (about A\$3,000) of participants were also higher than for participants in the first two studies. About two-thirds (62.2%) of participants had either a diploma or a Bachelor's degree, while 63.7% of participants were familiar with eating in restaurants.

All the participants completed an online questionnaire, beginning by reading a scenario that manipulated social desirability (e.g., Preiss et al., 2015; Stoeber & Hotham, 2013), by asking them to imagine being in the process of submitting an online job application. Next, they were asked to name at least two attributes which they would use to describe themselves in a socially desirable way to create a favorable (high SD) image or an honest (low SD) image. This was followed by undergoing the manipulation check for social desirability. Next, participants read a second scenario about a restaurant offering a buffet with many delicious dishes in a nice ambience under a PWYW pricing offer where they did not need to pay a fixed price and could whatever amount they wished after they had eaten, including zero.

Next, we manipulated the social context (private vs. public) by asking participants to imagine that they went to the restaurant to eat alone (vs. with friends) and were alone (vs. with friends) at the counter when paying for their meal, in which they were satisfied with the food, quality of service, and the ambience of the restaurant. This approach was similar to that used in other experimental studies on PWYW pricing (e.g., Roy et al., 2021). We then checked the manipulations using scales for private vs. public contexts (Sharma, 2011). Participants then recorded the price they were willing to pay (WTP) for the PWYW offer, followed by their IRP (normal price for a meal at a similar restaurant). Finally, participants completed scales for involvement (Zaichkowsky, 1985); fairness perception (Kim et al., 2009); price consciousness (Donthu & Gilliland, 1996); altruism (Kim et al., 2009); and social desirability (Hays et al., 1989), followed by demographic variables (age, gender,

income, occupation, and ethnic origin).

5.2 Data analysis and results

We began by testing the measurement model using confirmatory factor analysis (CFA) with AMOS (v.22.0) software and found a close fit ($\chi^2 = 456.59$, $df = 205$, $\chi^2/df = 2.22$, RMSEA = .05, CFI = .96, TLI = .95, NFI = .92, SRMR = .05) with all values of the fit indices better than the recommended cut-off values. All the parameter estimates are high ($> .60$) with significant ($p < .001$) loadings on their respective factors, except for one item each for PCO and social desirability which were dropped due to low factor loadings. All the scales also showed high values for average variance extracted (AVE) (.57 to .72) and quite high values for construct reliability (.76 to .87). Finally, the square roots of the AVE values for all constructs are higher than their correlations with all the other constructs, thus showing discriminant validity (Fornell & Larcker, 1981). Table 1 shows the descriptive statistics for scale items and Table 2 shows the correlations and psychometric properties for all constructs.

We began our data analysis by using multivariate analysis of variance to check our manipulations by comparing the average scores for social context (private vs. public) and social desirability (honest vs. favorable) across the experimental conditions. We found significantly higher scores for private context under private conditions ($M = 5.00$) than in public conditions ($M = 3.45$) ($F(1,383) = 70.33$, $p < .001$); for public context under public conditions ($M = 5.15$) than in private conditions ($M = 3.18$) ($F(1,383) = 112.36$, $p < .001$). We also found significantly higher scores for honest image under honest condition ($M = 5.36$) than for favorable condition ($M = 5.02$) ($F(1,383) = 4.72$, $p < .03$) and for favorable image under favorable condition ($M = 3.85$) than in honest condition ($M = 3.15$) ($F(1,383) = 18.88$, $p < .001$). Thus, both social context and social desirability were successfully manipulated.

Next, we used the same multiple moderated regression approach as in our first two studies. Once again, the direct effects of *IRP* ($\beta = .70$; $p < .001$) and *FP* ($\beta = .08$; $p < .05$) are

significant. However, among all the interactions, only *PCO X IRP* ($\beta = -.12; p < .05$) is significant; hence, only H1a is supported and not H1b, H2a, and H2b. Among the control variables, *ALT* ($\beta = .05; p > .05$), *PI* ($\beta = .04; p > .05$), gender ($\beta = -.03; p < .05$), and income ($\beta = .03; p < .05$) do not have significant effects, unlike age ($\beta = -.09; p < .05$). Overall, the model explains 52% of variance (adjusted $R^2 = .20$) in the PWYW price paid.

Finally, we used a three-way analysis of covariance (ANCOVA) to test our final two hypotheses (H3 and H4) by comparing the differences in the moderating effects of price consciousness (PCO) and social desirability on the impact of the internal reference price (IRP) on WTP, between the private and public context. To do this, we used WTP as our dependent variable and the two manipulated variables (social context and social desirability) with dichotomized scores using median splits for PCO, IRP, and fairness perception as fixed factors. We also included altruism (ALT), involvement, age, gender, and income as covariates. Due to the unbalanced design of the cells, we use least square means rather than raw means (Iacobucci, 1994). Tables 4A and 4B show all the results.

< Insert Tables 4A and 4B about here >

We found a significant effect of *IRP* ($F(1,371) = 141.33; p < .001$) but not *PCO* ($F(1,371) = .15, p > .05$) and context (*CON*) ($F(1,371) = .00, p > .05$) on *WTP*. We also found significant effects of the two-way interactions of *PCO X IRP* ($F(1, 371) = 4.43, p < .05$), *PCO X CON* ($F(1, 371) = 4.03, p < .05$), and *IRP X CON* ($F(1, 371) = 8.64, p < .01$) on *WTP*. However, the three-way interaction of *PCO X IRP X CON* was not significant ($F(1, 371) = .04, p > .05$). Thus, H1a is supported but not H3a. Specifically, participants with lower PCO scores, unlike those with higher PCO scores, were willing to pay higher PWYW prices if their IRP was higher. However, we found no significant difference between private and public contexts. Among the covariates, only *ALT* has a significant effect ($F(1, 371) = 6.56, p < .01$) on *WTP*.

We repeated the above analysis by replacing *IRP* with *FP* and using all the other variables. We found a significant effect of *FP* ($F(1,371) = 11.92; p < .001$) but not *PCO* ($F(1,371) = .08, p > .05$) and *CON* ($F(1,371) = .49, p > .05$) on *WTP*. We also found no significant effects of any two-way or three-way interactions among *PCO*, *FP* and *CON* on *WTP*. Thus, both H1b and H3b are not supported. Specifically, participants with a higher fairness perception were willing to pay higher PWYW prices but no significant differences were found in this effect based on their PCO level and between private and public contexts, as shown in Table 4A. Among the covariates, once again only *ALT* had a significant positive effect ($F(1, 371) = 3.91, p < .01$) on *WTP*.

Next, we repeated the above analysis by replacing *PCO* with *SD* and using *IRP* and *FP* as the key independent variable, respectively. Once again, we found a significant effect of *IRP* ($F(1,371) = 206.33; p < .001$) but not *SD* ($F(1,371) = 1.55, p > .05$) and *CON* ($F(1,371) = .12, p > .05$) on *WTP*. We also found significant effects of the two-way interactions *SD X IRP* ($F(1, 371) = 6.87, p < .01$), *SD X CON* ($F(1, 371) = 71.68, p < .001$), and *IRP X CON* ($F(1, 371) = 7.36, p < .01$) on *WTP*. Moreover, the three-way interaction of *SD X IRP X CON* was also significant ($F(1, 371) = 4.33, p < .05$). Thus, H2a and H4a are both supported. Specifically, participants with higher levels of SD, unlike those with lower levels of SD, were willing to pay higher PWYW prices if their IRP was higher. Moreover, this effect was more pronounced in the public context than in the private context. Among the covariates, once again only *ALT* had a significant positive effect ($F(1, 371) = 6.33, p < .01$) on *WTP*.

Finally, we repeated this analysis by replacing *IRP* with *FP* and found a significant effect of *FP* ($F(1,371) = 12.59; p < .001$) but not *SD* ($F(1,371) = .41, p > .05$) and *CON* ($F(1,371) = .96, p > .05$) on *WTP*. We also found only one significant two-way interaction, namely, *SD X CON* ($F(1,371) = 19.21; p < .001$) and no significant three-way interaction. Thus, both H2b and H4b are not supported. Specifically, participants with a higher fairness perception were

willing to pay higher PWYW prices but no significant differences were found in this effect based on their level of social desirability and between private and public contexts, as shown in Table 4B. Among the covariates, once again only *ALT* had a significant positive effect ($F(1, 371) = 4.14, p < .01$) on *WTP*. Figures 2A and 2B illustrate all significant interactions.

< Insert Figures 2A and 2B about here >

6. General discussion

Using three studies, first, a survey with university students; second, a field survey with customers of an actual PWYW restaurant; and, third, an online experiment, we show that PWYW pricing decisions are not only directly driven by the internal reference price (IRP) and fairness perception, as shown in past research (e.g., Kim et al., 2009), but these direct effects are also moderated by customers' economic and social characteristics, such as price consciousness (PCO) and social desirability, respectively. Specifically, we hypothesize and demonstrate the opposite moderating effects of PCO and social desirability on the influence of IRP and fairness perception on the prices customers pay, or are willing to pay (WTP), in PWYW pricing. For example, we show that PCO may dominate customers' PWYW decision in the private context, whereas social desirability may be the key driver in the public context.

This is in line with the extant literature (Wakefield & Inman, 2003; Wood, 1989) which mentions that the role of social forces is muted in the private context and may play a significant role in the public context. Our first study (Study 1) shows a negative effect of fairness perception on PWYW prices for highly price-conscious customers, which confirms how we think price-conscious customers perceive PWYW pricing. Basically, PWYW pricing offers the lowest price opportunity (including zero or paying nothing), which price-conscious customers may consider to be quite fair to the seller who has willingly offered this pricing arrangement. Therefore, price-conscious customers may consider it to be quite fair to pay low PWYW prices which would explain the negative association between fairness perceptions

and PWYW prices for highly price-conscious customers.

In our studies, we find some differences in the two-way and three-way interactions of PCO and social desirability with IRP and fairness perception between private and public contexts. For example, we find a negative interaction between social desirability and PCO in Study 1, which shows that price-conscious customers may also be guided by social desirability motives when making their PWYW pricing decisions, especially when they are in the public (vs. private) context. This is in line with Schindler (1998) who argues that price-conscious customers might prefer a price deal, not only for financial incentives but also for the social desirability of being perceived as smart shoppers in front of others. Thus, we use a range of methods (surveys and an experiment) and samples (university students, customers of a real-life PWYW restaurant, and online customers) to explain the underlying process driving customers' PWYW pricing decisions. Using different methods helps to ensure both external and internal validity of the findings and the different samples helps test their generalizability.

Our results confirm that the motivation to look for lower prices (i.e., price consciousness [PCO]) suppresses PWYW prices, while the motivation to conform to social norms (i.e., social desirability) increases PWYW prices. In addition, the internal reference price (IRP) and fairness perception have positive effects on PWYW prices. We rule out many alternative explanations for these effects across our studies. For example, in Study 1, we control for variables like altruism (ALT) and social desirability, thereby focusing on the variables of interest, namely, the internal reference price (IRP), fairness perception, and price consciousness (PCO). Similarly, we control for altruism (ALT) and price consciousness (PCO) while studying the moderating effects of social desirability. The different samples used across the first two studies also enhance the generalizability of our findings. Finally, Study 3 controls for the internal reference price (IRP) and fairness perception to show that price-conscious customers can demonstrate different payment decisions, depending on their

motivation to appear socially desirable, while being in the private or the public context.

7. Contributions and implications

7.1 Theoretical contributions

This research contributes to the growing literature on PWYW pricing. Firstly, its key theoretical contribution is to offer a deeper insight on the cognitive process of trading off between the economic and socio-psychological considerations of PWYW pricing which have been largely ignored in past research. Specifically, the economic and social boundary conditions, price consciousness (PCO) and social desirability, respectively, examined in the current research have contrasting impacts on customer decision making, offering a unique yet realistic context of exploring how customers may undergo a trade-off mechanism to arrive at a PWYW pricing decision. While extant research studies social mechanisms, such as impression management (Roy et al., 2021) or the role of social visibility and crowding (Sharma et al., 2020; Roy et al., 2016b), this study extends this line of inquiry. Prior research also suggests that PWYW prices can be influenced by social desirability (Kunter, 2015) but does not provide empirical evidence, a gap addressed in this study. The interactions between social desirability, fairness perception, and the social context (e.g., private vs. public) studied in this study, provide a nuanced understanding of the PWYW decision making. The WTP variable used to capture PWYW payments extends current work (e.g., Jang & Irwin, 2021), that prosocial behaviors are best captured by direct measures of people's actions, in our case, their willingness to pay under PWYW context.

Secondly, the current literature on PWYW pricing ignores some of the higher-order relationships between variables, such as the internal reference price (IRP), fairness perception, and individual characteristics, despite evidence from the pricing and social psychology literature on these higher-order relationships, especially in PWYW pricing (Roy et al., 2016a, 2016b). The current study addresses this gap and offers a parsimonious model to

explain customers' complex socio-psychological mechanism that underlies their PWYW pricing decisions. Our evidence shows that these decisions are not only directly reliant on competing economic factors (internal reference price [IRP], price consciousness [PCO]), but also contingent on psychographic (fairness perception) and social (social desirability) factors.

7.2 Managerial implications

Our study's findings would help managers to understand how customers make pricing decisions in the PWYW setting; hence, would lay the foundation for effective strategies. For example, based on our findings, it seems that price consciousness (PCO) may dampen PWYW prices. In Study 1 (private context), PCO dampens PWYW payments, especially in the presence of the internal reference price (IRP). However, this study also shows that fairness perception can increase PWYW payments even in the presence of price consciousness (PCO). It therefore seems that for price-sensitive customers, the business can remind its customers that it operates to support the local community and is doing the right thing by society. Furthermore, it can also be emphasized, when making payments that the business empowers customers to decide prices that are perceived as fair according to their experience. Hopefully, these interventions would sensitize price-conscious customers (e.g., students) about fairness norms which should, in turn, increase PWYW payments.

Based on Study 2's findings, fairness concerns are raised in the context of public consumption. Therefore, it seems like a reasonable strategy to encourage businesses wherever possible to promote group consumption (e.g., a restaurant meal). Furthermore, as with private consumption, fairness concerns can be triggered (e.g., reminding customers about the social motives for the business) at the time when customers are making payments and in the vicinity of other customers. Based on the findings that social desirability is a dominant force even for price-conscious customers leading to higher PWYW payments, it could also be feasible to attract price-sensitive customers in groups (e.g., an offer for a

PWYW gym for a limited time could be taken up if you are signing up with friends). The notion of driving higher prices amongst price-sensitive customers in a public consumption context is also supported in Study 3 which was conducted with Australian customers.

The findings from this research could also form an interesting basis for segmentation of PWYW customers. Past research has shown that pricing variables can be engaged to segment customers in a service setting, for example, a hotel (Choi et al., 2018). As mentioned above, the student segment could be safely assumed to be price conscious and therefore could be reminded of fairness and reciprocity norms when they are making payments for dining out. Students could be offered the opportunity to dine in on certain days when foot traffic is low (e.g., cheap Tuesdays) to boost business volume. Similarly, the segmentation strategy could include usage occasions. For example, for certain occasions (e.g., charity dinners), customers would be expected to act in a socially desirable manner. A direct application of our finding, therefore, could be holding charity dinners in PWYW restaurants. The presence of positive social norms with regard to charity could provide strong extrinsic motivation and be a driver for higher prices. We find these segmentation strategies relevant and useful as we note a wide variance in the PWYW prices paid, especially from Study 2 which surveyed actual restaurant diners. This supports the view that PWYW businesses (in this case, a restaurant) could attract all types of people, such as first-timers, those who are curious, and price-conscious individuals as potential customers. Finally, although we use a service setting, other businesses could also consider PWYW offers to boost traffic and revenue. For example, places that provide everyday low prices could consider running PWYW promotions to boost sales of slow-moving products.

8. Limitations and future research

The current research has a few limitations that future researchers may address. Firstly, future studies may look beyond the moderating roles of social desirability and price consciousness

(PCO) to explore the affective and/or cognitive processes (e.g., cognitive discomfort or dissonance, emotions like shame or guilt, etc.) underlying PWYW decision making, especially when customers fail to act in accordance with socially desirable norms. Secondly, social desirability and impression management may vary across cultural contexts (e.g., the concept of “face” in East Asian cultures) as do their measuring scales. Hence, it may be useful to explore cross-cultural differences when studying the influence of social and economic variables on PWYW prices. Future research may also use different scale items (e.g., Crowne & Marlowe, 1960) to measure social desirability. Thirdly, in Study 2, we recorded prices paid as reported by customers when they were leaving the restaurant after dining. This methodology could have led to biased reporting of the actual payments made by customers. We decided to take this approach as a similar methodology was adopted by previous PWYW research (Kim et al., 2009); however, future research may use other methods to record the actual payments made by patrons.

Fourthly, we operationalized public context in Study 2 by recording whether participants ate alone or with others. However, we could not monitor the presence of the cashier or strangers when payments were made as, to avoid disrupting the restaurant’s operations, we intercepted participants only when they walked out of the restaurant after making the payment. Future research could address this limitation by having associates present in the restaurant to record other social influences on participants. Future research could also replicate our results with different product and service categories, and include additional variables (e.g., product knowledge and social visibility) as moderators. Finally, in our three studies, we found mixed evidence about the impact of social desirability, possibly because we used it as a construct independent of the PWYW context in line with past research. Hence, future research may measure social desirability as a situational variable directly related to the PWYW pricing decisions made by participants, which could make it a more proximal and relevant construct in this context and may lead to more significant results.

References

- Adams, S. A., Matthews, C. E., Ebbeling, C. B., Moore, C. G., Cunningham, J. E., Fulton, J., & Hebert, J. R. (2005). The effect of social desirability and social approval on self-reports of physical activity. *American Journal of Epidemiology*, *161*(4), 389-398.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.
- Alford, B. L., & Biswas, A. (2002). The effects of discount level, price consciousness and sale proneness on consumers' price perception and behavioral intention. *Journal of Business Research*, *55*(9), 775-783.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modelling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411-423.
- Andreoni, J., & Bernheim, B. D. (2009). Social image and the 50-50 norm: A theoretical and experimental analysis of audience effects. *Econometrica*, *77*(5), 1607-1636.
- Andreoni, J., & Petrie, R. (2004). Public goods experiments without confidentiality: A glimpse into fund-raising. *Journal of Public Economics*, *88*(7), 1605-1623.
- Ariely, D., Bracha, A., & Meier, S. (2008). Doing good or doing well? Image motivation and monetary incentives in behaving prosocially. *The American Economic Review*, *9*(1), 544-555.
- Ashworth, L., Darke, P. R., & Schaller, M. (2005). No one wants to look cheap: Trade-offs between social disincentives and the economic and psychological incentives to redeem coupons. *Journal of Consumer Psychology*, *15*(4), 295-306.
- Bell, D. R., & Lattin, J. M. (2000). Looking for loss aversion in scanner panel data: The confounding effect of price response heterogeneity. *Marketing Science*, *19*(2), 185-200.
- Bergkvist, L., & Rossiter, J. R. (2007). The predictive validity of multiple-item versus single-item measures of the same constructs. *Journal of Marketing Research*, *44*(2), 175-184.
- Bertini, M., & Koenigsberg, O. (2014). When customers help set prices. *MIT Sloan Management Review*, *55*(4), 57-64.
- Bolton, L. E., Warlop, L., & Alba, J. W. (2003). Consumer perceptions of price (un)fairness. *Journal of Consumer Research*, *29* (March), 474-491.
- Borkenau, P., & Ostendorf, F. (1992). Social desirability scales as moderator and suppressor variables. *European Journal of Personality*, *6*(3), 199-214.

- Campo, S., & Yagüe, M. J. (2007). Effects of price promotions on the perceived price. *International Journal of Service Industry Management*, 18(3), 269-286.
- Chandon, P., Wansink B., & Laurent, G. (2000). A benefit congruency framework of sales promotion effectiveness. *Journal of Marketing*, 64, 65-81.
- Chao, Y., Fernandez, J., & Nahata, B. (2015). Pay-what-you-want pricing: Can it be profitable? *Journal of Behavioural and Experimental Economics*, 57, 176-185.
- Choi, C., Joe, S. J., & Mattila, A. S. (2018). Reference price and its asymmetric effects on price evaluations: The moderating role of gender. *Cornell Hospitality Quarterly*, 59(2), 189-194.
- Chung, J. Y. (2017). Price fairness and PWYW (pay what you want): A behavioral economics perspective. *Journal of Revenue and Pricing Management*, 16(1), 40-55.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24(4), 349-354.
- Damay, C., Guichard, N., & Clauzel, A. (2011). When children confront prices: An approach based on price presentation. *Journal of Product & Brand Management*, 20(7), 514-525.
- Das, G., & Roy, R. (2019). How self-construal guides preference for partitioned versus combined pricing. *Journal of Business Research*, 101, 152-160.
- Donthu, N., & Gilliland, D. (1996). Observations: The infomercial shopper. *Journal of Advertising Research*, 36(2), 69-76.
- Dorn, T., & Suessmair, A. (2017). Determinants in pay-what-you-want pricing decisions—a cross-country study. *American Journal of Industrial and Business Management*, 7(2), 115-142.
- Erdem, T., Swait, J., & Louviere, J. (2002). The impact of brand credibility on consumer price sensitivity. *International Journal of Research in Marketing*, 19(1), 1-19.
- Fehr, E., & Schmidt, K. M. (1999). A theory of fairness, competition, and cooperation. *Quarterly Journal of Economics*, 114 (3), 817-868.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Franzen, A., & Pointner, S. (2012). Anonymity in the dictator game revisited. *Journal of Economic Behavior & Organization*, 81(1), 74-81.

- Franzen, A., & Pointner, S. (2013). The external validity of giving in the dictator game. *Experimental Economics*, 16(2), 155-169.
- Garbarino, E., & Slonim, R. (2003). Interrelationships and distinct effects of internal reference prices on perceived expensiveness and demand. *Psychology & Marketing*, 20(3), 227-248.
- Gneezy, A., Gneezy, U., & Lauga, D. O. (2014). A reference-dependent model of the price–quality heuristic. *Journal of Marketing Research*, 51(2), 153-164.
- Gneezy, A., Gneezy, U., Nelson, L.D., & Brown, A. (2010). Shared social responsibility: A field experiment in pay-what-you-want pricing and charitable giving. *Science*, 329(5989), 325-327.
- Gneezy, A., Gneezy, U., Riener, G., & Nelson, L. D. (2012). Pay-what-you-want, identity, and self-signaling in markets. *Proceedings of the National Academy of Sciences*, 109(19), 7236-7240.
- Greenberg, J. (1983). Self-image versus impression management in adherence to distributive justice standards: The influence of self-awareness and self-consciousness. *Journal of Personality and Social Psychology*, 44(1), 5-19.
- Haws, K. L., & Bearden, W. O. (2006). Dynamic pricing and consumer fairness perceptions. *Journal of Consumer Research*, 33(3), 304-311.
- Hays, R. D., Hayashi, T., & Stewart, A. L. (1989). A five-item measure of socially desirable response set. *Educational and Psychological Measurement*, 49(3), 629-636.
- Helson, H. (1964). *Adaptation-level theory*. Harper and Row.
- Honea, H., & Dahl, D. W. (2005). The Promotion Affect Scale: Defining the affective dimensions of promotion. *Journal of Business Research*, 58, 543-55.
- Hu, L. t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55.
- Iacobucci, D. (1994). Analysis of experimental data (Chapter 7). In *Principles of marketing research*. (Ed.) R. P. Bagozzi. Blackwell.
- Jang, H., & Irwin, J. R. (2021). Answering for yourself versus others: Direct versus indirect estimates of charitable donations. *Psychology & Marketing*, 38(3), 397-415.
- Johnson, J. W., & Cui, A. P. (2013). To influence or not to influence: External reference price

- strategies in pay-what-you-want pricing. *Journal of Business Research*, 66(2), 275-281.
- Kahsay, G. A., & Samahita, M. (2015). Pay-what-you-want pricing schemes: A self-image perspective. *Journal of Behavioral and Experimental Finance*, 7(1), 17-28.
- Kalyanaram, G., & Winer, R. S. (1995). Empirical generalizations from reference price research. *Marketing Science*, 14(3), 161-169.
- Kastanakis, M. N., & Balabanis, G. (2012). Between the mass and the class: Antecedents of the “bandwagon” luxury consumption behaviour. *Journal of Business Research*, 65(10), 1399-1407.
- Kim, J.-Y., Kaufmann, K., & Stegemann, M. (2014a). The impact of buyer–seller relationships and reference prices on the effectiveness of the pay what you want pricing mechanism. *Marketing Letters*, 25(4), 409-423.
- Kim, J.-Y., Natter, M., & Spann, M. (2009). Pay what you want: A new participative pricing mechanism. *Journal of Marketing*, 73(1), 44-58.
- Kim, J.-Y., Natter, M., & Spann, M. (2014b). Sampling, discounts or pay-what-you-want: Two field experiments. *International Journal of Research in Marketing*, 31(3), 327-334.
- Kunter, M. (2015). Exploring the pay-what-you-want payment motivation. *Journal of Business Research*, 68(11), 2347-2357.
- Lichtenstein, D. R., Bloch, P. H., & Black, W. C. (1988). Correlates of price acceptability. *Journal of Consumer Research*, 15(2), 243-252.
- Lowengart, O. (2002). Reference price conceptualizations: An integrative framework of analysis. *Journal of Marketing Management*, 18(1-2), 145-171.
- Lynn, M. (1990). Choose your own price: An exploratory study requiring an expanded view of price’s functions. *Advances in Consumer Research*, 17(1), 710-714.
- Lynn, M., Flynn, S. M., & Helion, C. (2013). Do consumers prefer round prices? Evidence from pay-what-you-want decisions and self-pumped gasoline purchases. *Journal of Economic Psychology*, 36, 96-102.
- Machado, F., & Sinha, R. K. (2012). The viability of pay what you want pricing. In *European Marketing Academy Conference*. Lisbon, Portugal.
- Mak, V., Zwick, R., Rao, A. R., & Pattaratanakun, J. A. (2015). Pay what you want as threshold public good provision. *Organizational Behavior and Human Decision Processes*, 127(1), 30-43.

- Malär, L., Krohmer, H., Hoyer, W. D., & Nyffenegger, B. (2011). Emotional brand attachment and brand personality: The relative importance of the actual and the ideal self. *Journal of Marketing*, 75(4), 35-52.
- Marett, K., Pearson, R., & Moore, R. S. (2012). Pay what you want: An exploratory study of social exchange and buyer-determined prices of iProducts. *Communications of the Association for Information Systems*, 30(1), 1-14.
- Marlow, D., & Crowne, D. P. (1961). Social desirability and response to perceived situational demands. *Journal of Consulting Psychology*, 25(2), 109-115.
- Maxwell, S. (1995). What makes a price increase seem 'fair'? *Pricing Strategy & Practice*, 3(4), 21-27.
- Mazumdar, T., & Papatla, P. (2000). An investigation of reference price segments. *Journal of Marketing Research*, 37(2), 246-258.
- Mazumdar, T., Raj, S. P., & Sinha, I. (2005). Reference price research: Review and propositions. *Journal of Marketing*, 69(4), 84-102.
- Nieto-García, M., Muñoz-Gallego, P. A., & González-Benito, Ó. (2017). Tourists' willingness to pay for an accommodation: The effect of eWOM and internal reference price. *International Journal of Hospitality Management*, 62, 67-77.
- Ofir, C. (2004). Reexamining latitude of price acceptability and price thresholds: Predicting consumer reaction to price. *Journal of Consumer Research*, 30(4), 612-621.
- Ones, D. S., Viswesvaran, C., & Reiss, A. D. (1996). Role of social desirability in personality testing for personnel selection: The red herring. *Journal of Applied Psychology*, 81(6), 660-679.
- Preiss, M., Mejzlíková, T., Rudá, A., Krámský, D., & Pitáková, J. (2015). Testing the level of social desirability during job interview on white-collar profession. *Frontiers in Psychology*, 6, 1886. <https://doi.org/10.3389/fpsyg.2015.01886>
- Rabbane, F. K., Roy, R., & Spence, M. (2020). Factors affecting consumer engagement on online social networks: Self-congruity, brand attachment, and self-extension tendency. *European Journal of Marketing*, 54(6), 1407-1431.
- Rabin, M. (1993). Incorporating fairness into game theory and economics. *American Economic Review*, 83(5), 1281-1302.
- Ranyard, R., Charlton, J. P., & Williamson, J. (2001). The role of internal reference prices in

- consumers' willingness to pay judgments: Thaler's Beer Pricing Task revisited. *Acta Psychologica*, 106(3), 265-283.
- Roy, R. (2015). An insight into pay-what-you-want pricing. *Marketing Intelligence & Planning*, 33(5), 733-748.
- Roy, R., Rabbanee, F. K., & Sharma, P. (2016a). Antecedents, outcomes, and mediating role of internal reference prices in pay-what-you-want (PWYW) pricing. *Marketing Intelligence & Planning*, 34(1), 117-136.
- Roy, R., Rabbanee, F. K., & Sharma, P. (2016b). Exploring the interactions among external reference price, social visibility and purchase motivation in pay-what-you-want pricing. *European Journal of Marketing*, 50(5/6), 816-837.
- Roy, R., Sharma, P., Chan, R. Y., & Potdar, V. (2021). Exploring the role of spotlight effect in pay- what- you- want (PWYW) pricing: An anchoring and adjustment perspective. *Psychology & Marketing*, 38(5), 866-880.
- Santana, S., & Morwitz, V. (2011). Buying what you can get for free: How self-presentation motives influence payment decisions in pay-what-you-want contexts. *Advances in Consumer Research*, 3, 253.
- Schindler, R. M. (1998). Consequences of perceiving oneself as responsible for obtaining a discount: Evidence for smart-shopper feelings. *Journal of Consumer Psychology*, 7, 371-392.
- Sharma, P. (2011). Demystifying cultural differences in country-of-origin effects: Exploring the moderating roles of product type, consumption context, and involvement. *Journal of International Consumer Marketing*, 23(5), 344-364.
- Sharma, P., Roy, R., & Rabbanee, F. K. (2020). Interactive effects of situational and enduring involvement with perceived crowding and time pressure in pay-what-you-want (PWYW) pricing. *Journal of Business Research*, 109, 88-100.
- Sirgy, M. J. (1982). Self-concept in consumer behavior: A critical review. *Journal of Consumer Research*, 9 (December), 287-300.
- Soetevent, A. R. (2005). Anonymity in giving in a natural context—a field experiment in 30 churches. *Journal of Public Economics*, 89(11), 2301-2323.
- Soule, C. A., & Madrigal, R. (2015). Anchors and norms in anonymous pay-what-you-want pricing contexts. *Journal of Behavioural and Experimental Economics*, 57, 167-175.

- Stoeber, J., & Hotham, S. (2013). Perfectionism and social desirability: Students report increased perfectionism to create a positive impression. *Personality and Individual Differences, 55*(5), 626-629.
- Tedeschi, J. T. (1981). *Impression management theory and social psychological research*. Academic Press.
- Thaler, R. (1985). Mental accounting and consumer choice. *Marketing Science, 4*(3), 199-214.
- Viglia, G., & Abrate, G. (2014). How social comparison influences reference price formation in a service context. *Journal of Economic Psychology, 45*, 168-180.
- Viglia, G., Maras, M., Schumann, J., & Navarro-Martinez, D. (2019). Paying before or paying after? Timing and uncertainty in pay-what-you-want pricing. *Journal of Service Research, 22*(3), 272-284.
- Wakefield, K. L., & Inman, J. J. (2003). Situational price sensitivity: The role of consumption occasion, social context and income. *Journal of Retailing, 79*(4), 199-212.
- Weisstein, F. L., Kukar-Kinney, M., & Monroe, K. B. (2016). Determinants of consumers' response to pay-what-you-want pricing strategy on the Internet. *Journal of Business Research, 69*(10), 4313-4320.
- Wood, J. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological Bulletin, 90*, 231-248.
- Xia, L., Monroe, K. B., & Cox, J. L. (2004). The price is unfair! A conceptual framework of price fairness perceptions. *Journal of Marketing, 68*(4), 1-15.
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research, 12*(3), 341-352.

Table 1: Scale items and psychometric properties

Scale Items	Study 1		Study 2		Study 3				
	λ	M	SD	λ	M	SD	λ	M	SD
Price Consciousness									
I often check prices at different retailers before making a purchase.	.57	2.85	.86	.64	5.10	1.48	.26	4.66	1.19
I usually purchase items on sale rather than those on full price.	.80	2.83	.85	.90	5.15	1.37	.94	4.18	1.30
I often look for the cheapest items while shopping	.79	2.79	.98	.66	4.89	1.45	.68	3.98	1.41
Social Desirability									
There have been occasions when I took advantage of someone.*	.64	2.71	.84	.75	3.38	1.61	.75	3.61	1.63
I sometimes feel resentful when I don't get my way.*	.74	2.68	.81	.81	3.81	1.51	.76	4.15	1.44
I sometimes try to get even rather than forgive and forget.*	.79	2.69	.89	.70	3.48	1.66	.76	3.72	1.68
Altruism									
I love to help others.	.67	3.16	.88	.69	5.84	.98	.85	5.29	1.20
I have a good word for everyone.	.78	2.97	.91	.71	5.56	1.03	.66	4.73	1.30
I am concerned about others.	.75	3.01	.92	.83	5.83	.97	.82	5.16	1.23
I make people feel welcome.	.77	3.09	.94	.85	5.85	.96	.79	5.28	1.18
I anticipate the needs of others.	.66	3.06	.95	.76	5.67	1.07	.72	5.02	1.18
Product Involvement									
Unexciting.....Exciting	.69	4.03	1.21	.75	6.08	1.00	.91	5.28	1.64
Means nothing.....Means a lot to me	.71	3.93	1.23	.74	6.29	.93	.85	5.17	1.61
Unappealing.....Appealing	.81	4.08	1.32	.63	6.35	.97	.93	5.17	1.45
Mundane.....Fascinating	.83	3.93	1.26	.72	6.34	.96	.77	5.35	1.47
Worthless.....Valuable	.87	4.00	1.30	.68	6.42	.90	.78	4.78	1.58
Uninvolving.....Involving	.88	4.04	1.35	.68	6.29	.93	.83	4.92	1.58
Fairness Perception									
I think my price would be fair toward the seller.	--	3.39	1.05	--	5.37	1.36	--	5.21	1.24
Willingness to pay (A\$)									
Internal reference price (A\$)	--	22.98	15.88	--	19.49	33.19	--	21.82	9.41
	--	22.32	13.83	--	15.13	6.11	--	22.75	10.42

* Reverse coded item; λ = standardized factor loading; M = mean; SD = standard deviation

Note: Items with values in italics were dropped due to poor reliability

Table 2: Correlation matrices and discriminant validity

Study 1	<i>PCO</i>	<i>SD</i>	<i>ALT</i>	<i>PI</i>	<i>FP</i>	<i>WTP</i>	<i>IRP</i>
Price consciousness (<i>PCO</i>)	.80						
Social desirability (<i>SD</i>)	.15**	.72					
Altruism (<i>ALT</i>)	.45**	.14*	.73				
Product involvement (<i>PI</i>)	.13*	.00	.18*	.80			
Fairness perception (<i>FP</i>)	.13*	.05	.41**	.05	-		
Willingness to pay (<i>WTP</i>)	-.15*	.04	.05	.19**	.11	-	
Internal reference price (<i>IRP</i>)	-.11	.10	.09	.24**	.04	.73**	-
Composite reliability (CR)	.81	.75	.76	.82	--	--	--
Average variance extracted (AVE)	.63	.51	.53	.64	--	--	--
Study 2	<i>PCO</i>	<i>SD</i>	<i>ALT</i>	<i>PI</i>	<i>FP</i>	<i>WTP</i>	<i>IRP</i>
Price consciousness (<i>PCO</i>)	.74						
Social desirability (<i>SD</i>)	.15*	.75					
Altruism (<i>ALT</i>)	.13*	-.03	.77				
Product involvement (<i>PI</i>)	-.03	-.08	.25**	.73			
Fairness perception (<i>FP</i>)	.05	-.11	.09	.11	-		
Price paid (<i>WTP</i>)	-.02	.09	.10	.08	.18*	-	
Internal reference price (<i>IRP</i>)	-.21**	.12	.14*	.09	-.01	.25**	-
Composite reliability (CR)	.76	.77	.78	.75	--	--	--
Average variance extracted (AVE)	.55	.57	.59	.54	--	--	--
Study 3	<i>PCO</i>	<i>SD</i>	<i>ALT</i>	<i>PI</i>	<i>FP</i>	<i>WTP</i>	<i>IRP</i>
Price consciousness (<i>PCO</i>)	.82						
Social desirability (<i>SD</i>)	.13*	.76					
Altruism (<i>ALT</i>)	.03	-.21**	.77				
Product involvement (<i>PI</i>)	.05	.09	.28**	.85			
Fairness perception (<i>FP</i>)	-.10	-.08	.36**	.36**	--		
PWYW Price paid (<i>WTP</i>)	-.08	-.08	.17**	.10*	.21**	--	
Internal reference price (<i>IRP</i>)	-.12*	-.09	.11*	.05	.16**	.69**	--
Composite reliability (CR)	.83	.76	.78	.87	--	--	--
Average variance extracted (AVE)	.67	.57	.59	.72	--	--	--

Note: Numbers on the diagonal are the square roots of AVE values

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 3: Multiple moderated path model output (dependent variable: *WTP*)

Independent Variables	Study 1		Study 2		Study 3	
	β	<i>t</i> -value	β	<i>t</i> -value	β	<i>t</i> -value
Internal reference price (<i>IRP</i>)	.59***	12.02	.16*	2.43	.70***	18.10
Fairness perception (<i>FP</i>)	.14***	3.27	.14*	1.99	.08*	1.98
Price consciousness (<i>PCO</i>)	-.01	-.21	-.08	-1.14	-.02	-.49
Social desirability (<i>SD</i>)	-.02	-.57	-.07	-1.04	-.02	-.50
<i>IRP X FP</i>	.18**	2.88	.16*	2.39	.07	1.75
<i>PCO X IRP</i>	.01	.10	-.08	-1.22	.12**	3.11
<i>PCO X FP</i>	-.08*	-1.99	.11	1.46	-.04	-1.00
<i>SD X IRP</i>	.01	.10	.03	.38	-.05	-1.27
<i>SD X FP</i>	-.03	-.63	.14*	2.12	.01	.22
<i>SD X PCO</i>	-.08*	-2.04	.08	1.18	-.04	-.93
<i>SD X PCO X IRP</i>	-.04	-.87	.15*	2.01	.02	.45
<i>SD X PCO X FP</i>	-.02	-.43	-.13	-1.45	.06	1.54
<i>SD X IRP X FP</i>	-.14*	-1.32	-.05	-.69	.13**	2.98
<i>PCO X IRP X FP</i>	-.18*	-2.10	-.13	-1.67	-.02	-.48
<i>SD X PCO X IRP X FP</i>	-.08	-.48	.21*	2.29	-.02	-.41
Control Variables						
Altruism (<i>ALT</i>)	-.08*	-1.86	.00	-.04	.05	1.15
Product Involvement (<i>PI</i>)	.06	1.67	.03	.47	.04	.87
Age	.06	1.59	.03	.48	-.09*	-2.29
Gender	.01	.20	-.12*	-1.98	-.03	-.78
Income	.03	.64	.16*	2.24	.03	.68
Adjusted <i>R</i> -squared	.66		.22		.52	
<i>F</i> -value	30.53***		3.07***		21.51***	

β = standardized path coefficients; * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4A: Three-way between-subjects interaction: ANCOVA results (Study 3) – Price consciousness (H3)

Price Consciousness (PCO)	Private Context			Public Context			Overall		
	Low IRP	High IRP	Total	Low IRP	High IRP	Total	Low IRP	High IRP	Total
Low	18.51 (7.94) (N=63)	17.22 (7.44) (N=50)	17.94 (7.72) (N=113)	24.57 (8.45) (N=46)	28.19 (9.11) (N=48)	26.41 (8.93) (N=94)	21.06 (8.66) (N=109)	22.59 (9.93) (N=98)	21.79 (9.29) (N=207)
High	18.54 (6.57) (N=56)	14.08 (5.68) (N=40)	16.68 (6.56) (N=96)	27.50 (9.74) (N=38)	28.56 (8.33) (N=43)	28.06 (8.98) (N=81)	22.16 (9.10) (N=94)	21.58 (10.19) (N=83)	21.89 (9.60) (N=177)
Total	18.52 (7.30) (N=119)	15.82 (6.86) (N=90)	17.36 (7.22) (N=209)	25.89 (9.12) (N=84)	28.36 (8.70) (N=91)	27.18 (8.97) (N=175)	21.57 (8.86) (N=203)	22.13 (10.03) (N=181)	21.83 (9.42) (N=384)
Price Consciousness (PCO)	Private Context			Public Context			Overall		
	Low FP	High FP	Total	Low FP	High FP	Total	Low FP	High FP	Total
Low	19.52 (8.38) (N=56)	20.57 (10.47) (N=51)	20.02 (9.40) (N=107)	22.70 (8.73) (N=53)	24.79 (8.90) (N=47)	23.68 (8.83) (N=100)	21.06 (8.66) (N=109)	22.59 (9.93) (N=98)	21.79 (9.29) (N=207)
High	20.46 (8.53) (N=50)	18.55 (8.48) (N=42)	19.59 (8.52) (N=92)	24.09 (9.43) (N=44)	24.68 (10.94) (N=41)	24.38 (10.13) (N=85)	22.16 (9.10) (N=94)	21.58 (10.19) (N=83)	21.89 (9.60) (N=177)
Total	19.96 (8.43) (N=106)	19.66 (9.62) (N=93)	19.82 (8.98) (N=199)	23.33 (9.03) (N=97)	24.74 (9.85) (N=88)	24.00 (9.43) (N=185)	21.57 (8.86) (N=203)	22.13 (10.03) (N=181)	21.83 (9.42) (N=384)

Note: Figures in brackets are standard deviations

Table 4B: Three-way between-subjects interaction: ANCOVA results (Study 3) – Social desirability (H4)

Social Desirability (SD)	Private Context			Public Context			Overall		
	Low IRP	High IRP	Total	Low IRP	High IRP	Total	Low IRP	High IRP	Total
	Honest	19.95 (6.51) (N=75)	12.28 (5.60) (N=39)	17.32 (7.19) (N=114)	32.81 (9.48) (N=32)	26.31 (8.00) (N=54)	28.73 (9.09) (N=86)	23.79 (9.53) (N=107)	20.43 (9.91) (N=93)
Favorable	16.09 (7.98) (N=44)	18.53 (6.54) (N=51)	17.40 (7.30) (N=95)	21.63 (5.68) (N=52)	31.35 (8.93) (N=37)	25.67 (8.63) (N=89)	19.09 (7.34) (N=96)	23.92 (9.90) (N=88)	21.40 (8.97) (N=184)
Total	18.52 (7.30) (N=119)	15.82 (6.86) (N=90)	17.36 (7.22) (N=209)	25.89 (9.12) (N=84)	28.36 (8.70) (N=91)	27.18 (8.97) (N=175)	21.57 (8.86) (N=203)	22.13 (10.03) (N=181)	21.83 (9.42) (N=384)
Social Desirability (SD)	Private Context			Public Context			Overall		
	Low FP	High FP	Total	Low FP	High FP	Total	Low FP	High FP	Total
	Honest	21.89 (9.13) (N=54)	18.19 (9.82) (N=47)	20.17 (9.59) (N=101)	25.74 (9.63) (N=53)	22.72 (9.58) (N=46)	24.33 (9.68) (N=99)	23.79 (9.53) (N=107)	20.43 (9.91) (N=93)
Favorable	17.96 (7.18) (N=52)	21.15 (9.29) (N=46)	19.46 (8.35) (N=98)	20.43 (7.37) (N=44)	26.95 (9.77) (N=42)	23.62 (9.18) (N=86)	19.09 (7.34) (N=96)	23.92 (9.90) (N=88)	21.40 (8.97) (N=184)
Total	19.96 (8.43) (N=106)	19.66 (9.62) (N=93)	19.82 (8.98) (N=199)	23.33 (9.03) (N=97)	24.74 (9.85) (N=88)	24.00 (9.43) (N=185)	21.57 (8.86) (N=203)	22.13 (10.03) (N=181)	21.83 (9.42) (N=384)

Note: Figures in brackets are standard deviations

Figure 1A: Conceptual framework

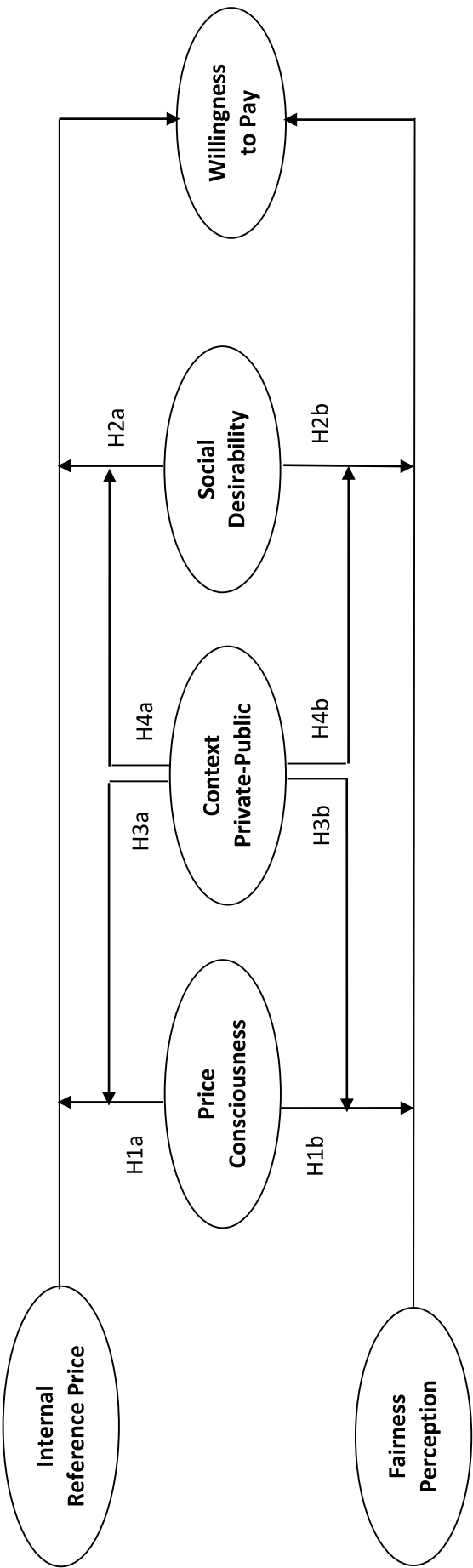


Figure 1B: Empirical studies summary

	Study 1	Study 2	Study 3
Research design	In-class survey	Field survey	Online experiment
Sample size	300	248	384
Participants	Undergraduate students	PWYW restaurant customers	Online customer panel members
Stimuli	Hypothetical scenario	Actual dining experience	Manipulated the social context and social desirability
Research setting	Imaginary PWYW Restaurant	Actual PWYW Restaurant	Imaginary PWYW Restaurant
Social context	Private	Public	Private & Public

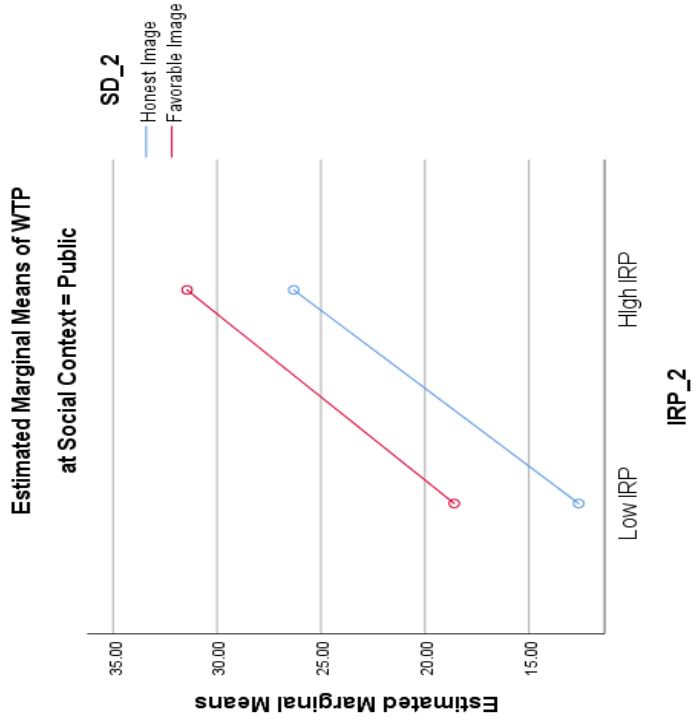


Figure 2B:
Interactions of SD and IRP in public context

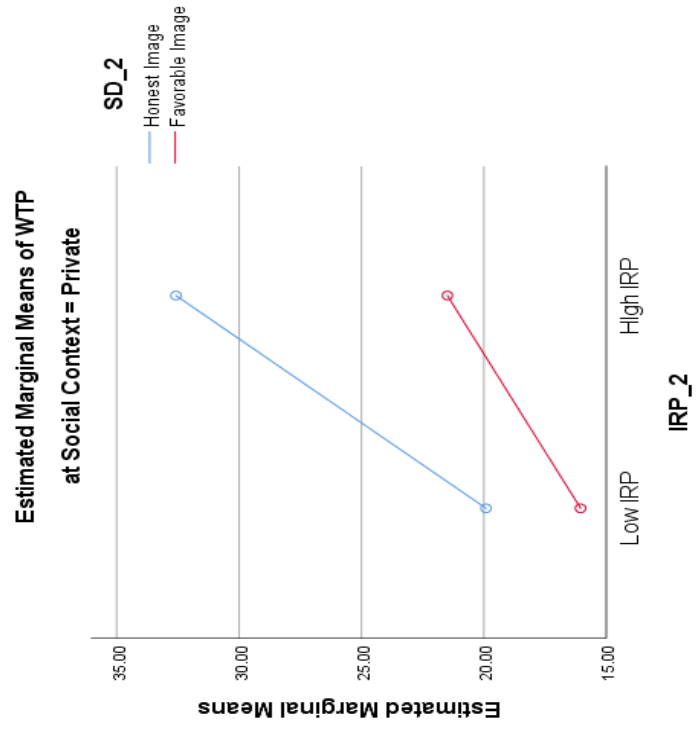


Figure 2A:
Interactions of SD and IRP in private context