

# **Exploring the Role of Spotlight Effect in Pay-What-You-Want (PWYW) Pricing – An Anchoring and Adjustment Perspective**

## **ABSTRACT**

This paper investigates social influences on Pay-What-You-Want (PWYW) pricing decisions by combining a socio-psychological phenomenon, called ‘spotlight effect’ (defined as an egocentric bias while estimating the salience of one’s own behavior and external appearance), with the well-established ‘anchoring and adjustment’ perspective. We test our hypotheses with one field study and two lab experiments. Findings show that when making a payment in PWYW setting, customers perceive greater attention on self (vs. others) and in the presence of distant (vs. close) others, which makes them initially anchor the price they are willing to pay on their internal reference price. However, this anchoring effect is adjusted downwards (i.e., reduced) in the presence of external reference prices. Our findings would help managers understand the factors influencing customers’ PWYW pricing decisions, based on their internal and external reference prices. Managers can further use this knowledge to develop more effective strategies to drive higher PWYW prices.

**Keywords** – Anchoring and adjustment; internal reference price; external reference price; pay what you want; PWYW; spotlight effect

Pay-What-You-Want is a novel pricing strategy in which the seller delegates full pricing control to the buyers (Kim et al., 2009, 2014; Kim et al., 2014; Kunter, 2015). Under this mechanism, a buyer can offer any price (including zero) and the seller cannot withdraw the offer. Many firms ranging from hotels, cafes, and restaurants to online music stores have successfully used PWYW pricing in recent times (Kunter, 2015; Mak et al., 2015; Mendoza-Abarca & Mellema, 2016). PWYW is different from fixed pricing as the seller may not provide any external pricing cue (e.g., retail price), leaving the pricing decision solely to the buyer (Kim et al., 2014). As a result, PWYW pricing may seem ambiguous and even cause cognitive discomfort to some customers as they may be required to arrive at a pricing decision without any external pricing cues to guide them or help them decide how much to pay (Machado & Sinha, 2012; Jung et al., 2014).

Past research into the social influences on PWYW pricing also shows that making an ‘improper’ pricing decision can have negative social consequences for the customers, such as being seen as stingy or greedy by others (Gneezy et al., 2012; Gneezy et al., 2014). Hence, the ambiguity and discomfort caused by PWYW pricing may be further accentuated in the presence of others, which can even motivate customers to avoid PWYW pricing altogether (Gneezy et al., 2012; Gneezy et al., 2014). However, there is still no consensus about the impact of social presence on PWYW pricing decisions, and it ranges from positive (Kim et al., 2009; Kunter, 2015; Roy et al., 2016) or negative (Gneezy et al., 2012) to a non-significant effect (Machado & Sinha, 2012; Jung et al., 2017). For example, past studies suggest that pro-social forces (e.g., being with friends, interaction with waiter) can positively influence PWYW payments (Kim et al., 2009; Kunter, 2015; Roy et al., 2016). Similarly, Gneezy et al. (2012) reports that presence of others may actually cause discomfort and avoidance of PWYW offers. We suggest that these mixed findings can be reconciled through the theoretical lens of ‘spotlight effect’, a tendency to

believe that one's actions and appearances receive greater attention from the observers than is the case (Gilovich et al., 2000). This is because spotlight effect may actually provide nuanced insights into how overestimating a socially embarrassing action (e.g., paying a low price that might make one look greedy) may guide PWYW payments.

Customers experience a spotlight effect in many social situations, such as when wearing a low status brand in public (Vissers, 2005) and purchasing embarrassing (Dahl et al., 2001; Lau-Gesk & Drolet, 2008) or counterfeit products (Zhan et al., 2015). Interestingly, past PWYW research also shows that making an 'improper' pricing decision can have negative social consequences for the customers, such as appearing to be stingy or greedy, especially in the presence of others (Gneezy et al., 2012; Gneezy et al., 2014). However, despite growing evidence about the role of social influences in PWYW decision making, there is no direct evidence about the existence of 'spotlight effect' in this context. We address this first research gap by using the egocentric nature of spotlight effect (Gilovich et al., 2000) to hypothesize that customers would perceive greater attention (spotlight) on them (vs. others) and in the presence of distant (vs. closer) others, when making PWYW payments.

Past studies also show that when faced with the ambiguity and discomfort caused by PWYW pricing, customers' pricing decisions may be susceptible to an anchoring effect. For example, they could even use arbitrary anchors, such as the last three digits of their social security number (Simonson & Drolet, 2004). Others show that customers may make their pricing decisions by anchoring on their internal reference prices (IRP) for similar product and services, which are shaped by their past shopping experiences and access to pricing information through retail channels and product advertisements (Kim et al., 2009). Interestingly, customers also anchor on their phenomenological experiences when they feel being under the spotlight (Gilovich et al.,

2000). Similarly, subjects tend to anchor on firsthand shopping experiences when making pricing decisions in the PWYW context (Kim et al., 2009). However, despite this apparent similarity, there is no research on the impact of perceived attention (spotlight) on the prices that customers are willing to pay (WTP) in PWYW context. We address this second research gap by showing that perceived attention influences customers' pricing decisions in PWYW context by using their internal reference prices (IRP) as an internal anchor and adjusting these to their final willingness to pay (WTP) by allocating a proportion of their internal reference price, which we operationalize as RATIO (WTP/IRP). RATIO captures the proportion of a buyer's reference price discharged to the seller (Kim et al., 2009) and has been engaged by prior research as the key dependent variable (Roy et al., 2016).

Finally, research on the impact of external anchors (e.g., external reference price) on the prices paid in PWYW context also offers mixed findings (Johnson & Cui, 2013). For example, some show that external anchors have a positive effect on PWYW prices (Kim et al., 2014) while others report a negative (Weisstein et al., 2019; Roy et al., 2016; Schmidt et al., 2014) or non-significant effect (Machado & Sinha, 2012). A recent study in online PWYW context also shows that customers may pay less for unfamiliar brands in the presence of an external anchor but it would have no impact on their pricing decisions for familiar brands (Weisstein et al., 2016). Hence, there is still no consensus on the exact process by which customers use external price anchors to adjust the prices they are willing to pay in PWYW context (Johnson & Cui, 2013). We address this third research gap by exploring the role of external reference price as an external anchor and a boundary condition for the spotlight effect in PWYW context proposed earlier.

To summarize, we develop a new conceptual model with specific hypotheses about the role of spotlight effect under social presence in PWYW decision-making by customers. We

hypothesize that customers perceive greater attention on them (vs. others) and in the presence of distant (vs. closer) others, when making a payment in PWYW context. We also propose a positive effect of this perceived attention on the allocation of internal reference prices by the customers to the prices they are willing to pay. Finally, we posit that providing an external anchor (e.g., external reference price) would attenuate the effect of perceived attention on the customers' pricing decisions. This paper contributes to the PWYW literature by generating insights as how perceived attention, social distance, and the provision of external anchor (e.g., external reference price) can drive PWYW payments. Our findings also provide practical insights that managers can use to develop strategies to increase PWYW prices for their businesses, such as increasing social presence at the point of payment and by avoiding the use of external reference price as it may act as an external anchor to drive the PWYW prices down. Figure 1 shows our conceptual model.

< Insert Figure 1 about here >

We use three studies to test our hypotheses in a sequential manner. We begin with a field study to establish the existence of spotlight effect in PWYW context (H1-H2) in study 1. Next, we use a lab experiment to test H1-H2 again and the moderating effect of social distance (H3) in study 2. Finally, we use another lab experiment to test H1-H3 again and the moderating effect of external reference price (H4) in Study 3. We use this mixed methods approach because it allows us to study the broad phenomenon of spotlight effect using a field study and study the roles of two moderators (social distance and external reference price) using more controlled experimental studies (e.g., Viglia et al., 2019; Jung et al., 2014). We conclude by discussing the theoretical contributions and practical implications of our results along with some limitations and directions for future research.

## CONCEPTUAL BACKGROUND AND HYPOTHESES

### Pay-what-you-want (PWYW) Pricing

PWYW is a form of participative pricing in which sellers delegate full control over the pricing decisions to buyers (Kim et al., 2009; Santana & Morwitz, 2011). The PWYW pricing strategy is an exception to existing pricing norms because in regular pricing situations it is not customary for customers to select their own price for most products and services. Extant research shows a number of drivers for PWYW payments. For example, past research has studied individual variables (e.g., price consciousness, satisfaction), situational variables (time pressure, crowding), social image concerns (e.g., payment visibility, presence of shoppers) and payment timing amongst others (Sharma, Roy, & Rabbanee, 2020; Christopher & Machado, 2019, Viglia et al., 2019; Roy et al., 2016; Gneezy et al., 2012; Kim et al., 2009). The absence of external cues (e.g., listed price) may create ambiguity about the offer value, and hence, customers may use a range of cues to make their PWYW pricing decisions (Bettman et al., 1998; Kim et al., 2009; Santana & Morwitz, 2011). Appendix I summarizes current literature on the drivers of PWYW payments.

Although buyers can pay any price under PWYW, they do not try to maximize their utility function by paying nothing, contrary to the standard economic perspective (Kim et al., 2009). Past research explains this seemingly ‘irrational’ behavior by arguing that it may be guided by social exchange norms and non-economic considerations, reciprocity, cooperation, and distribution (Heyman & Ariely, 2004), rather than rational considerations prevalent in typical money–market relationships (Kim et al., 2009; Ariely et al., 2009; Carter & Curry, 2010). Extant research shows that people are less willing to violate social norms as such actions would normally result in distress and social disapproval (Ariely et al., 2009). Individuals try to avoid

undesirable social consequences (e.g., appearing cheap or unfair) while making a payment, thus prompting them to pay a price significantly different from zero (Kim et al., 2009; Santana & Morwitz, 2011; Machado & Sinha, 2012). Hence, it is not surprising to see that social forces such as concerns for self-presentation can drive PWYW pricing decisions (Kim et al., 2009; Santana & Morwitz, 2011; Machado & Sinha, 2012).

An important motive while making PWYW payment decisions concerns maintaining self-image (Gneezy et al., 2010; 2012). While self-image concerns can cause people to pay more, but it can also make people avoid PWYW situations, especially if they feel that their behaviors are being socially scrutinized (Gneezy et al., 2012). Jung et al. (2014) shows that making social context salient can influence PWYW payments. For example, in their studies, they pitch two different framings for PWYW pricing. The first one was the regular PWYW, while the second one was called the pay-it-forward. Under pay-it-forward, people were told that the product consumed by them has been paid for by a previous customer, and they have a similar chance to pay for a future customer. Findings show that payments were higher under pay-it-forward as compared to PWYW, as the focus changes from a relationship between buyer-seller to a symbolic social relationship with other customers. Extant research thus highlights the underlying importance of self-image and social context, in PWYW setting.

### **Reference Prices and PWYW Pricing**

***Internal Reference Price (IRP):*** The pricing literature defines internal reference price as a memory resident price, which customers use as the standard to judge offered prices (Garbarino & Slonim, 2003; Mazumdar et al., 2005). Customers can form internal reference prices based on different phenomenological experiences, including previous period prices (Winer, 1986), the

weighted or smoothed average of past prices (Greenleaf, 1995) and price of last brand purchased (Hardie et al., 1993). internal reference prices are considered to be malleable and adaptive to the context (Thaler, 1985). Accordingly, Kim et al. (2009) operationalizes internal reference price in PWYW context as the amount of money customers normally paid for a similar product during an earlier shopping experience.

In the absence of external pricing cues such as menus, price lists and price labels in PWYW setting, customers generally rely on their phenomenological experiences in the past (as reflected by their internal reference prices) to make a pricing offer. Kim et al. (2009) show that most customers are willing to discharge a certain proportion of their internal reference price (up to 86% across multiple product categories on average), as reflected in their willingness-to-pay. Similarly, buyers are willing to allocate a higher share of their internal reference price, when making PWYW payments. In other words, internal reference price may act as an internal anchor that may guide customers' PWYW pricing decisions (Roy et al. 2016).

***External Reference Price (ERP):*** Although customers rely on their internal reference prices in PWYW setting, their pricing decisions in other situations can also be influenced by external reference prices (Mazumdar & Papatla, 2000). External reference prices are formed based on the price information available in the current purchase environment, such as regularly offered prices and advertised retail prices (Mazumdar & Papatla, 2000). They can thus act as external anchors and influence customers' price judgments (Adaval & Wyer Jr., 2011). In most pricing situations, willingness-to-pay is influenced by both internal anchors such as internal reference prices (Simonson & Drolet, 2004) as well as the non-incidental prices of other products that may ultimately influence the price of a target product (Nunes & Boatwright, 2004). In PWYW, customers rely on their internal reference prices as no external price stimuli are provided (Kim et



al., 2009). However, external anchors such as the prices provided by the manufacturer may also affect willingness-to-pay decisions in PWYW setting, by making customers deliberately consider such external anchors and thus reducing the anchoring effect of internal reference prices (Adaval & Wyer Jr., 2011).

Many studies investigate the moderating effect of external reference price in the PWYW context. For example, Johnson and Cui (2013) study the influence of different types of external reference price (minimum, maximum and suggested price) on PWYW prices to show that providing minimum and maximum prices as external reference price reduces PWYW payments. On the other hand, suggested prices closer to the customers' internal reference price helps increase PWYW payments. Overall, Johnson and Cui (2013) recommends that PWYW retailers are better off by not using external reference price. Similarly, Roy, Rabbanee and Sharma (2016) argue that external reference price negatively moderates the influence of social forces increasing PWYW payments. Similarly, Weisstein, Choi, & Andersen (2019) demonstrate that presence (vs. absence) of external reference price reduces (increases) PWYW payment for hedonic (utilitarian) products. Further, the absence of external reference price combined with social nature (e.g., image concerns) of PWYW payments can make it uncertain as customers struggle to decide their own prices (Sharma, Roy, & Rabbanee, 2020), which in the absence of external reference price can help raise PWYW payments as customers tend to rely on their internal reference price (Roy et al., 2016). In other words, external reference price may moderate the impact of other variables in PWYW context.

### **Spotlight Effect**

Spotlight effect is a phenomenon in which people overestimate the extent to which their actions,

appearances and even internal states are noticed by others than is actually the case (Gilovich et al., 2000). It occurs because people tend to overestimate the extent to which observers attend to them and fail to give sufficient consideration to situational factors that may influence an observer's impression (Gilovich et al., 2000). Spotlight effect is pervasive in everyday life, especially in social situations. For example, people overestimate the extent to which others can detect their internal states such as when they are lying or indulging in other forms of deception (Gilovich et al., 1998). People also think that their goals in a negotiation can be perceived by their negotiation partners than may be the case (Vorauer & Claude, 1998). Similarly, people overestimate the extent to which others can make accurate inferences about their traits based on observing their behavior (Vorauer & Ross, 1999).

Under spotlight effect, people exhibit an egocentric bias, relying heavily on their own phenomenological experiences. Normally, people know that others may see things differently than they do, and hence they may adjust from their anchor of initial experiences (Jacowitz & Kahneman, 1995). However, as typically happens with such processes, the adjustment seems to be insufficient. This subsequently results in a bias in which people's estimates of how they appear to others are overly influenced by how one appears to oneself (Kenny & DePaulo, 1993). This discrepancy causes the spotlight effect (Gilovich et al., 2000).

Several studies show evidence of spotlight effect in consumer behavior. Spotlight effect affects customer responses to snack food taxes and warning labels (Lacanilao et al., 2011) and corporate social responsibility initiatives (Russell & Russell, 2010). In a shopping context, people who imagined carrying a shopping bag with an unpopular (vs. popular) store printed on it thought that they were more harshly evaluated (Savitsky et al., 2001). Similarly, people who wore low (vs. high) status brands overestimated the extent to which they were noticed by others

(Vissers, 2005). Past research also examines moderators of spotlight effect such as purchase familiarity (Dahl et al., 2001), public self-consciousness (Lau-Gesk & Drolet, 2008) and outcome severity as well as mediators such as perceived attention (Zhan et al., 2015).

Dahl et al. (2001) use two field studies to show the impact of social presence (real and imagined) in the context of an embarrassing product purchase and the negative moderating role of familiarity with the purchase act on this impact. In a similar context, Lau-Gesk and Drolet (2008) show that public self-consciousness is positively associated with buying intentions for products aimed at preventing embarrassment but which are embarrassing to buy (e.g., a vaginal douche or an anti-flatulent). Moreover, the severity of social consequences linked with an embarrassing situation has a positive effect on purchase intentions, regardless of the level of public self-consciousness. Further, the frequency of an embarrassing situation's occurrence has a positive impact on the purchase intentions of low public self-consciousness participants, and a negative effect on the purchase intentions of those with high public self-consciousness. More recently, Zhan et al. (2015) find evidence of spotlight effect in counterfeit purchase context, wherein customers are shown to overestimate the extent to which others may pay attention to them and this effect is stronger for others than self (e.g., friends, family members, etc.), thus showing support for egocentric bias in spotlight effect. Similarly, past research shows that when confronted with less familiar people (e.g., co-workers), subjects tend to report higher 'spotlight' in comparison to confrontation with more familiar people (e.g., family) (Gilovich et al., 2002).

### **Spotlight Effect in PWYW Pricing**

As described earlier, PWYW is a context in which customers are expected to decide how much to pay for a product or service based on their own judgment. Further, past research argues that

absence of external reference price (e.g., price list) could be more beneficial for PWYW businesses (Roy et al., 2016; Johnson and Cui, 2013). Therefore, customers are likely to be concerned about paying too little or too much, and this may lead to undesirable social consequences such as being seen as unfair or stingy for paying less and careless or spendthrift for paying more (Roy et al., 2016). In addition, customers may perceive a sense of economic loss if they pay more than the perceived value of the product or service or experience a sense of guilt if they pay less than what they think is expected by the seller or service provider (Johnson and Cui, 2003). We argue that under the influence of such complex and varied motivations (e.g., social consequences, economic loss), presence of people nearby when the customers make payment in PWYW context (social presence), is likely to trigger spotlight effect whereby the customers would perceive being focus of attention of those around them. As a result, we expect this spotlight effect to occur at the time when the customers make payment because they would expect the cashier or others near them to notice and pay attention to how much they are paying. Accordingly, we hypothesize as follows:

**H1:** Social presence has a positive effect on the perceived attention from others (spotlight) experienced by the customers in PWYW settings.

Past PWYW studies show that customers generally tend to allocate a proportion of their internal reference price to the prices they are willing to pay (Kim et al., 2009; Roy, 2015; Roy et al., 2016). Roy et al. (2016) also show that presence of others can motivate customers to allocate a higher proportion of their internal reference price towards PWYW prices. As argued earlier, customers are likely to perceive greater attention on them when making pricing decisions in PWYW context. Based on the above, we hypothesize, as follows:

**H2:** Perceived attention has a positive effect on the prices that customers are willing to pay (WTP) in PWYW settings.

Spotlight effect has an egocentric bias (Gilovich et al., 2000), wherein people perceived a significantly greater attention on the self in situations involving social visibility and perceived social evaluations (Ross & Sicoly, 1979). Past research shows that spotlight effect is stronger in the presence of strangers (vs. acquaintances) as they are more likely to judge people using peripheral cues, such as a shopping bag with a popular vs. unpopular brand logo (Vissers, 2005). Another reason for this may be the greater familiarity and possibility of shared group norms with close others (e.g., friends or family members) than distant others (e.g., co-workers or strangers) because it could make the customers' perceive being evaluated more harshly by people who are socially distant (vs. closer) to them (Zhao & Xie, 2011). In the PWYW context, presence of others will trigger concerns of social evaluation and the target person may feel under the spotlight, especially when they are with distant others. Based on this discussion, we hypothesize as follows:

**H3:** Social distance moderates the spotlight effect in PWYW settings, wherein customers perceive greater attention on themselves in the company of distant versus close others, and vice versa.

### **Anchoring and Adjustment under Spotlight Effect**

As argued previously, spotlight effect is guided by anchoring and adjustment. Prior research on anchoring and adjustment theory shows that people fail to adjust away from their initial anchors, even under situations when accuracy motivation is increased by providing monetary incentives (Simmons et al., 2010). In order to solve this conundrum, scholars have proposed an alternative

mechanism underlying anchoring and adjustment theory, namely the ‘selective accessibility model’ (Strack & Mussweiler, 1997). Under this explanation, people start off with a hypothesis regarding whether the true value is equal to the anchor value and in this process, they typically generate anchor-consistent information, which leads to an estimate closer to the anchor (Strack & Mussweiler, 1997). Research into why “accuracy motivation” fails to increase adjustment from initial anchors shows that people are motivated to adjust sufficiently from their initial anchor only when they are certain about the direction of the adjustment (Simmons et al., 2010).

Past studies also support the notion that one way to make judgments under ambiguity is to anchor on information that comes to mind and adjust until a plausible value is reached (Epley & Gilovich, 2006). Past research shows that when they are dealing with ambiguous situations, such as an unclear notion about the product value, customers may rely on arbitrary anchors (e.g., last two digits of social security number or prices from unrelated product category) (Simmons et al., 2010). In PWYW context, customers often rely on their internal reference prices in order to overcome the ambiguity of not knowing whether the prices paid by them are too much or too little (Machado & Sinha, 2012). Further, given the ambiguity associated with PWYW pricing decisions coupled with the social motivations, customers may make insufficient adjustment from their initial anchor, resulting in payments that are consistent with their internal reference price.

An external pricing anchor (e.g., an external reference price) can motivate customers to make sufficient adjustment from their initial anchor. First, in line with anchoring and adjustment theory, an external anchor should reduce the ambiguity and motivate customers to make sufficient adjustments (Simmons et al., 2010). Second, an external anchor may also provide customers with an idea about the value of the goods offered, which again should influence customers’ willingness-to-pay (Simonson & Drolet, 2004). We argue that the direction of

adjustment will be away from their internal anchor, as customers will move towards a plausible value under the influence of an external reference price (Epley & Gilovich, 2006). Hence, we hypothesize:

**H4:** External reference price negatively moderates the positive effect of perceived attention on willingness-to-pay in PWYW settings, wherein higher perceived attention would result in a lower willingness-to-pay in the presence (vs. absence) of external reference price.

Next, we describe three studies used to test our hypotheses (Figure 1). In the first study, we use a field survey to establish the existence of spotlight effect in PWYW context by testing H1-H2. We then use a lab experiment to test H1-H2 again and the moderating role of social distance (H3) in Study 2. Finally, we use another lab experiment to test H1-H3 again and the moderating role of external reference price (H4) in Study 3. Such a mixed methods approach allows us to test the presence of spotlight phenomenon in PWYW pricing in a natural setting and test its boundary conditions using two controlled lab experiments (e.g., Viglia et al., 2019; Jung et al., 2014).

## **Study 1**

### **Sample and Procedure**

119 customers (67% female, Mean age = 31.7 years) participated in a field survey at a fast-food restaurant in Australia over a one-week period. A salesperson (blind to the purpose of our study and its hypotheses) offered a 600 ml of water bottle to the customers after they had placed a regular order, for which they could pay any price, including zero (i.e., pay nothing). Customers were free to reject this PWYW offer and continue with their regular order without the water

bottle. The salesperson recorded our key dependent variable (WTP: amount of money paid for the water bottle) while handling the payment after confirming the customers' orders. An amount of \$1.40 was recorded as the average payment for the 600ml water bottle, with a minimum of \$0 and a maximum of \$4. Only 15% of participants did not pay anything in response to the PWYW offer, similar to recent PWYW studies (e.g., 16.7% in Kim et al., 2014) and seems to be a more natural and realistic response compared to some past studies in which every participant paid a price higher than zero (e.g., Kim et al., 2009; 2014).

While the customers were being served, a second salesperson (also blind to the study purpose and its hypotheses) recorded the number of people accompanying them. After the customers collected their orders, this second salesperson approached them with a request to participate in a short survey. The survey questionnaire began by asking the participants how many people they observed around them while making their payments, followed by a three-item scale to measure perceived attention (PA) in response to the question, "When you were making the payment, how likely is it that the people standing around you?". All the three items, "Paid attention to you while you were making payment", "Noticed you while you were making payment", and "Looked at you while you were making payment", were measured using a seven-point Likert scale (1=very unlikely and 7=very likely) and show good reliability (Cronbach alpha = .95). Next, the customers recorded their internal reference price for the 600ml water bottle (price that they normally pay for a similar water bottle), followed by their age, gender, and the type of people (e.g., family, friends, co-workers) accompanying them.

### **Data analysis and results**

To test our first two hypotheses, we analyzed our data using Hayes' (2013) PROCESS Model 4.



The number of people who were nearby when customers made payment is the independent variable, perceived attention is the mediator and willingness-to-pay (WTP) is the dependent variable with customers' age and gender as control variables. As shown in the top panel of Table 1, social presence (the number of people around when the customers were making payment) has a positive effect on the customers' perceived attention from others ( $\beta = .50, t = 3.96, p < .001$ ), thus H1 is supported. Next, the middle panel shows that perceived attention has a positive effect on WTP ( $\beta = .12, t = 2.12, p < .01$ ), hence H2 is also supported. Finally, the lowermost panel shows a significant mediating effect of social presence on willingness-to-pay via perceived attention, because the 95% bootstrap confidence interval (.01-.14) does not straddle zero.

<Insert Table 1 here>

We repeated this analysis with RATIO (WTP/IRP) as the dependent variable and found similar results, with perceived attention showing a positive effect on WTP ( $\beta = .05, t = 2.01, p < .05$ ) and the 95% bootstrap confidence interval (.00-.05) does not straddle zero. Based on these findings, perceived attention fully mediates the effect of social presence on PWYW prices paid by the customers as well as their allocation of internal reference prices to the PWYW prices paid by them. Among the control variables, gender has a positive effect on perceived attention and age has a negative effect on willingness-to-pay. Thus, females are likely to perceive greater attention on them and the younger customers are likely to pay more. Overall, this study confirms the existence of spotlight phenomenon in PWYW context as the following chain of effects: social presence  $\rightarrow$  perceived attention  $\rightarrow$  PWYW prices (H1-H2). Next, we report our study 2 in which we used a laboratory experiment with a PWYW restaurant setting to investigate the egocentric nature of spotlight effect that causes a stronger effect on self vs. others and the influence of social distance between the customers and the people accompanying them on

perceived attention (H3).

## **Study 2**

### **Sample and Procedure**

289 customers in a major Australian city (Male = 44.6 %, Mean Age = 23.6 years) participated in a 3 X 2 lab experiment in which we manipulated social presence as target (self vs. others vs. third party) and social distance (close vs. distant) using imaginary scenarios. The “self”, “others” and “third party” manipulations were adapted from Savitsky et al. (2001) who engaged similar manipulations in their study 1, while using hypothetical social scenarios to trigger spotlight. Further, we also engaged hypothetical restaurant scenarios as it has been adopted by previous PWYW scholars (Viglia et al., 2019). All the participants were recruited and brought to a central location by trained student helpers where they were randomly allocated to one of the six experimental conditions and exposed to the relevant scenario. Participants were asked to imagine having dinner with others (social distance: close = family members vs. distant = co-workers) in a PWYW restaurant that served good food in a nice ambient environment. Participants further read that they were satisfied with the food and service. After finishing a dinner, the actor (target: self vs. others vs. third party) took out his/her wallet to make a cash payment. Across all the different hypothetical scenarios, we therefore controlled for participants expectations, food and service quality and timing of payment (Viglia et al., 2019; Christopher and Machado, 2019). Appendix II shows all the six scenarios. We checked all the manipulations by asking all the participants to what extent they felt close or distant to the person they were having dinner with and who made the payment in the scenario they had read. All the participants answered these questions correctly, hence all our manipulations seem to have worked as expected.

After reading the scenario, participants were asked to what extent they thought that the other people at the table with them (family members or co-workers) would pay attention to them. In the “self” condition, the person making the payment (the actor) was asked to what extent s/he thought that attention was paid to her/him while making the payment. In the “other” and “third party” conditions, participants reported if they or others at the table were paying attention to the actor while s/he was making the payment, respectively. Finally, all the participants filled in demographic and other variables related to the study. Similar to study 1, spotlight effect was operationalized using a three-item nine-point Likert scale that captured the extent to which the observers “paid attention to”, “noticed” and “looked at” the target while the participant was making the payment (Zhan et al., 2015). Next, willingness-to-pay (WTP) was recorded by using a single-item nine-point scale with “zero” and “high price” as anchors, a subjective measure used in earlier studies (e.g., Donaldson et al., 1997), to overcome any demand effects and the inability or unwillingness of some participants to give an exact estimated price. Finally, we recorded demographic variables, including age and gender.

### **Data Analysis and Results**

As study two employed an experimental design, we first used univariate analysis of variance (UNIANOVA) to test our next hypotheses (H3) with social distance (DIS) and target (TGT) as the manipulated factors and perceived attention (PA) as the dependent variable. We also used age and gender as covariates. Table 2A shows all the results. We found a significant positive effect of target ( $F(2, 280) = 3.27, p < .05$ ) on perceived attention, with higher scores for self ( $M = 6.56$ ) than others ( $M = 6.07$ ) and third person ( $M = 6.14$ ), which supports H1. Moreover, social distance ( $F(1, 280) = 3.67, p < .05$ ) has a significant positive effect on perceived attention, which is higher when accompanied by co-workers ( $M = 6.46$ ) than family members ( $M = 6.09$ ).

Hence, participants perceive more attention on self than on others and this effect is stronger when they are accompanied by distant versus close others, supporting H3.

< Insert Table 2A and 2B about here >

Next, we tested a moderated-mediation model using Hayes' (2013) PROCESS Model 7 with target person (TGT) as the independent variable, perceived attention as the mediator, WTP as the dependent variable and social distance (DIS) as the moderator. Table 2B reports the results. We find that target (self vs. others) has no significant effect ( $\beta = .02, t = 0.20, p > .84$ ) on perceived attention but has a significant negative effect on WTP ( $\beta = -.25, t = -3.07, p < .001$ ). Moreover, perceived attention has a significant positive effect on WTP ( $\beta = .20, t = 4.19, p < .001$ ), hence H2 is supported. Next, social distance also has a significant positive effect ( $\beta = .35, t = 2.16, p < .05$ ) on perceived attention and the interaction term (Target \* Social Distance) has a significant negative effect on perceived attention ( $\beta = -.43, t = -2.18, p < .05$ ). Moreover, this conditional effect of target on perceived attention is significant for distant others ( $\beta = -.40, t = -2.87, p < .01$ ) but not for close others ( $\beta = .03, t = 0.20, p > 0.84$ ), which supports H3. We repeated this analysis with RATIO as the dependent variable and found similar results. Thus, social distance negatively moderates the effect of target on willingness-to-pay and this effect is mediated by perceived attention. None of the control variables has any significant effect on willingness-to-pay.

Overall, study 2 shows that the participants perceive significantly higher levels of attention when the target person is self (vs. other or a third person) and when the 'social distance' between the target person and accompanying people is high (co-workers) versus low (family members). We also show that perceived attention mediates the interactive effect of target and social distance

on the prices that the participants are willing to pay and their allocation of internal reference prices. Next, we describe Study 3 that further validates these findings and also helps test the moderating impact of external reference price (H4) on the impact of perceived attention on willingness-to-pay, using a similar PWYW restaurant setting using a lab-experiment design. We collected data in Hong Kong to test the validity of our results from the first two studies in a different cultural setting.

### **Study 3**

#### **Sample and Procedure**

237 customers (Males = 28.2 %, Mean Age = 22.8 years) participated in a 2 X 2 X 2 between-subjects lab experiment in which we manipulated social distance (low: family members vs. high: co-workers), target person (self vs. others) and external reference price (present vs. absent). Similar to study 2, the participants were recruited by trained student helpers and randomly allocated to one of the eight experimental conditions to imagine that they were having dinner with their family members or co-workers in the PWYW restaurant (Appendix III). Once again, we checked all the manipulations by asking the participants to what extent did they feel close or distant to the person with them, who made the payment, and what could be the normal price indicated for a similar meal in a fixed price restaurant, in the scenario read by them. All the participants answered these questions correctly, hence our manipulations worked as expected.

Next, the participants reported how much they would normally pay for a similar meal in a fixed price restaurant (internal reference price) and how much they would be willing to pay (WTP) for this meal in this PWYW restaurant. We counterbalanced these questions to eliminate the possibility of any order bias. Following this, the participants indicated to what extent the

other people at the table (family members or co-workers) would pay attention to the ‘target’, namely “self” (the participant) or “others” (family member or co-worker). We then manipulated the third factor (external reference price) by telling the participants a normal price (HK\$120 ~ US\$15 per person) for a similar meal in a fixed price restaurant. Finally, we collected demographic data for all the participants.

### **Data Analysis and Results**

Similar to study 2, we first used univariate analysis of variance (UNIANOVA) to test our hypothesis (H3) with social distance (DIS) and target person (TGT) as the manipulated factors and perceived attention as the dependent variable. We also used age and gender as covariates. Table 3A shows a significant positive effect of target ( $F(1, 230) = 15.78, p < .001$ ) on perceived attention, with higher scores for self ( $M = 4.92$ ) compared to others ( $M = 4.50$ ), which supports H1. Moreover, social distance has a positive effect ( $F(1, 230) = 9.19, p < .001$ ) on perceived attention but only when target is self, with higher scores for co-workers ( $M = 5.09$ ) than family members ( $M = 4.74$ ) and not when target is other (4.37 vs. 4.64), hence H3 is supported.

< Insert Table 3A about here >

Next, we used Muller et al.’s (2005) approach to test the moderating effects of social distance and external reference price on the mediating role of perceived attention with a series of multiple regression models (Table 3B). Model 1 shows a significant positive effect of DIS ( $\beta = .12, p < .05$ ) but not TGT ( $\beta = -.07, p > .05$ ) on WTP. Next, Model 2 also shows a significant positive effect of DIS ( $\beta = .15, p < .05$ ) but not TGT ( $\beta = -.01, p > .05$ ) on perceived attention (PA). Model 3 shows no significant effects of TGT and DIS but a significant negative effect of TGT\*DIS interaction ( $\beta = -.12, p < .05$ ) on PA, which supports H3. Next, Model 4 shows

significant effects of TGT ( $\beta = -.19, p < .05$ ), DIS ( $\beta = .24, p < .01$ ), TGT\*DIS ( $\beta = -.21, p < .01$ ) and perceived attention ( $\beta = .12, p < .05$ ) on WTP, which supports H2. Finally, Model 5 shows significant effects of TGT ( $\beta = -.18, p < .05$ ), DIS ( $\beta = .24, p < .01$ ), TGT\*DIS ( $\beta = -.20, p < .01$ ), PA ( $\beta = .18, p < .01$ ) and ERP\*PA ( $\beta = -.20, p < .01$ ) on WTP but not ERP itself ( $\beta = -.06, p > .05$ ), which supports H4. We found similar results using RATIO as the dependent variable. Overall, we found that perceived attention mediates the interactive effects of social presence and distance on willingness-to-pay, and external reference price negatively moderates the positive effect of perceived attention on willingness-to-pay.

< Insert Table 3B about here >

## **Discussion and Contribution**

Our findings have important implications for the PWYW literature, especially how various antecedents and moderators drive PWYW payments. The results from one field study and two lab experiments provide converging evidence that while making a payment in the PWYW restaurant, customers perceive to be under spotlight if they have others nearby. They perceive this spotlight to be stronger on self than on others and in the company of distant (co-workers) versus closer (family members) others. As expected, this spotlight effect also has a positive effect on the PWYW prices that customers are willing to pay (WTP) as well as the allocation of their internal reference prices (RATIO=WTP/IRP). Finally, in the third study, a boundary condition for this effect was proposed based on the theories of anchoring and adjustment, in the form of the presence versus absence of an external reference price. The findings show that in the presence of an external reference price, the positive effects of perceived attention on payment decisions are significantly diminished. We used a PWYW restaurant setting in all the three

studies to avoid any possible confounds due to contextual effects. Using a mixed-methods approach (Study 1 as field survey and Studies 2 and 3 as lab experiments) and conducting our studies in different cultural settings (Studies 1 and 2 in Australia, and Study 3 in Hong Kong) provides robust evidence for the validity and generalizability of our findings.

Our findings make important theoretical contributions. First, we introduce the idea of spotlight effect to the study of customers' pricing decisions in PWYW context. We show that the mere presence of others when making payment, can make the customers perceive being under a social spotlight (i.e., greater attention by others) on them, which can make them use their internal reference price (IRP) as an anchor for the price they are willing to pay (WTP). Second, we show the evidence of an egocentric bias in this spotlight effect wherein customers perceive greater attention on them than on others who may be in a similar situation. Third, we also show that the spotlight effect is stronger in the presence of distant (vs. closer) others. The current findings therefore contribute to the literature on spotlight (Gilovich et al., 2000; Savitsky et al., 2001) by helping to understand the "spotlight" mechanism better, especially social distance as the moderator of spotlight effect.

Our findings contribute to the body of previous work that studies the positive impact of social forces on PWYW payments (Kim et al., 2009; Kunter, 2015; Roy et al., 2016). Our studies discover that when people perceive that their actions (e.g., making payment) are salient to others around them, they are motivated to anchor on an internal phenomenological experience, such as internal reference price. Consequently, this perceived attention influences allocation of higher internal reference prices towards PWYW payment. The current work is first to provide insights as to how a social mechanism (such as spotlight) can positively influence PWYW payments.



Finally, we also clarify the role of external anchors in PWYW pricing in this paper. The moderating role of external reference price in the PWYW context currently shows mixed findings with some work showing a negative impact (Weisstein et al., 2019; Roy et al., 2016; Schmidt et al., 2014) while others arguing a positive or negative impact, albeit based on the external reference price type (Johnson and Cui, 2013). The current work helps to understand the moderating role of external reference price further. Our findings support an extant body of work that demonstrates a negative moderating impact of external reference price (e.g., Schmidt et al., 2014), but further explains the underlying mechanism that reduces PWYW payments. The current work relies on the ‘anchoring and adjustment’ perspective to explain this adjustment by customers using ‘selective accessibility’ and ‘ambiguity’ about the direction of adjustment (Epley & Gilovich, 2006; Simmons et al., 2010). Thus, customers decide the PWYW prices they are willing to pay (WTP) based on their internal anchors (e.g., internal reference price) when they are under the spotlight; however, they move away from these initial anchors when they are provided an external anchor (e.g., external reference price) because it helps them resolve the ambiguity and overcome the social anxiety about these initial anchors.

Our research also has many useful managerial implications. First, we show that presence of others bodes well for payments in PWYW context because it can make customers feel that they are under a social spotlight. Social presence is therefore key to triggering spotlight. Practical strategies may therefore involve promoting a PWYW business to encourage higher foot traffic and customer presence. Having customers around on premises, especially while someone making payment should trigger spotlight effect and motivate higher payments. The spotlight effect can be further strengthened in the presence of distant others (e.g., a work colleague). Managers of PWYW businesses may therefore encourage promotions such as complimentary drinks and

dessert, especially if diners came in with a work colleague. Such promotions can be further encouraged during lean times, to encourage increased presence of customers. For a regular business, bundled promotions can be offered (e.g., a regular price coffee with a PWYW slice of cake) if a potential buyer came with a distant other (e.g., a neighbour). The PWYW product offered in the bundle can especially include products that are slow moving, or alternately offered under everyday low prices. In the context of a website running PWYW offers (e.g., music download), a potential buyer can have his name and amount paid displayed as a web ticker. This should potentially trigger spotlight and encourage higher payments.

Second, we show that managers should not provide external reference prices such as ‘suggested prices’ as these external anchors seem to drive down the prices customers are willing to pay in PWYW environment. In this regard, social motivations underlying PWYW decision-making seem to make customers raise the prices they are willing to pay, by causing insufficient adjustment from their initial anchors of internal reference prices. It is possible that a potential customer can look up online prices, but our findings suggest that such external anchors should not be provided by the business itself. In the absence of external anchors (e.g., external reference price) provided by the business itself, consumers are expected to pay higher prices due to the spotlight effect. Once external reference price is provided by the business, consumers may become more confident of the prices they are expected to pay, and consequently the positive effect of spotlight on payment is reduced, thereby lowering payments.

## **Limitations and Future Research**

This paper has a few limitations that future research could address. First, we chose a promotional PWYW offer in our Study 1 because it was difficult to conduct our study in a restaurant that uses

PWYW as regular pricing strategy. Hence, it would be useful to replicate our findings in regular PWYW businesses. Second, we used a scenario-based approach in both our lab experiments (Study 2 and 3) for a tight control on the social situation to study the activation and impact of spotlight effect. However, the responses to the imaginary scenarios may not fully reflect actual customer responses in real life. For example, extant research shows timing of payment (e.g., before or after consumption) can influence PWYW payments (Viglia et al., 2019). Similarly, the impact of spotlight effect may also vary if one pays first or second and for oneself or the whole group when dining with others. We also did not control for the number of people present at the time of payment, which may have provided further insights about the impact of social presence. Future research may test the impact of spotlight effect on payments made at different times by the target person and for different types of restaurants (e.g., fine-dining versus casual).

Third, we chose a restaurant setting for all our studies because it was very familiar to all the participants in these studies and it allowed us to control for any between-categories effects. However, we did not record if any extra items such as water or wine were ordered by the participants along with their meal. Future research may use other approaches (e.g., field experiments) in other contexts (e.g., shopping) to control for these and other variables, to replicate our findings and provide further insights into this interesting phenomenon. Fourth, we replicated our results using samples from two different cultural settings, but we need more research to further validate and extend our findings. For example, future research may test our model for different product categories (e.g., music or retail), purchase or consumption contexts (e.g., online vs. offline) and customers with diverse personal cultural orientations (Sharma, 2010). Similarly, future studies may examine spotlight effect in the context of purchasing an embarrassing product (e.g., condoms) versus a regular product (e.g., coffee). Finally, we focused

on social motivations in all our studies but future research could directly compare rational (saving money for future) versus social (spotlight) motivations to see which of these motivations is more likely to influence customers' PWYW pricing decisions.

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**Table 1. PROCESS Model 4 Output (Study 1)**

**Mediator: Perceived Attention (PA)**

	R	R-sq	MSE	F	df1	df2	p
	0.48	0.23	2.80	2.24	14.00	104.00	0.01
	coeff	se	t	p	LLCI	ULCI	
Constant	2.96	1.52	1.95	0.05	-0.05	5.97	
<i>Social presence</i>	0.50	0.13	3.96	0.00	0.25	0.76	
Age	0.05	0.15	0.33	0.74	-0.24	0.34	
<i>Gender</i>	0.64	0.32	2.00	0.05	0.01	1.28	

**Dependent Variable: PWYW Price (WTP)**

	R	R-sq	MSE	F	df1	df2	p
	0.50	0.25	0.97	2.34	15.00	103.00	0.01
	coeff	se	t	p	LLCI	ULCI	
Constant	1.07	0.91	1.18	0.24	-0.73	2.87	
<i>Perceived Attention</i>	0.12	0.06	2.12	0.04	0.01	0.24	
Social presence	-0.11	0.08	-1.36	0.18	-0.27	0.05	
Age	-0.15	0.09	-1.72	0.09	-0.32	0.02	
Gender	-0.09	0.19	-0.48	0.63	-0.48	0.29	

**Direct effect of Social Presence on WTP**

Effect	SE	t	p	LLCI
-0.11	0.08	-1.36	0.18	-0.27

**Indirect effect of Social Presence on WTP (via PA)**

	Effect	Boot SE	BootLLCI	BootULCI
<i>PA</i>	0.06	0.03	0.01	0.14

**Table 2A. Analysis of Variance (ANOVA) Output (Study 2)**

	<b>DV = Spotlight</b>			
<b>Relationship Type (TYP)</b>	<b>Target (TGT)</b>			
	<b>Self</b>	<b>Other</b>	<b>Third party</b>	<b>Total</b>
<b>Family members</b>	6.09 (1.43)	6.10 (1.52)	6.09 (1.35)	6.09 (1.43)
<b>N</b>	49	50	49	148
<b>Co-workers</b>	<b>6.96<sup>***</sup></b> (1.18)	6.03 (1.35)	6.19 (1.34)	6.46 (1.34)
<b>N</b>	58	42	41	141
<b>Total</b>	<b>6.56<sup>*</sup></b> (1.37)	6.07 (1.44)	6.14 (1.34)	6.27 (1.39)
<b>N</b>	107	92	90	289

**Note:** Figures in **bold** are significantly different from others in the same row.

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

**Table 2B. PROCESS Model 7 Output (Study 2)**

**Outcome Variable: Perceived Attention (Mediator)**

	R	R-sq	MSE	F	df1	df2	p
	0.24	0.055	1.86	3.34	5.00	286.00	0.006
	coeff	se	t	p	LLCI	ULCI	
Constant	6.90	0.47	14.73	0.00	5.98	7.82	
Target (Self vs. Other)	0.03	0.14	0.20	0.84	-0.24	0.30	
Social distance	0.35	0.16	2.16	0.03	0.03	0.66	
Target * Distance	-0.43	0.20	-2.18	0.03	-0.81	-0.04	
Age	-0.02	0.02	-1.59	0.11	-0.06	0.01	
Gender	-0.15	0.16	-0.92	0.36	-0.46	0.17	

**Conditional effects of Target on WTP at values of Social Distance**

Social distance	Effect	SE	t	p	LLCI	ULCI
Low (Family)	0.03	0.14	0.20	0.84	-0.24	0.30
High (Coworker)	-0.40	0.14	-2.87	0.00	-0.67	-0.13

**Outcome Variable: Price Willing to Pay (Dependent Variable)**

	R	R-sq	MSE	F	df1	df2	p
	0.31	0.10	1.25	7.83	4.00	287.00	0.00
	coeff	se	t	p	LLCI	ULCI	
Constant	4.43	0.52	8.72	0.00	3.43	5.42	
Target (Self vs. Other)	-0.25	0.08	-3.07	0.00	-0.40	-0.09	
Perceived Attention	0.20	0.05	4.19	0.00	0.11	0.29	
Age	0.00	0.01	0.15	0.88	-0.02	0.03	
Gender	0.16	0.13	1.24	0.22	-0.10	0.42	

**Conditional Indirect effect of Target on WTP (via Perceived Attention)**

Social distance	Effect	Boot SE	BootLLCI	BootULCI
Low (Family)	0.01	0.03	-0.05	0.06
High (Coworker)	-0.08	0.03	-0.18	-0.01

**Index of Moderated Mediation Effect**

Social distance	Index	Boot SE	BootLLCI	BootULCI
	-0.09	0.04	-0.18	-0.01

**Table 3A. Analysis of Variance (ANOVA) Output (Study 3)**

	<b>DV = Perceived Attention (PA)</b>		
<b>Social Distance (DIS)</b>	<b>Target (TGT)</b>		
	<b>Self</b>	<b>Other</b>	<b>Total</b>
<b>Low (Family members)</b>	4.74 (0.78)	4.64 (0.79)	4.69 (0.78)
<b>N</b>	58	59	117
<b>High (Co-workers)</b>	<b>5.09<sup>***</sup></b> (0.82)	4.37 (0.79)	4.73 (0.88)
<b>N</b>	61	59	120
<b>Total</b>	<b>4.92<sup>***</sup></b> (0.82)	4.50 (0.80)	4.71 (0.83)
<b>N</b>	119	118	237

**Note:** Figures in **bold** are significantly different from others in the same row.  
<sup>\*</sup>  $p < .05$ , <sup>\*\*</sup>  $p < .01$ , <sup>\*\*\*</sup>  $p < .001$

**Table 3B. Mediated Moderation Analysis Output (Study 3)**

<b>Predictors</b>	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>
	<b>DV=WTP</b>	<b>DV=PA</b>	<b>DV=PA</b>	<b>DV=WTP</b>	<b>DV=WTP</b>
	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$
<b>Target (TGT)</b>	-.07	-.01	-.03	-.19 <sup>*</sup>	-.18 <sup>*</sup>
<b>Social Distance (DIS)</b>	.12 <sup>*</sup>	.15 <sup>*</sup>	.13	.24 <sup>**</sup>	.24 <sup>**</sup>
<b>TGT * DIS</b>			-.21 <sup>**</sup>	-.21 <sup>**</sup>	-.20 <sup>**</sup>
<b>Perceived attention (PA)</b>				.12 <sup>*</sup>	.18 <sup>**</sup>
<b>External Reference Price (ERP)</b>					-.06
<b>ERP * PA</b>					-.20 <sup>**</sup>
<b>R-square</b>	.13	.15	.19	.24	.30
<b>F-value</b>	3.02 <sup>*</sup>	3.28 <sup>*</sup>	3.88 <sup>*</sup>	4.63 <sup>**</sup>	5.34 <sup>**</sup>
<b>R-square change</b>	-	.02 <sup>*</sup>	.04 <sup>*</sup>	.05 <sup>**</sup>	.06 <sup>**</sup>

WTP = Price Willing to Pay;  $\beta$  = Standardized regression coefficient  
<sup>\*</sup>  $p < .05$ , <sup>\*\*</sup>  $p < .01$ , <sup>\*\*\*</sup>  $p < .001$

**Appendix I. Literature Review – PWYW Payment Drivers\*\*\***

<b>Study</b>	<b>IV (Main)</b>	<b>DV</b>	<b>Contribution</b>
Kim, Natter and Spann (2009)	Price fairness, Satisfaction, face-to-face interaction, Price consciousness, Income	PWYW prices	Fairness, satisfaction, price consciousness, and income as individual-level variables driving payments
Gneezy et al. (2012)	Individuals' identity and self-image concerns	PWYW prices	Individuals' identity and self-image concerns drive PWYW payments.
Machado and Sinha (2012)	Fairness motivation, reciprocity concerns	PWYW prices	PWYW prices are driven by fairness, image, and reciprocity concerns.
Kim, Kaufmann, and Stegemann (2014)	Social distance and external reference price	PWYW prices	Social distance negatively influences PWYW prices paid. External reference price positively drives PWYW payments.
Schmidt et al. (2014)	Price discrimination, revenue management, social preferences	PWYW prices	Outcome-based social preferences and strategic considerations to keep the seller in the market drives PWYW prices
Mak et al. (2015)	Pre-payment communication (social communication), feedback	PWYW prices	PWYW payment increases when feedback about others' payment is available.
Kunter (2015)	Fairness, customer satisfaction, avoiding guilt, income	PWYW prices	Fairness, customer satisfaction, guilt avoidance, and income drive PWYW prices.
Roy et al. (2016)	Social visibility, purchase motivation	PWYW prices	When external reference price is absent, social visibility and purchase motivation positively drives PWYW payments.
Jung et al. (2017)	Presence of charity, Social influence	PWYW prices	The presence of charity influences PWYW prices. Social influence does not impact PWYW prices.
Christopher and Machado (2019)	Payment visibility, information about payment, timing of payment, price recommendation	PWYW prices	Design variations and timing drives PWYW payments
Sharma et al. (2020)	Situational and enduring involvement, time pressure, crowding	Ratio of IRP to PWYW prices	Involvement types, crowding and time pressure drives PWYW payments
This research*	Perceived attention, social distance, external reference price	WTP	Perceived attention, social distance positively drives payments, especially in the absence of external reference price

\*\*\*Studies reported here focus on social mechanism underlying PWYW payments.

## Appendix II. Experimental Scenarios (Study 2)

### Relationship Type = Family members (Co-workers)

You come to know about a “Pay What You Want” restaurant in the city. The restaurant serves good food and has a nice ambience. The restaurant has a unique pricing strategy. It doesn’t charge customers a fixed price for their menu. Instead, customers are encouraged to pay any amount of money voluntarily after they have dined at the restaurant.

Imagine you had a three-course meal with a group of **family members (co-workers)** in this restaurant. All your **family members (co-workers)** were satisfied with the food and service provided by the restaurant. After finishing the meal, and while waiting to make a cash payment, you and your **family members (co-workers)** were engaged in a cheerful conversation.

#### Target = Self

When the waiter came, **you reached for your wallet** and took out the cash to pay **for your share**. What is the likelihood that **your family members (co-workers) will pay attention to you while you’re making the payment?**

#### Target = Others

When the waiter came, **one of your family members (co-workers) reached for his/her wallet** and took out the cash to pay **for his/her share**. What is the likelihood that **you will pay attention to your family member (co-worker) while s/he is making the payment?**

#### Target = Third party

When the waiter came, **one of your family members (co-workers) reached for his/her wallet** and took out the cash to pay **for his/her share**. What is the likelihood that **other family members (co-workers) will pay attention to your family member (co-worker) while s/he is making the payment?**



### Appendix III. Experimental Scenarios (Study 3)

#### **Relationship Type = Family members (Co-workers) without [with] external reference price**

There is a restaurant in the city that serves good food and has a nice ambience. The restaurant has a unique “Pay What You Want” pricing strategy under which it doesn’t charge customers a fixed price for their menu. Instead, customers can pay any amount of money voluntarily for a three-course meal after they have dined at the restaurant. **[A three-course meal such as this would normally cost \$15 per person at a similar restaurant with a fixed price menu.]**

Now, imagine you had a three-course meal with a group of **family members (co-workers)** in this restaurant. All of you were satisfied with the food and the service provided by the restaurant. After finishing the meal, and while waiting to make a cash payment, you and your **family members (co-workers)** were engaged in a cheerful conversation.

#### **Target = Self**

When the waiter came, **you reached for your wallet** and took out the cash to pay **for your share**. As **you** were about to pay for your share in the above situation, to what extent do you think your other family members (co-workers) will pay attention to **you**?

#### **Target = Others**

When the waiter came, **one of your family members (co-workers) reached for his/her wallet** and took out the cash to pay **for his/her share**. As your **family member (co-worker)** was about to pay for his/her share in the above situation, to what extent do you think you and other family members (co-workers) will pay attention to **him/her**?