

**We're In This Together: How Sellers, Social Values, and Relationship Norms Influence
Consumer Payments in Pay-What-You-Want Contexts**

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We're In This Together: How Sellers, Social Values, and Relationship Norms Influence Consumer Payments in Pay-What-You-Want Contexts

Prior research on Pay-What-You-Want (PWYW) pricing has largely focused on explaining why consumers pay above zero. We add to this literature by demonstrating that buyers not only pay above zero, but sometimes pay above their reference price in such settings, and by highlighting how sellers can positively influence buyer payments. We explain buyer behavior in PWYW settings by positing that they view the transaction as a socially interdependent one, and consider both their own economic outcomes and those of the seller when deciding what to pay. The degree to which buyers consider own versus seller outcomes varies with their social value orientation (SVO) and whether exchange or communal relationship norms are salient. This in turn affects buyers' willingness to pay and their likelihood of overpayment. The joint effects of SVO and relationship norm hold both whether or not a suggested price is present, whether or not profits are donated to a charity, and whether or not the relationship norm is based on direct experience with the seller or is based on an independent prime.

Key Words: Social Values, Relationship Norms, Pay What You Want, Behavioral Pricing

In a traditional marketing environment, the firm controls all of the critical decisions—which products to sell, how to advertise, which channels to sell through, and what price consumers should pay. In recent years, however, a number of firms have invited consumer participation in many of these decisions, giving rise to a growing trend toward what we call participative marketing. Doritos’ “Crash the Super Bowl” contest invites consumers to create commercials. Through its “People’s Pick” program, Sears’s customers choose the sales promotions to be offered. Lay’s “Do Us a Flavor” competition allows consumers to submit ideas for a new potato chip flavor, and through Buyapowa.com, firms use consumers as a distribution channel by creating a social community of buyers. In recent years, some firms have even begun to allow consumers to participate in what many managers consider to be the most important marketing decision of all—pricing.

Economically speaking, participative pricing can be a high-risk strategy, since, in theory, it allows consumers to pay below market prices. Partly for this reason, other participative pricing offerings such as auctions and Name Your Own Price often require offers to surpass a minimum threshold in order to be considered. This is not the case, however, in Pay What You Want (PWYW) pricing, where sellers are obligated to provide the product to the buyer at whatever price the latter chooses, even a price of zero. In these contexts, economically rational buyers should maximize their own utility by paying zero to the seller, at least for one shot purchase decisions. Yet, prior research and industry reports show that consumers almost always pay above zero (Gneezy, Gneezy, Nelson, and Brown 2010; neezy, Gneezy, Riener, and Nelson 2012; Kim, Natter, and Spann 2009, 2010; Mak, Zwick, and Rao 2010; Riener and Traxler 2012; Schmidt, Spann, and Zeithammer 2012; Schons, Rese, Wieske, Rasmussen, Weber, and Strotman 2013) and sometimes even pay above their reference price (Kim et al. 2009; Regner and Barria 2009).

For example, in 2011, the Panera Bread[®] restaurant chain, which operates a number of PWYW restaurants, reported that only 20 percent of their patrons paid less than the suggested price posted on the menu. Sixty percent paid the suggested price, and the remaining 20 percent paid *more than* the suggested price (Salter 2011). Similarly, in 2012, the website Techdirt eBooks offered select digital books under PWYW pricing. They subsequently reported that 49 percent of their readers paid above \$0 for their download, including eight percent who paid twice as much as the \$5.00 suggested price (Beaton 2012). Finally, Kim et al.'s (2009) descriptive payment data from the restaurant and delicatessen showed that a non-trivial proportion of customers paid above the reference price for their lunch or beverage, respectively, and the average price paid at the delicatessen was higher than the normal fixed price.

While the growing body of research on PWYW pricing largely focuses on explaining why customers pay above zero, and under what conditions the pricing strategy can be viable, relatively little is known about how sellers can positively influence buyers to consider more than just their own economic self-interest, to in turn increase their payments and the possibility that they might even pay above their reference prices. Yet as more sellers consider PWYW pricing, it becomes increasingly important to understand how consumers internally generate prices (versus externally react to them), the factors that shape their pricing decisions, and the role that sellers can play in influencing pricing decisions. We posit that two factors that have not been explored in the PWYW literature play a large role in shaping consumer payment behavior. The first is a consumer trait variable—their social value orientation (McClintock 1972; Messick and McClintock 1968) -- and the second is a situational element--the buyer's perceived relationship norm with the seller (Aggrawal 2004; Aggrawal and Law 2005), which we show that the seller can influence. We posit that SVO and relationship norm salience jointly affect the degree to

which consumers price in an economically self-interested way or in a more other-focused social way. The more buyers price in a social way, the higher their payments and their greater likelihood of overpayment (i.e., pay an amount greater than a reference price).

The remainder of this paper is organized as follows: First, we discuss the extant research on PWYW pricing. Next, we briefly review selected research on social value orientation, and relationship norms in marketing environments. We then develop our hypotheses and present one field and three laboratory studies designed to test the hypotheses. We conclude with a general discussion of the contributions of this research, its limitations, and areas for future research.

Background and Hypotheses

Pay-What-You-Want Pricing

Three questions dominate the existing research on PWYW pricing. First, when given the chance to pay any price for a product or service, do consumers freeload? Second, if not, then what drives their payment behavior? Third, is PWYW a viable business strategy for sellers?

A number of field studies on PWYW show that consumers almost never freeload, but rather pay above zero (Gneezy et al. 2010, 2012; Kim et al. 2009, 2010 Regner and Barria 2009; Riener and Traxler 2012; Schons, et al. 2013). This research offers various explanations for this behavior, including concerns for fairness, self-image and self-signaling motivations, altruism, and social norms. Kim et al. (2009) conducted three field experiments to examine consumers' pricing behavior in different PWYW settings (a restaurant, a movie theater, and a delicatessen). They developed a model of prices paid that incorporated consumers' internal reference price, defined as the price consumers recalled paying for the target item in past purchases, and a

parameter estimate of the proportion of their reference price that consumers were willing to share with the seller. They noted that normative economic theory would predict that the parameter estimate would be zero. Yet, based on findings from behavioral pricing and economics research, the authors argued that PWYW is not governed by money-market relationship norms (where price serves as a metric for value), but rather by social-market relationship norms (e.g., reciprocity and cooperation; Heyman and Ariely 2004), and thus they expected the parameter estimate to be positive. Given this they then tested whether fairness, altruism, satisfaction, and loyalty would have a positive impact on prices paid in PWYW settings, controlling for income and price consciousness. None of these variables was a significant predictor of prices in every setting, although each was a significant predictor in at least one setting. For example, fairness was only a significant predictor of prices at the cinema and altruism only at the delicatessen. Similarly, Regner and Barria (2009) concluded that feelings of reciprocity may influence consumer payments in online music purchases, after analyzing payment data, and Riener and Traxler (2012) inferred from observed payment patterns from a PWYW restaurant that consumers' payments above zero were driven by social norms of fairness.

Gneezy et al. (2010) conducted a large PWYW field experiment in an amusement park where customers could pay any price they wanted for a souvenir photo of themselves on a ride. Two factors were manipulated across customers: the type of pricing (fixed vs. PWYW) and the amount of revenue that went to charity (none vs. 50 percent). The results showed that the revenue per rider was higher with PWYW than with fixed pricing, that the average price consumers paid was significantly higher in the PWYW + charity condition than in the PWYW + no charity condition, but that purchase rates were lower, although still profitable. The authors attribute the higher prices paid in the PWYW + charitable donation condition to "shared social

responsibility,” a conclusion that is also consistent with the notion that in some settings, consumers will consider social or communal aspects of their relationship with a seller in determining how much to pay.,

Finally, research also shows that PWYW can be equally if not more profitable for sellers than charging a fixed price (Gneezy et al. 2010; Kim et al. 2009, 2010; Mak, Zwick, and Rao 2010; Riener and Traxler 2012; Schmidt et al. 2012). This can occur when PWYW attracts additional customers and/or when customers actually pay more under a PWYW offering. In support of the first point and with the notable exception of work by Gneezy et al. (2010, 2012), most research shows that although most consumers pay less than the regular retail price in PWYW situations, overall revenues tend to increase due to an increase in demand (Kim et al. 2009, 2010; Riener and Traxler 2012). Additionally data reported by Kim et al. (2009, Figure 2) show that the range of payments in all three PWYW establishments included some that exceeded regular fixed prices or consumers’ internal reference price. In particular, they report that the average price at the delicatessen was significantly higher under PWYW than under the regular fixed prices, and that the parameter estimate of the proportion of consumers’ internal reference price that they paid at the restaurant ranged from .07 to 1.67, indicating that at least some people were willing to pay as much as 67 percent more than their internal reference price for their lunch. Finally research has also shown that sellers can also influence the profitability of PWYW by sharing some or all of the profits with a charity (Gneezy et al. 2010).

In summary, extant PWYW research demonstrates that: 1) consumers typically pay above zero, 2) average payments are often, but not always, below the standard fixed price for the good, and 3) PWYW typically (though not always) attracts more new customers than standard fixed pricing does, without crowding out existing customers, resulting in higher profits for the seller.

That said, important questions regarding consumer behavior in PWYW contexts remain unanswered. Since several studies suggest that social perceptions may be correlated with buyer payments, it is important to examine if, how, and why this happens, but no work has systematically identified individual level or contextual factors that influence social perceptions. Second, for PWYW to be successful, sellers need to identify ways to increase buyers' payments. Past research has examined one factor that can positively influence buyer behavior—sharing profits with a charity—but sellers may want not want to or it may not be feasible to do this in all settings, so other methods are needed. Third, if PWYW pricing leads many buyers to pay lower than market prices, than to be successful it would be helpful if a significant subset of buyers offset this by paying amounts higher than market prices. Thus identifying factors that lead buyers to pay above their reference prices would also be useful.

Our goal is to address these issues by offering a process explanation for payment behavior in PWYW settings that is focused on consumers' individual differences, the social aspects of the buyer-seller interaction that can be influenced by the seller, and how these factors jointly affect whether consumers pursue economic self-interest or social interests when deciding on a price to pay in PWYW settings. Second, we explicitly explore the incidence and magnitude of overpayment, and in doing so, we build on prior PWYW findings and offer new insight into consumer payment behavior in this growing participative pricing practice.

Social Value Orientation

The fact that consumers rarely behave in an economically rational way in PWYW settings suggests that additional factors influence their pricing decisions. Given that sellers must accept any price that the buyer submits, we posit that the pricing decision is socially interdependent in nature, and consumers' social value orientation significantly influences their

pricing decisions.

Social value orientation (SVO) describes the general preference that individuals hold for the distribution of resources between themselves and others in socially interdependent tasks (McClintock 1978; Messick and McClintock 1968). Interest in social value orientation emerged in part out of the widespread observation that participants routinely failed to make choices consistent with the assumption of maximization of self-interest in strategic games such as the Prisoner's Dilemma, the Ultimatum Game, and the Dictator Game.

Dictator Games often show how economic prescriptions sometimes fail to reflect actual interpersonal behavior. In a Dictator Game, participants in dyads are randomly assigned to either the role of the dictator or the recipient. Dictators are given an endowment that they can divide between themselves and the receiver according to any distribution they want—including all to the dictator and zero to the receiver—and the receiver must accept the proposed distribution. Despite the economic prediction that rational dictators should allocate zero, Camerer (2003) observed that the majority gave positive amounts, and Eckel and Grossman (1996) showed that giving increases in Dictator Games when the recipient is a charity. Both Camerer (2003) and Eckel and Grossman (1996) pointed to altruism to explain participant behavior in their respective Dictator Games. Academics then turned to the use of decomposed games as a means to more effectively disentangle participant motives from choice strategy in socially interdependent settings. The resulting stream of research revealed that people do in fact vary in their social motives in such choice tasks (Kuhlman and Marshello 1975; Messick and McClintock 1968). People who are motivated to maximize their own gain irrespective of others' gain are labeled as individualistic. Those who are motivated to maximize the relative difference between their own gain and that of others are said to be competitive. Those who seek to maximize joint gains for

self and others are labeled as cooperative, and those who are motivated to maximize gains for others are said to be altruistic. While in theory a number of preferences are possible (Knight and Dubro 1984; Kuhlman and Marshello 1975; Liebrand and McClintock 1988; MacCrimmon and Messick 1976), SVO research tends to focus on cooperative, individualistic, and competitive orientations or the more general distinction between pro-social (i.e., cooperative and altruistic) and pro-self (i.e., individualistic and competitive) orientations.

Research has shown that the expression of social motives may occur automatically (Cornelissen, Dewitte, and Warlop 2011), and that individual differences in SVO influence choice behavior across a number of real-world socially interdependent domains such as the decision to take public transportation versus driving one's own car (Van Vugt, Meertens, and Van Lange 1995), negotiations (DeDreu and Van Lange 1995), helping behavior (McClintock and Allison 1989), and both the number of charitable acts an individual performs and the breadth of their charitable goals (VanLange, Bekkers, Schuyt, and Vugt 2007). We build on this research by demonstrating that SVO influences how much consumers pay and whether or not they overpay in PWYW settings. We argue that pro-socials will be more likely to take the seller's welfare into consideration than pro-selves. This in turn will lead them to pay higher prices and be more likely to overpay than pro-selves. However, we expect this payment behavior to vary according to the salience of relationship norms between the buyer and the seller when the pricing decision is made, as we explain in the next sections.

Relationship Norms

Consumers can form relationships with brands that mimic social relationships with other people (Fournier 1998). As such, these brand relationships are guided by norms in the same way

as individual relationships (Aggarwal 2004). Perhaps the most common distinction among relationship norms is the exchange / communal norm distinction (Clark and Mills 1993).

Exchange norms are typically based on economic factors, while communal norms are based more on social factors. In general, exchange relationships are guided by norms of quid-pro-quo, where partners provide benefits either in response to benefits given or with the expectation of getting similar benefits returned in the near future. Conversely, communal relationships are governed more by norms of conferring benefits to the partner (Aggarwal 2004; Aggarwal and Law 2005; Aggarwal and Zhang 2006; Clark 1986; Clark and Mills 1993; Wan, Hui, and Wyer 2011). Keeping track of inputs and outputs, comparable benefits, and repayment behavior are all hallmarks of exchange relationships; while helping others, keeping track of others' needs, and responding to others' emotional needs are all hallmarks of communal relationships. Business partners and acquaintances are typically guided by exchange norms, whereas friends and family are typically guided by communal norms (Aggarwal 2004, Clark 1986; Clark and Mills 1979; Mills and Clark 1982).

Relationship norms have been shown to affect consumer attitudes and behavior in a number of ways. Although Aggarwal and Zhang (2006) stated that most commercial relationships, such as buyer-seller relationships, are governed by exchange norms, they and others also showed that relationship norms in a commercial setting can vary. For example, Aggarwal (2004) showed that consumers respond negatively to violations of relationship norms, especially when a communal partner displays exchange norm behavior. Specifically, when participants believed they were in a communal relationship with a firm, and the firm then charged them a service fee for an action they took on behalf of the customer, participants reacted more negatively than when they believed they were in an exchange relationship. Likewise,

participants in a communal (exchange) relationship reacted less (more) favorably when offered comparable compensation for their time spent on a task. Wan et al. (2011), demonstrated that the effect of relationship norms on service failures is moderated by consumers' perceptions of their own versus the partner's obligation to the other. Individuals who believed they were in a communal relationship with a provider reacted more negatively when primed with thoughts of obligations to others versus obligations to self. Finally, relationship norms can even affect consumers' loss aversion (Aggarwal and Zhang 2006). Exchange relationship partners are more likely to focus on the net balance of gains and losses, resulting in weaker loss aversion, while communal partners are more likely to evaluate losses and gains independently (since quid pro quo is inconsistent with this norm), and experience a higher level of loss aversion.

These findings demonstrate that relationship norms affect consumer behavior, and although commercial relationships are typically governed by exchange norms, that buyer-seller communal norms are possible. We extend these findings to the PWYW context by suggesting that relationship norms can affect how much individuals pay in such settings. Specifically, when an exchange norm is salient versus a communal norm, consumers will be less likely to consider social factors in generating their purchase price, resulting in lower payments and a lower likelihood of overpayment.

Hypothesis Development

Based on the relationship norm literature, but in contrast to Kim et al. (2009), we begin with the assumption that exchange norms are the default, though not defining, relationship norm in buyer-seller relationships, including PWYW settings. From here we propose four main arguments. First, the degree to which consumers consider the seller's welfare in addition to

economic factors in PWYW settings positively affects the amount consumers pay. Past empirical research provides evidence that in some cases buyers pay prices above their internal or an external reference price, which we label overpayment. Based on this observation, we posit that in cases when buyers focus to a large extent on the seller's welfare overpayment may occur.

Second, trait SVO and situational relationship norms both influence when consumers are more (versus less) likely to consider the seller's welfare. Third, consumers are not equally affected by contextual factors that affect perceptions of relationship norms with the seller. Pro-social buyers, who naturally consider both their own and others' outcomes in making interdependent resource allocation decisions, are likely to consider the impact of their pricing decision on sellers regardless of which relationship norm is more salient. Therefore, we expect the amount pro-socials pay and their likelihood of overpayment to be relatively high in both exchange and communal settings. In contrast, we expect pro-self buyers, who naturally prioritize their own outcomes in interdependent resource allocation decisions, to only consider the seller's welfare when communal norms are salient. Thus, when an exchange relationship is salient, the amount they pay, as well as their likelihood of overpayment will be less than that of their pro-social counterparts. However, when a communal norm is salient, we expect the amount they pay and their likelihood of overpayment to be higher than when an exchange norm is salient. We summarize these predictions in the hypotheses below:

- H1: When buyers consider the seller's welfare, a non-trivial proportion of consumers will overpay (pay a price that is significantly above their reference price) in PWYW settings.
- H2: Pro-social individuals will pay higher prices and will be more likely to overpay than pro-self individuals.
- H3: Consumers will pay higher prices and will be more likely to overpay when communal

norms are salient than when exchange norms are salient.

H4a: When an exchange norm is salient, pro-socials will pay higher prices than pro-selves.

H4b: Pro-selves' payments will be significantly higher when a communal (versus exchange) norm is salient.

See Figure 1 for a depiction of our proposed model. We next report the results of one field study and three experiments that were designed to test these hypotheses.

---Insert Figure 1 about here ----

Study 1

Study 1 was designed to test, whether in a setting where consumers are likely to take the seller's welfare into account, but where reference prices are relatively high, whether any buyers overpay, and if so, whether they overpay by a significant amount. The data for Study 1 were provided to us by a local animal shelter that used PWYW pricing for the adoption fee for a one month period in February 2013. The organization provided us with a list of every cat adopted that month and the amount each adopter decided to pay for their adoption fee. The organization normally charges \$150 for cat adoptions and this reference fee was shown on paper work given to those considering adopting a cat. Volunteers who worked the adoption events made salient that those adopting cats should consider the organization's welfare by telling them that the reasons they charge an adoption fee is that the organization spends on average \$1,500 per animal for their care while at the shelter.

We test H1 by examining what percent of adopters paid above the reference adoption fee of \$150. Note we do not conduct significance tests since we examined the entire population, and not a random sample, of cat adoptions. Twenty-five cats were adopted across the 28 days of that month. On average adopters paid \$110.38 in adoption fees, with fees ranging from \$10 to \$225.

Note that although they could, no one paid a \$0 adoption fee. Sixty percent paid less than \$150, 32 percent paid exactly \$150, and eight percent paid more than \$150. Among those who overpaid, the average magnitude of overpayment (i.e., the difference between their payment and the \$150 reference price) was \$62.50, an amount we consider non-trivial, since it is over 40 percent more than the standard adoption fee.

Thus Study 1 provides evidence that in a context where buyers likely took the seller's welfare into consideration, a significant number overpaid and by a non-trivial amount, supporting H1. However, given the nature of these field data, we cannot examine how individual and contextual factors that impact the extent to which buyers consider the seller's welfare affect payment behavior. We next test these next in three lab experiments.

Study 2

Study 2 was designed to provide evidence that the degree to which buyers focus on their own economic outcomes versus social motives influences the magnitude of their payments as well as the likelihood that they overpay in a PWYW context. Second, we wanted to show that both SVO and relationship norms influence the degree to which buyers consider economic versus social motives. Third, we wanted to examine whether consumer overpayment in PWYW settings can occur in both a communal norm setting where proceeds go to charity, and in an exchange norm setting when the proceeds remain with the seller. Finally, since trivial payments above reference prices lack practical importance and may just occur to simplify a transaction (e.g., so that change is not required), we also test whether, on average, the magnitude of overpayment is significantly greater than zero.

Participants

Two hundred and five adults were paid \$1.00 upon completion of an online study conducted through Amazon's Mechanical Turk (50% male; modal age range = 25-34 years). Participants reacted to a scenario where they could pay whatever they wanted for a 16-ounce cup of fresh-squeezed lemonade from a vendor at a local farmers market. Five outliers were removed from the data (stated payment, typical payment, or maximum payment was more than three standard deviations above the mean of each respective variable), as were two individuals who failed an instructional manipulation check. Consistent with established procedures (McClintock and Allison 1989; Van Lange et al. 1997), 21 individuals were eliminated because their responses to the SVO questions could not be classified into a specific category. The analysis below is based on the remaining 177 participants.

Procedure

Participants were told that they would be completing a series of independent mini studies, though all questions were actually parts of the same study. In part one, we measured participants' social value orientation. In part two, participants completed a neutral filler task, and in part three, they completed the focal PYWY task which included a relationship norm manipulation. The entire study took less than 15 minutes to complete and all parts were completed on a computer.

We measured participants' social value orientation using the Triple Dominance procedure (Van Lange et al. 1997). Participants were informed that they would make a series of choices, where they are paired with another person (referred to as Other) with whom they would not meet or communicate. They were then informed that in each task they and the Other would make a choice between three options (A, B, and C) that differ in the number of points they provide for themselves and the Other. They were informed to think of these points as having value.

Participants read an example of the task, complete with an explanation of how each choice would affect his/her points and the Other's points. They then selected their preferred distribution of points between self and Other over nine trials (See Web Appendix Part 1 for the instructions and full set of questions for this Triple Dominance procedure).

The three options participants chose from represented pro-social, individualistic, and competitive social values. The pro-social option maximized points for both self and Other; the individualistic option maximized points for self, regardless of the points for the Other; and the competitive option maximized points for self, relative to the Other's points. Following established procedures (McClintock and Allison 1989; Van Lange et al. 1997), participants who made six or more choices consistent with one of the orientations were classified as having that social value orientation.

After completing the Triple Dominance task, participants completed a neutral scrambled sentence (Srull and Wyer 1979) filler task in order to minimize the possibility of hypothesis guessing. They then moved on to the PWYW task, which included the relationship norm manipulation. Participants were told to imagine that they were shopping at a local farmer's market, that it was hot, and that they were thirsty. They were told to imagine they noticed a vendor that was offering the following special: "Today's Special: Pay Whatever You Want for One (1) 16-ounce cup of fresh-squeezed lemonade." Participants who had been randomly assigned to the communal norm condition next read that "All of today's profits will be donated to The Regional Children's Hospital." The remaining participants who were in the exchange norm condition were not given any information about profits being donated to charity, and thus were left to believe that the seller would keep the profits. Finally participants were told that next to the window where they placed their order, there was a large clear jar where they could place

their money. They were told to imagine that they were now at the front of the line and that there were several people whom they did not know behind them. Participants were next asked to submit a purchase price for their lemonade by entering a price in a text box at the end of the statement “*I will pay this much for my lemonade.*”

After participants submitted their purchase price (WTP), they answered a series of affective, perceptual, and behavioral questions, including their purchase likelihood, using both a continuous (“Regardless of the price you submitted, assuming you were in the mood for lemonade, if you saw this pay what you want offer, how likely would you be to purchase lemonade using this special offer?” 1=Extremely Unlikely, 7 = Extremely Likely) and categorical measure (“Regardless of the price you submitted, assuming you were in the mood for lemonade, if you saw this pay what you want offer, would you purchase lemonade using this special offer?” 1 = yes, 2 = no). We also measured how much attention, effort, consideration, and exertion participants put into determining their purchase price (1=Extremely Little, 7 = A Great Deal). We then measured the typical and maximum price participants would be willing to pay for a 16-ounce cup of lemonade (open-ended).

Finally, in order to measure the degree to which participants were focused primarily on economic aspects of the transaction that would benefit themselves or social aspects that would benefit others during the pricing task, we asked them to state their level of agreement with the following questions, “When I was deciding how much to pay for my lemonade, I thought this is an opportunity to get a good deal on a purchase,” “... save myself some money,” “...help myself,” “...donate to charity,” “...do something nice for someone else,” “...help someone else,” “... paying more than I normally would pay would be a good thing.” Responses were recorded via seven point scales anchored by 1 = Strongly Disagree and 7 = Strongly Agree. The study

concluded with an instructional manipulation check and demographic questions. A full list of variables measured in this study is included in Web Appendix, Part 2.

Results

SVO Categorization. Fifty percent of the participants were categorized as pro-social, based on their responses to the Triple Dominance Task, 30 percent as individualistic, and 9 percent as competitive. Due to the small number of people in the competitive group, we combined it with the individualistic group to form an overall pro-self group, as has been done in past research (DeDreu and Van Lange 1995; Stouten, deCremer, and van Dijk 2005).

Economic vs. Social Focus. According to our model, the reason that SVO and relationship norms influence payments is because they both impact whether people primarily focus on economic factors that benefit themselves or social factors that also impact the seller when deciding what to pay. As such, we expected pro-selves to be more economically focused in the pricing task than pro-socials, and we expected individuals in the exchange norm (seller) condition to be more economically focused than those in the communal norm (charity) condition.

We conducted an exploratory factor analysis on the seven economic-social items using Varimax rotation. There were two factors with eigenvalues greater than one, with good deal, self-help, and save money loading onto one factor and donate, other nice, other help, paying more would be good loading onto a second factor. We reverse-scored the last four items and combined them with the first three to create an economic-social focus index ($\alpha = .87$), with high scores indicating that the person was more economically-focused during the pricing task and low scores indicating the person was more socially focused during the task.

An ANOVA with economic-social focus as the dependent variable and relationship norm, SVO, and their interaction as the independent variables partially confirmed our expectations.

Participants in the exchange norm (seller) condition were more economically focused ($M_{\text{seller}} = 3.94$), than those in the communal norm condition ($M_{\text{communal}} = 2.56$, $F(1,173) = 82.29$, $p < .0001$), and while pro-selves were more economically focused than pro-socials, the difference did not reach conventional levels of significance ($M_{\text{pro-self}} = 3.37$, $M_{\text{pro-social}} = 3.13$, $F(1,173) = 2.37$, $p = .13$). The SVO x norm interaction was not significant.

Payment and buying behavior. Overall, participants stated that they would pay \$2.19 on average for a 16-ounce cup of fresh-squeezed lemonade (median = \$2.00), and WTP ranged from \$0 - \$6.00. On average, participants reported that they would typically pay \$1.55 for a 16-ounce cup of fresh-squeezed lemonade, an amount significantly less than their average WTP ($t(176) = 6.07$, $p < .0001$). An ANOVA with purchase likelihood as the dependent variable and SVO, relationship norm, and their interaction as the independent variables showed no significant effects.

To test the impact of the independent factors on payment amount, we conducted an ANOVA with WTP (log transformed since the data were not normally distributed) as the dependent variable and relationship norm, SVO, and their interaction as the independent variables. As shown in Figure 2, although pro-socials did express higher WTP (\$2.28) than pro-selves (\$2.06), the difference was not significant ($F(1,172) = 2.51$, $p = .11$) at conventional levels, and thus did not support H2. The effect of relationship norm was significant, with higher payments in the communal (charity) condition (\$2.81) than in the exchange (seller) condition (\$1.53; $F(1,173) = 45.86$, $p < .0001$), supporting H3. Both of these effects were qualified by a significant SVO x profit interaction ($F(1,173) = 3.72$, $p = .05$). In the exchange (seller) condition, pro-socials paid marginally more (\$1.77) than pro-selves (\$1.29, $F(1,173) = 3.15$, $p < .08$) consistent with H4a. However, when communal norms were made more salient through the

charity manipulation, pro-selves became as generous as their pro-social counterparts ($M_{\text{pro-self}} = \$2.83$, $M_{\text{pro-social}} = \2.79) and paid significant more in this condition than in the exchange condition ($M_{\text{exchange}} = \$1.29$, $M_{\text{communal}} = \$2.83$, $F(1,173) = 28.68$, $p < .0001$), supporting H4b.

Finally, we tested whether the focus on economic versus social factors mediated the SVO x relationship norm effect on WTP. An analysis using the method recommended by Preacher and Hayes (2008) with 1,000 resamples and SVO x relationship norm as the independent variable, economic-social focus as the mediator, and WTP as the dependent variable showed that economic-social focus fully mediated the effect of the SVO x relationship norm interaction on WTP (95% CI = .1969, .4458).

---Insert Figure 2 About Here ---

Last, we examined overpayment behavior. We defined overpayment as occurring when WTP exceeded the participants' internal reference price operationalized as the price they stated they would typically pay for the product. To ensure that this typical price was not influenced by the independent factors, we first conducted an ANOVA with typical WTP as the dependent variable (log transformed) and SVO, relationship norm, and their interaction as the independent variables. No effects were significant.

Across the entire sample, 16 percent of participants stated a price that was less than their reference price, 32 percent stated a price equal to their reference price, and 52 percent stated a price above their reference price. To examine how overpayment varied across conditions, we ran a logistic regression with overpayment incidence as the dependent variable (1 = overpaid, 0 = did not overpay) and relationship norm (1 = communal, 0 = exchange), SVO (1 = pro-social, 0 = pro-self), and their interaction as the independent variables. Only the effect of relationship norm was significant ($B = 1.48$, Wald $X^2(1) = 9.12$, $p < .01$), with overpayment being much more likely in

the communal (68%) than in the exchange condition (36%), supporting H1 and H2.

We next examined whether the observed overpayment was trivial in magnitude or not (e.g., whether consumers were willing to pay \$1.95 but paid \$2.00 to simplify the transaction). Among the participants who overpaid, we conducted a t-test comparing the average amount of overpayment to zero in each condition. A non-significant result in any of the conditions would indicate that, when participants overpaid, the amount was trivial (virtually zero). However, as Table 1 shows, each t-test was significant, indicating that the participants who overpaid were not simply rounding up or paying a trivial amount above their reference price, supporting H1.

Since a possible explanation for consumer overpayment is that participants weren't paying attention during the pricing task (i.e., overpayment was simply a mistake), we combined responses to the attention, effort, consideration, and exertion questions to create an effort index ($\alpha = .81$), and then conducted an ANOVA with this index as the dependent variable and SVO, profit, and their interaction as the independent variables. The results showed that none of the factors significantly affected participant effort. Thus, we have no evidence that overpayment is due to a lack of consumer attention in the price generation task.

-----INSERT Table 1 ABOUT HERE-----

Discussion

Study 2 showed that individual differences in SVO combined with relationship norms affect how much people pay in PWYW settings but not their likelihood of buying. When buyers believed that the seller would keep the profits, economic norms guided pricing behavior, resulting in pro-selves paying less than pro-socials. However, when buyers believed that profits would be donated to a charity, social norms guided pricing behavior, resulting in both pro-selves and pro-socials paying significantly higher amounts in this condition. We also showed that a

non-trivial proportion of consumers overpay in PWYW settings, and that donating profits to charity is not a necessary condition for overpayment. Some participants even overpaid when they believed the seller would keep the profits. Finally, we showed that overpayment was not due to lack of cognitive effort on the part of consumers.

Study 2 provided support for our proposed model, using a charity-seller manipulation as a proxy for communal-exchange norms. In Study 3, we wanted to determine if sellers could effectively influence relationship norms in the absence of a charitable tie-in. Therefore, we designed our next study to test the hypothesized combined effects of relationship norms and SVO on WTP and overpayment in a non-charity environment.

Study 3

Participants

Five hundred forty six participants (54% male; modal age = 25-34 years) were recruited via Amazon's Mechanical Turk, and paid \$1.00 upon completion of our study. Thirty eight individuals were eliminated due to inconsistent responses during the SVO task (McClintock and Allison 1989; Van Lange et al. 1997). Another 25 were removed because their WTP, typical WTP or maximum WTP responses exceeded three standard deviations from the mean, and four more were excluded after they failed an instructional manipulation check. The analysis below is based on the remaining 479 participants.

Procedure

We used the same "mini-studies" cover story and procedures as in Study 2, with the following exceptions. Approximately one half of the participants were assigned at random to an

exchange relationship norm manipulation adopted from Aggarwal (2004). Participants in this condition read the following passage:

“Imagine that you have been a customer at a local coffee shop for the past few years. You have used the shop quite extensively, and have been very happy with their efficiency and the quality of their service. You have been there when the shop is quite busy, and they have always been able to fulfill your order quite quickly. Their prices are also among the best in the city. You also eat there from time to time, because they offer a wide range of salads and sandwiches at very good prices.

The coffee shop also periodically makes some offers to you that appear to be of great value. In the past, whenever you have gone to the shop you have gotten in and out very quickly—they respect your time, and get the job done fast. Their workers seem to be quite well-trained and smart. Overall, your experience with the coffee shop has been excellent.”

Participants assigned to the communal relationship norm instead read the following passage:

“Imagine that you have been a customer at a local coffee shop for the past few years. You have used the shop quite extensively, and have been very happy with their efficiency and the quality of their service. When you first moved to the neighborhood, you went there to take a break from all of the unpacking. You still remember how touched you were when the shop owner offered you a free cup of coffee to welcome you to the neighborhood.

You have always associated the coffee shop with positive feelings, and often bring out of town guests there. The people at the shop have always treated you well. Over the past few years, whenever you have visited the shop you have had a very warm interaction. Everyone seems to take a personal interest in you, and they have often taken the initiative to suggest different blends of coffee or tea that you might enjoy. Overall, your experience with the coffee shop has been memorable.”

Next, participants were told to imagine that they were out running errands one day and decided to stop in at the coffee shop. Once inside, they noticed a sign offering customers an opportunity to pay whatever they want for a 16-ounce cup of hot, fresh coffee. Participants then submitted their purchase price, using the same procedure as in Study 2. Next, we measured participants' purchase intentions, post-purchase positive and negative affect, effort, perceived service quality, perceived product quality, and the typical and maximum price participants would be willing to pay for a 16-ounce cup of coffee (open-ended). The study concluded with an instructional manipulation check and demographic questions (please see the Web Appendix, part

1 for a complete listing of variables).

Results

SVO categorization. Overall, fifty-seven percent of participants were classified as pro-social, 34 percent as individualistic, and 9 percent as competitive. Once again we combined the competitive and individualistic groups to form an overall pro-self group.

Economic vs. Social Focus. An ANOVA with economic-social focus as the dependent variable and relationship norm, SVO, and their interaction as the independent variables revealed that participants in the exchange norm condition were more economically focused ($M_{\text{exchange}} = 4.25$), than those in the communal norm condition ($M_{\text{communal}} = 3.59$, $F(1,475) = 32.21$, $p < .0001$), and pro-selves were more economically focused than pro-socials ($M_{\text{pro-self}} = 4.18$, $M_{\text{pro-social}} = 3.66$, $F(1,475) = 20.32$, $p < .0001$). The SVO x norm interaction was not significant.

Payment and buying behavior. Self-reported WTP ranged from \$0 - \$8.00, with an average of \$2.48 (median = \$2.00), as compared to an average typical WTP of \$2.12 (median = \$2.00). The typical WTP was significantly lower than the stated WTP ($t(478) = 5.37$, $p < .0001$).

An ANOVA with purchase likelihood as the dependent variable and SVO, relationship norm, and their interaction as the independent variables showed that purchase likelihood was not affected by any of the experimental factors.

Next, we conducted an ANOVA with WTP (log transformed) as the dependent variable and norm, SVO, and their interaction as the independent variables. As Figure 3 shows, the effect of SVO was significant. Pro-socials expressed higher WTP (\$2.62) than pro-selves (\$2.31; $F(1, 471) = 6.76$, $p = .01$). The effect of relationship norm was also significant with participants paying less in the exchange (\$2.22) than in the communal condition (\$2.71; $F(1,471) = 13.43$, p

< .0001). The SVO x norm interaction was not significant ($F(1,471) = 1.40, p = .23$), but the hypothesized simple effects were significant. In the exchange norm condition, pro-socials paid significantly more (\$2.45) than pro-selves (\$1.98; $F(1,471) = 7.22, p < .01$). In contrast, in the communal norm condition, pro-selves paid significantly more (\$2.63) than their exchange counterparts (\$1.98; $F(1,471) = 10.30, p < .0001$), and the difference in payment behavior between pro-selves and pro-socials was attenuated. Thus, H2, H3, H4a, and H4b were supported.

Given that the SVO x relationship norm was not significant, we conducted two separate mediation analyses to determine whether economic-social focus mediated the main effects of SVO and relationship norm on WTP. The results showed that it did (95% CI = .0758 -.2508, and .1102-.2842, based on 1,000 resamples, respectively), thus supporting our argument that the extent to which consumers focus on their own economic outcomes versus the needs of the seller explains their payment behavior in PWYW settings.

--- Insert Figure 3 here ----

We next examined overpayment. As in Study 2, we defined overpayment relative to each participant's self-reported internal reference price (the price they stated they would typically pay for the product). An ANOVA with typical WTP (log transformed) as the dependent variable and SVO, relationship norm, and their interaction as the independent variables showed that the experimental factors did not affect the price that participants stated they would typically pay.

In support of H1, nearly half (49%) of the participants stated a purchase price higher than their internal reference price, with 21 percent stating a price equal to their internal reference price and 30 percent stating a price below their internal reference price. A logistic regression with whether or not participants overpaid as the dependent variable (1= overpayment, 0 = no overpayment), and SVO (1=prosocial, 0 = proself), relationship norm (1=communal, 0 =

exchange), and their interactions as the independent variables showed that the incidence of overpayment was marginally higher among pro-socials (51%) than among pro-selves, (46%; $B = .432$, Wald $X^2(1) = 2.61$, $p = .10$), and participants were significantly more likely to overpay when a communal norm was salient (58%) than when an exchange norm was salient (40%; $B = 1.02$, Wald $X^2(1) = 12.65$, $p < .0001$). The overall SVO x norm interaction was not significant ($B = -.501$, Wald $X^2(1) = 1.76$, $p = .185$).

. --- Insert Figure 3 about here ---

Finally we ran a series of t-tests to determine if the magnitude of overpayment was significant or trivial within each condition among those who overpaid. On average, those who overpaid paid \$1.42 above their reference price, and as Table 2 shows, each t-test was significant, indicating that consumer overpayment was not trivial.

--- Insert Table 2 about here ---

Discussion

Study 3 corroborated the findings of Study 2 that consumers' social value orientation and situational relationship norms each influence their payment behavior in PWYW settings. However, unlike in Study 2 where the relationship norm was influenced by the seller's relationship with a third party (a charity), in this study, we showed that the buyer's relationship with the seller alone can also influence pricing behavior. This result demonstrates for the first time that sellers can extract higher prices from buyers in PWYW settings without adding a charitable component and without providing an anchor like a suggested price. We also replicated our finding that some consumers overpay in PWYW settings, and that the magnitude of overpayment is meaningful.

While this study largely supported our predictions, it had several limitations that we

address in the next study. First, although we used an established manipulation for relationship norm, it is one where the norm is directly tied to an existing buyer-seller relationship. Firms that have existing exchange relationships with customers may find it difficult to quickly change their relationship norm, and it would take time for new firms to establish a relationship norm. We therefore wanted to test whether simply priming relationship norms, independent from the direct buyer-seller relationship can have an impact. Prior research shows that the mere salience of relationship norms can affect subsequent behavior, even in an unrelated context (Aggarwal and Law 2005; Aggarwal and Zhang 2006). Therefore in the next study, we test whether exchange and communal norms primed in an unrelated task would carry over and affect payment behavior in a subsequent PWYW scenario. Second, we defined overpayment in the previous studies relative to an internal reference price, operationalized as the price participants said they typically would pay for the product. Although we have no evidence that the independent factors impacted the typical price reported, it is still possible that participants' self-reported typical price may have been influenced by the thought process involved with deciding on a payment in the PWYW context. Further, we cannot be certain that the price participants said they typically pay is actually a relevant internal reference price. Therefore in the next study, we provide a single external reference price to participants and define overpayment as the amount they are willing to pay over that external reference price.

Study 4

Participants

We recruited three hundred thirty nine participants (56% male, modal age = 25 – 34

years) through Amazon Mechanical Turk who were paid \$1.00 upon completion of the experiment. We used the same “mini studies” cover story from the previous studies. Seventeen participants were eliminated because we could not classify their SVO. Fifteen participants were excluded for failing or not completing an instructional manipulation check (5), or expressing a WTP or typical WTP that exceeded three standard deviations above the respective means (5 each, respectively). Our results are based on the remaining 338 participants.

Procedure

We used similar procedures as in Study 3 with the following exceptions. First, half the participants completed the SVO task before proceeding to the relationship norm prime and PWYW task, whereas the other half started with the prime and PWYW task and then completed the SVO task. We used this procedure as a safeguard against the possibility that our SVO measure interfered with the relationship norm priming task or that measuring it upfront increased its salience. Second, we used a relationship norm priming task from Aggarwal and Law (2005) (See Web Appendix, Part 3), in which participants read a passage about a fictitious student named Chris who attended a local university. Approximately half of the participants read a passage intended to prime an exchange norm by describing Chris as someone who “likes to keep things even” and that relationships should be “quid pro quo.” Those in the communal prime were told that Chris “likes to do things for other people” and is “very close to her friends and is always there for them whenever they need her.” Both groups then were told that Chris went to lunch with a friend. They were asked to put themselves in Chris’ shoes and imagine how she might have decided to split the bill by typing their open-ended answers into a text-box provided to them. Third, the target item for the PWYW promotion in this study was a breakfast special comprised of a “regular cup of coffee (or tea) plus a bagel (or Danish or donut).” Last, in contrast

to the previous studies, all participants were provided with a \$3.00 suggested price for the breakfast special. We determined this suggested price after a separate sample of U.S. adults indicated that the modal price they would be willing to pay for a cup of coffee (or tea) plus a bagel (or Danish or donut) was \$3.00.

We again measured participants' purchase likelihood and economic-social focus, along with a number of additional affective and behavioral variables. The study concluded with participants completing an instructional manipulation check, and providing the typical, maximum, and fair price they would pay for a similar breakfast special along with personal demographics. The entire study took less than 15 minutes to complete. See Web Appendix, part 2 for a listing of measured variables.

Results

SVO Classification. Sixty percent of participants were classified as having a pro-social SVO, followed by 31 percent individualistic, and the remaining 9 percent competitive. As we did in our previous studies, we combined the last two categories into an overall pro-self category.

Economic vs. Social Focus. An ANOVA showed that once again pro-selves were more economically and less socially focused (4.19) than pro-socials (3.82) during the pricing task ($F(1,335) = 10.71, p < .01$) as were those exposed to the exchange (4.12) versus the communal prime (3.12, ($F(1,335) = 4.20, p < .05$)). The SVO x prime interaction was not significant.

Payment and buying behavior WTP ranged from \$0 to \$6.00, with an average of \$3.23 (median = \$3.00). An ANOVA with purchase likelihood as the dependent variable and SVO, prime, and their interaction as the independent variables showed that none of the experimental factors affected participants' purchase intentions.

We next conducted an ANOVA on log WTP with SVO, SVO measurement time (i.e., before or after the priming task), prime, and their respective interactions as the independent variables. Whether SVO was measured before or after the priming task had no effect on pricing behavior. Therefore, all subsequent analyses are based on SVO collapsed across measurement time. The ANOVA on log WTP showed a significant main effect of SVO, with pro-selves paying less (\$3.01) than pro-socials (\$3.40; $F(1,335) = 13.76, p < .0001$). The main effect of relationship norm was also significant. Participants primed with exchange norms essentially paid the suggested price on average (\$3.04), while those primed with communal norms paid \$3.37 on average ($F(1,335) = 7.77, p < .0001$). The SVO x prime interaction was marginally significant ($F(1,334) = 2.64, p = .10$), and the pattern of cell means supported our predicted simple effects. When an exchange norm was primed, pro-selves paid significantly less (\$2.81) than pro-socials (\$3.27; $F(1,334) = 15.53, p < .0001$). But when a communal norm was primed, pro-selves paid significantly more (\$3.21) than when an exchange norm was primed (\$2.81; $F(1,334) = 8.14, p < .01$). There was no significant difference among prosocials in what they paid in the communal (\$3.53) versus the exchange norm conditions (\$3.27; $F(1,334) < 1, p = ns$), and there was no difference between pro-socials and pro-selves in the communal condition ($F(1,334) = 2.01, p = .158$). These results support H2, H3, H4a and H4b (see Figure 4).

As in Study 2, we conducted a mediation analysis to determine whether economic-social focus mediated the SVO x prime effect on WTP, and once again, the results showed that it did (95% CI = .0084 -.1291).

---- Insert Figure 4 about here ---

Thirteen percent of participants paid less than the \$3.00 suggested price for their breakfast special. Sixty-two percent paid \$3.00, and 25 percent paid above \$3.00. A logistic

regression with whether or not participants overpaid (relative to the suggested price) as the dependent variable, and prime, SVO, and their interaction as the independent variables showed a main effect of SVO ($B = 1.28$, Wald $X^2(1) = 8.02$, $p < .01$). Thirty percent of pro-socials paid above \$3.00, whereas only 18 percent of pro-selves did. Also, individuals primed with a communal relationship norm were more likely to overpay (32%) than those primed with exchange relationship norms (20%; $B = 1.36$, Wald $X^2(1) = 7.89$, $p < .01$). The relationship norm x SVO interaction was marginally significant ($B = -1.03$, Wald $X^2(1) = 3.21$, $p < .08$). To examine whether the magnitude of overpayment was significant, we selected only those participants who paid above \$3.00 for their breakfast special. These individuals paid \$1.47 above \$3.00 on average, which is significantly different from zero ($t(86) = 21.29$, $p < .0001$). Follow-up t-tests for each condition showed once again that the magnitude of overpayment, when it occurs, is not trivial in any of the treatment conditions.

Discussion

Study 4 showed that overpayment in PWYW settings persists even when an external reference price is provided to participants, thus addressing the potential concern that overpayment in the previous studies may have been biased by unreliable self-reports of participants' internal reference price. The results also replicated the results of prior studies but when relationship norm is based on an independent prime. When exchange norms were salient, pro-socials paid more and were more likely to overpay than pro-selves. However, when a communal norm was salient, the difference in payment behavior between pro-socials and pro-selves was attenuated, driven largely by the substantial increase in payment by pro-selves.

General Discussion

Our findings from one field and three laboratory studies demonstrate that consumers not only pay above zero when they can pay any price they want, but also that some consumers even pay above their reference price in these same settings. We show that buyer-seller relationship norms at the time the pricing decision is made combined with the consumer's SVO influence how much they focus on their own economic welfare versus the needs of the seller, which in turn affects how much they pay and their likelihood of overpayment. Second, we showed that buyer-seller relationships can be governed by either communal or exchange norms, depending on the situational cues available to the consumer. In general, buyers pay more in PWYW settings when they possess a pro-social orientation and/or when they view their relationship with the seller to be a communal one. However, this does not mean that sellers are at the mercy of individual differences in SVO. We also show that sellers can shape relationship norm perceptions in ways other than sharing profits with a charity (Study 2). Developing a personal relationship with customers (Study 3) also increased payments, as did merely priming communal norms in the buyer through an unrelated task (Study 4). Our effects hold both when a suggested price is provided (Studies 1 and 4) and when it isn't (Studies 2 and 3).

Although SVO has been shown to affect decision-making in strategic games and cooperative behavior, to our knowledge, this is the first instance where it has been used to explain consumer behavior in a pricing decision context. However, the extension to PWYW settings is a fitting context to test the role of SVO on pricing behavior, since PWYW shares many characteristics of a Dictator Game. Similarly, while relationship norms have been examined in commercial settings before, no one has examined how relationship norm salience might affect the buyer's pricing decision when he/she has complete pricing power over the seller.

This research also contributes to the growing body of research on PWYW pricing. With the notable exception of Gneezy et al. (2010, 2012), PWYW research to date has largely been correlational in nature. In contrast, we propose a behavioral pricing model, test it with experiments, and offer empirical support for factors that explain consumer payment behavior in PWYW settings.

Our findings also expand our general understanding of why consumers sometimes overpay for products in participative settings. While prior research has shown that consumers sometimes overpay in auctions (Heyman, Orhun, and Ariely 2004; Ku, Malhorta, and Murnighan 2005; Wolf, Arkes, and Muhanna 2005), to our knowledge, this is the first paper that shows that consumers may pay above a reference price when they possess full pricing power, and systematically study the factors that lead to overpayment.

From a managerial perspective, this research confirms that PWYW can be a viable pricing strategy for sellers, and it sheds new light on the efficacy of the different variables deployed across PWYW models, as well as actions that sellers can take to increase consumers' payments. First, we demonstrated that pro-social consumers pay more and are more likely than their pro-self counterparts to pay above their reference price. This suggests that PWYW promotions will be more successful if the population of buyers includes both pro-social in addition to pro-self individuals. We recognize that it might be difficult for managers to predict or to control the population of consumers that take advantage of their PWYW offer, but fortunately this research also demonstrated that there are other ways to influence whether buyers consider the seller's welfare. Specifically, this research shows that when consumers perceive a communal relationship norm with the seller, both pro-socials and pro-selves pay more and are more likely to overpay, with pro-selves often behaving as generously as their pro-social counterparts. Thus,

sellers that take actions to influence the perception of a communal relationship norm should be more profitable. For example firms can frame PWYW promotions in a communal manner, by telling consumers that since they view the customer as their partner, they can jointly determine price. Similarly, they could undertake other participative marketing actions that make buyers feel a connection to the seller or to the seller's larger buyer community, such as providing buyers the chance to name or design a new product. They could donate some or all of the PWYW profits to a charity, or they could engage consumers through regular and ongoing communication, just to name a few. Last, we add to the research that has investigated the impact of providing a suggested price to potential buyers in PWYW settings. Our results show that consumers may not feel bound by a suggested price, as evidenced by the 8% and 25% of participants who expressed a WTP above the suggested prices provided in Studies 1 and 4, respectively. In fact we find they are not even bound by their internal reference price, or the price they typically pay for the good.

Although this research sheds new light on consumer payment behavior in PWYW contexts, limitations remain. First, though we have evidence consistent with our theorizing from the field study, we only tested our hypotheses in laboratory settings, and thus rely on self-reports of what people say they would pay and their likelihood of buying in a PWYW context. Ideally we would test our hypotheses with actual consumers and actual purchases, as we recognize that it is easier to say that you will buy and that you will pay a certain price and/or overpay than it is to actually pay that price or overpay. However, in Study 1 we replicated what others have shown that consumers pay above zero and may even overpay in PWYW settings, and furthermore, our research interest and contribution is less on the actual degree of (over)payment in real markets, and more on the psychological factors that impact payment magnitude. Finally, given that prior consumer behavior research shows that behavior intentions and actual behavior are highly

correlated (Morwitz, Steckel, and Gupta 2007), self-reported price should be correlated with payments in an actual buying context.

Second, given our focus on the social nature of the relationship between the buyer and the seller, we posited that payment in PWYW settings is the result of the combined effects of SVO and perceived relationship norms, but we fully acknowledge that other types of social factors and psychological processes could also affect what consumers pay. For example, impression management goals might influence payment in PWYW settings. A consumer may strategically overpay to impress a romantic partner while on a date, but strategically underpay to impress their boss while on a business trip, for example. They might overpay if their price is visible to other customers, but underpay if their price is private or not identifiable. Testing the relationship between these variables and overpayment would be a worthwhile avenue to pursue.

Third, we presented our participants with a very simple PWYW purchase context. However, some sellers are beginning to offer increasingly complex PWYW promotions. For example, Apple recently announced a PWYW offer for 10 Mac apps that offered 4 price anchors—one that exceeded the average price paid, a recommended price, a price to be at the top of the leader board, and a custom price. Similarly, the Humble Indie Bundle allows customers to pay what they want for gaming bundles, but also to choose how the price they paid is distributed across overhead, developers, and charity. Pricing in each of these examples involves a number of cognitive, affective, and social processes that may result in different payment amounts.

Finally, like much of the PWYW literature, our research focuses on a one-time purchase between the buyer and seller—a one shot game, if you will. However, it is unclear how SVO and relationship norms change over time, and by extension, how that affects consumer payment behavior over time. This is an important question that we hope future research will address.

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TABLE 1
A Summary of the Incidence and Magnitude of Consumer Overpayment

		Study 2		Study 3		Study 4	
		Pro-	Pro-Self	Pro-	Pro-Self	Pro-	Pro-Self
		Social		Social		Social	
Exchange Norm¹	Incidence	40%	31%	44%	34%	27%	10%
	Magnitude	\$.76*	\$.51*	\$1.32*	\$1.20*	\$1.35*	\$1.18*
Communal Norm¹	Incidence	70%	66%	57%	59%	34%	29%
	Magnitude	\$1.79*	\$1.93*	\$1.58*	\$1.43*	\$1.78*	\$1.25*

Notes: ¹Operationalized as profits to seller or profits to charity in Study 2. * denotes whether the difference between average overpayment among those who overpaid and zero is significant at the $p < .05$ level.

FIGURE 1
Proposed Model of The Effect of Social Value Orientation and Relationship Norms on Payment Behavior in PWYW Settings



FIGURE 2
Study 2: Willingness to Pay by Social Value Orientation and Relationship Norms (Exchange=Profits to Seller; Communal=Profits to Charity)

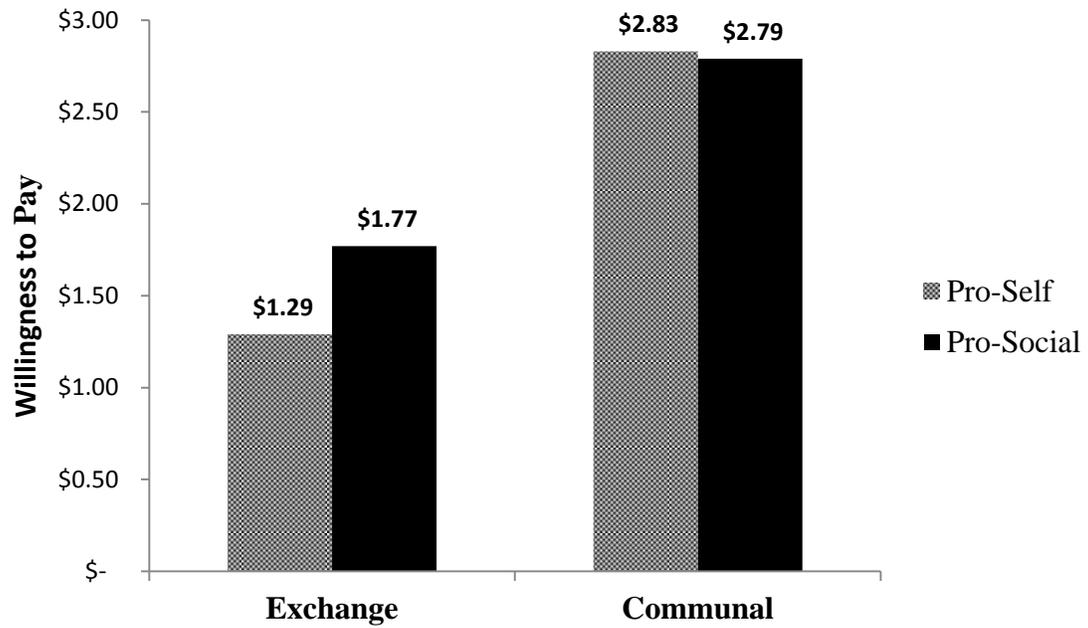


FIGURE 3
Study 3: Willingness to Pay by Social Value Orientation and Relationship Norms

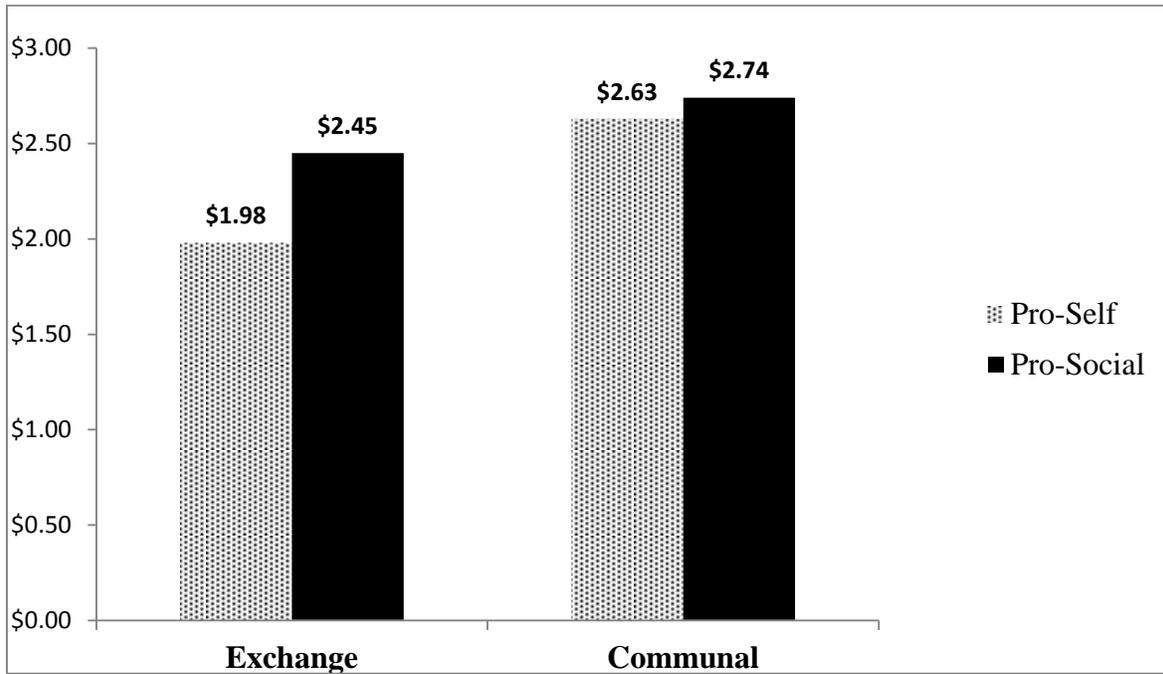
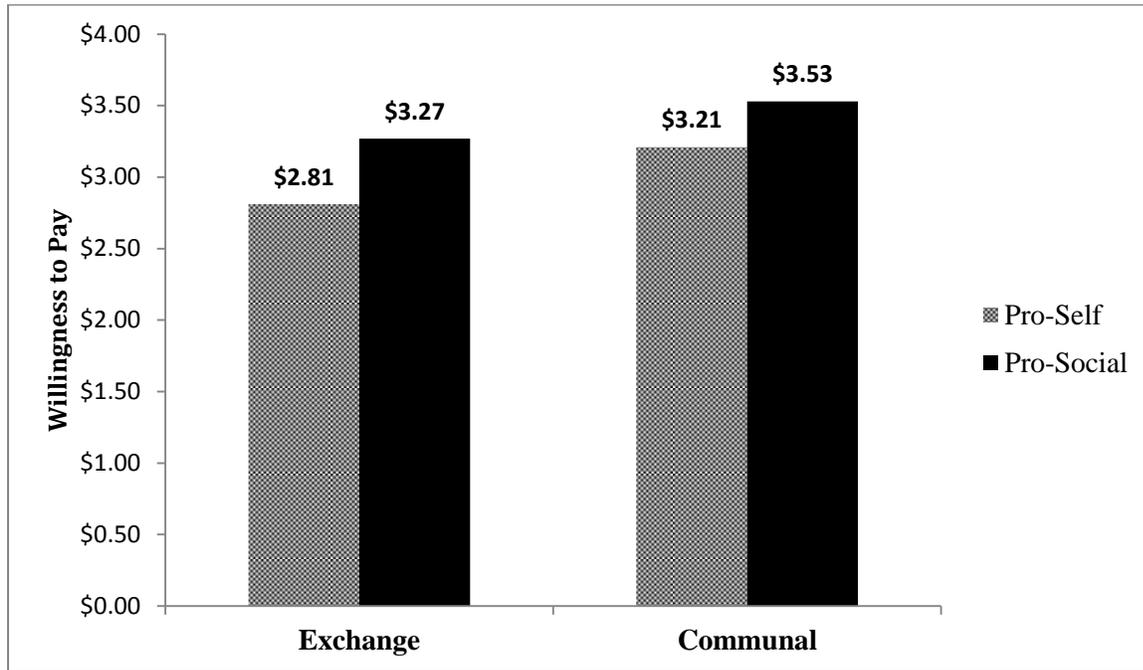


Figure 4
Study 4: Willingness to Pay by Social Value Orientation and Relationship Norm Prime



Web Appendix

Part 1: Nine-Item Triple Dominance Measure of Social Value Orientation

This task deals with decision making. As you will soon see, you will be asked to make choices in a series of decision problems. We fully expect that different people may have different preferences, and we are interested in knowing what choice YOU, as an individual, prefer most in each decision problem. So, during this task please make the choices you think are best.

For the upcoming decision tasks, you will be randomly paired with another person whom we refer to simply as Other. You will never knowingly meet or communicate with this other, nor will (s)he ever knowingly meet or communicate with you. In this decision task, both you and the other will be making choices by selecting either choice A, choice B, or choice C. Your own choices will produce points for yourself and the Other person. Likewise, the Other's choice will produce points for him/her and for you.

Every point has value: the more points you receive, the better for you, and the more points the Other receives, the better for him/her.

Here is an example of how the task works:

	A	B	C
You Get	500	500	550
Other Gets	100	500	300

In this example, If you chose A, you would receive 500 points and the Other would receive 100 points; if you chose B, then you would receive 500 points and the Other would receive 500 points; and if you chose C, you would receive 550 points and the other would receive 300 points. So you see that our choice influences both the number of points you receive and the number of points the Other receives.

Before you begin making choices, please keep in mind that there are no right or wrong answers—choose the option that you, for whatever reason, prefer most. Also remember that the points have value: The more of them you accumulate, the better for you. Likewise, from the Other's point of view, the more points s/he accumulates, the better for him/her.

	A	B	C		A	B	C
1) You get	480	540	480	6) You get	500	500	570
Other gets	80	280	480	Other gets	500	100	300
2) You get	560	500	500	7) You get	510	560	510
Other gets	300	500	100	Other gets	510	300	110
3) You get	520	520	580	8) You get	550	500	500
Other gets	520	120	320	Other gets	300	100	500
4) You get	500	560	490	9) You get	480	490	540
Other gets	100	300	490	Other gets	100	490	300
5) You get	560	500	490				
Other gets	300	500	90				

Note: Participants are classified when they make 6 or more consistent choices. Prosocial choices are 1c, 2b, 3a, 4c, 5b, 6a, 7a, 8c, 9b; individualistic choices are 1b, 2a, 3c, 4b, 5a, 6c, 7b, 8a, 9c; and competitive choices are 1a, 2c, 3b, 4a, 5c, 6b, 7c, 8b, 9a.

Part 2: List of Additional Variables Measured by Study

Study 2 – angry, afraid, proud, guilty, happy, sad, ashamed, worried, frustrated, disgusted, hopeful, surprised, joyful, excited, warm feelings about the vendor, vendor helps others in times of need, I'd miss the vendor if I moved away, vendor makes me feel special, vendor cares about me, I care about the vendor, I get good value for my money at the vendor, vendor gives good service in order to get business, I get my money's worth at the vendor, service quality, product quality, gender, income, age, state of residence, employment status.

Study 3 – interested, alert, afraid, hostile, upset, attentive, excited, enthusiastic, ashamed, irritable, nervous, scared, determined, distressed, guilty, jittery, inspired, strong, active proud, warm feelings about the coffee shop, the coffee shop helps others in times of need, I'd miss the coffee shop if I moved away, the coffee shop makes me feel special, the coffee shop cares about me, I care about the coffee shop, I get good value for my money at the coffee shop, the coffee shop gives good service in order to get business, I get my money's worth at the coffee shop, service quality, product quality, gender, income, age, state of residence, employment status.

Study 4 – interested, alert, afraid, hostile, upset, attentive, excited, enthusiastic, ashamed, irritable, nervous, scared, determined, distressed, guilty, jittery, inspired, strong, active proud, warm feelings about the coffee shop, the coffee shop helps others in times of need, I'd miss the coffee shop if I moved away, the coffee shop makes me feel special, the coffee shop cares about me, I care about the coffee shop, I get good value for my money at the coffee shop, the coffee shop gives good service in order to get business, I get my money's worth at the coffee shop, service quality, product quality, gender, income, age, state of residence, employment status.

Part 3 : Relationship Norm Primes Used in Study 4

Communal Prime: Chris is a student at a local university and is now in the third year of the program. Chris likes to go to movies with her friends. In fact, Chris is very close to her friends and is always there for them whenever they need her. She is caring, and is a good listener. She likes to do things for people just to please them and to show that she cares for them. Once she called a friend late in the evening and requested him to drive out to where she was and give her a ride home when he car got stranded off campus. Her friend asked her to take a cab instead, since he wasn't feeling up to driving (but offered to pay the cab fare). This disappointed Chris, who would have gladly helped this friend out if he had made a similar request to her. She just couldn't imagine how someone who was a friend would not be there for her when she needed some help.

The other day she had gone out to lunch with one of her dear friends for a quick bite after class. When the bill came, she looked at it and decided to...

Exchange Prime: Chris is a student at a local university and is now in the third year of the program. Chris likes to go to movies with her friends, but is careful in her interactions with them. She believes that relationships should be quid-pro-quo. In fact, she always likes to keep things as even as possible and generally keeps track of her exchanges with others. In fact, she is also very uncomfortable if others give her more than what she has been able to give them, and tries to find a way to return the favor as early as possible. When she helps other people, she generally makes a mental note and expects them to reciprocate in kind. Once she got very upset when she had lent a book to a friend, but the friend forgot to return the book to the library within the due date. She felt that the least the friend could do was pay the late fee that the library would levy on her.

The other day she had gone out to lunch with one of her dear friends for a quick bite after class. When the bill came, she looked at it and decided to...