# The "Fees $\rightarrow$ Savings" Link, or Purchasing Fifty Pounds of Pasta 

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#### Abstract

Many consumers have had the experience of entering discount membership clubs to make a few purchases, only to leave with enough pasta to outlast a nuclear winter. We suggest that the presence of membership fees can lead consumers to infer a "fees $\rightarrow$ savings" link, spurring them to increase their spending independent of the actual savings afforded by such clubs. Using both field data and studies in which we created our own "membership clubs," we show that 1) fees serve as a signal of price discounts, such that stores that charge fees are perceived as offering better deals for identical items; 2) the presence of fees can increase consumer spending and overall store profitability; and 3) the presence of fees can drive choice of retail outlets, such that stores with membership fees are more popular even when they offer the same goods at the same prices as stores without fees.


Discount membership clubs have a large and growing presence in retail - one recent survey reported that Costco sells to 1 in every 11 people in the United States and Canada (Spector 2005) and warehouse clubs are estimated to be a $\$ 120$ billion industry today in the United States alone (HCC Publishing 2007). As a result, more and more people have had the experience of entering one of these popular clubs and leaving hours later with more goods than can fit in their car and enough pasta to outlast a nuclear winter; at minimum - as is the case with some of our acquaintances - many are familiar with a family member who engages in this kind of behavior. While one rational reason for such behavior is that membership clubs do offer lower prices than other retailers, we propose that the presence of membership fees alone - independent of the actual savings on any given product - can lead consumers to infer a "fees $\rightarrow$ savings" link, leading them to spend more than they otherwise would to capitalize on these perceived "great deals." These inferences can lead retailers who charge membership fees to make more money not just on increased sales due to consumers' sometimes erroneous inferences about the deals they are getting, but, ironically, on collecting the very fees that lead to these increased sales.

We explore this phenomenon by setting up our own "membership clubs" and comparing our profits across stores with varying membership fees. Across five studies, we demonstrate that consumers perceive stores that charge fees - both in the real-world and in our laboratory studies - to offer better deals than stores which do not charge fees, even when those stores offer the same goods at the same prices, perceptions which spur increased spending.

## The "Fees $\rightarrow$ Savings" Link

What might account for this generalized belief in the savings offered by discount clubs? We suggest that membership fees required for the consumption of a brand or service signal
dominance on the dimension most salient to the particular brand or service: for country clubs, higher fees might signal greater exclusivity; for health clubs or healthcare plans, fees may signal higher service quality; for discount stores such as Costco or Sam's Club, where the most salient dimension is cost savings, fees may signal greater price discounts. The presence of fees at membership stores thus may instantiate an implicit norm with consumers (see Grice 1975): "We wouldn't charge you this fee if we weren't making it worth your while," leading consumers to infer a "fees $\rightarrow$ savings" link. Just as consumers infer that stores which display a high proportion of in-store sales signs (Simester 1995) and those which use promotional messages like "Prices start at $\$ 49 "$ (Shin 2005) have low prices, we suggest that they perceive stores that charge membership fees to have more attractive price discounts compared to those that do not. In support of this logic, prior research has demonstrated that consumers are indeed drawn to stores that charge fees, when those fees signal increased savings (Dick and Lord 1998).

Such signaling of implicit norms is consistent with previous research that shows that consumers' relationships with brands are based on similar contracts (Aggarwal 2004); when these contracts or norms are violated, consumers' relationships with such brands are weakened and erosion of brand equity can ensue (Aaker, Fournier, and Brasel 2004; Fournier 1998). For example, consumers expect prices associated with particular brands to be generally stable within a short amount of time, and firms can raise prices without invoking wrath among consumers only provided consumers understand why those changes are made (Bolton and Alba 2006; Bolton, Warlop, and Alba 2003) and see them as fair (Campbell 1999; Janakiraman, Meyer, and Morales 2006; Kahneman, Knetsch, and Thaler 1986; Rotemberg 2005; Xia, Monroe, and Cox 2004). In a similar vein, when a store sells the same products as other competing stores but charges a
membership fee, consumers may infer that the prices at the store must be lower to warrant that fee (see Wyer and Srull [1989] for a general discussion of such inference processes.)

Of course, while we suggest that consumers overgeneralize the assumption that fees lead to lower prices, the assumption is not completely unfounded. Membership clubs frequently offer better prices per unit (e.g., per ounce of detergent), due to factors such as lower costs for store upkeep (the stereotypical concrete-floored warehouse club) and especially due to the volume discounts these retailers are able to offer given their ability to stock package sizes far larger than other retailers can stock. Indeed, when we visited both a Costco store (which charges a fee) and a Wal-Mart store (which does not) in New England and recorded the prices of a selection of 20 common consumer products ranging from Lipton tea bags and Goldfish crackers to regular household products such as Duracell batteries and Tide laundry detergent, we discovered two things. First, the two stores generally did not offer the same sized products. Second, when we extrapolated prices to calculate the volume discount, Costco had an average price advantage of 9.5\% per unit across these product categories compared to Wal-Mart. Thus discount stores like Costco do allow consumers to enjoy lower unit prices due to volume discounts compared to other regular stores that do not charge a fee.

If consumers believe that the savings offered by retailers like Costco are due solely to volume discounts, however, they would not infer the generalized "fees $\rightarrow$ savings" link that we posit spurs increased spending. What might lead consumers to overgeneralize the relationship between fees and savings? As mentioned above, the different package sizes offered by the different stores make direct price comparison difficult for consumers; in addition, a discount club like Costco simply carries fewer items (some 4,000 ) than their competitors such as Wal-Mart $(125,000)$ or grocery stores $(40,000$; Branch 1999), making it even more difficult for consumers
to compare products at discount clubs to other stores. As a result, while consumers can see that a 64 ounce bottle of ketchup is cheaper per ounce than a 32 ounce bottle within a given Wal-Mart due to a volume discount, consumers often cannot directly compare the extent to which different prices for different sizes are due to volume discounts between Wal-Mart and Costco, a situation that creates ambiguity as to whether the savings are due to a volume discount or to Costco truly offering better deals. This kind of uncertainty can lead consumers to be particularly susceptible to cues induced by marketing efforts such as coupons and promotions (Lee and Ariely 2006; Simonson, Carmon, and O'Curry 1994) - or, we suggest, the inference that membership fees may be responsible for these perceived savings. Indeed, stores that charge fees attempt to manage this consumer uncertainty in favor of a "fees $\rightarrow$ savings" inference: One Costco retailer, for example, sold $\$ 100$ gift certificates for $\$ 80$, implying a flat $20 \%$ price discount on all goods; even more tellingly, these gift certificates were placed strategically in a heavily-trafficked position at the entrance to the store.

In sum, due both to the implicit norms implied in the membership fees that discount clubs charge and the difficulty of ascertaining whether this inference of better deals is correct, we suggest consumers may generalize from real savings offered on some goods by retailers that charge fees to a perceived "fees $\rightarrow$ savings" link. If consumers do endorse this link, then they might erroneously perceive products to be a better deal if they encounter these products in a store that charges a fee than in one that does not, even when the two stores sell these products at the same price point. In short, we suggest that an overgeneralized consumer belief in the savings offered by these clubs is the trigger for the increased spending that can result in consumers arriving home with a 50 -pound bag of spaghetti - and to an irate spouse.

## Overview of Studies

To explore our hypothesis - that the generalized belief that stores which charge fees offer lower prices causes consumers to spend more in such stores than in stores which offer the same goods at the same prices but do not charge a fee - we ran a series of studies examining how membership fees affect both consumers' perceptions of the attractiveness of store prices as well as their buying behavior. In Study 1, we created our own "membership club" in which we asked some participants to pay a fee before making any purchases from our store, in order to document the potential increased spending that results from fees. We examined the underlying causes of the basic finding more directly in Studies 2 and 3, assessing consumers' price perceptions of goods at stores that charge fees or not. Using the same "membership club" paradigm as in Study 1, we assessed both price perceptions and spending concurrently in Study 4. Finally, Study 5 suggests a practical implementation of our results, varying the fees displayed on store advertisements and demonstrating the impact of such fees on consumer preferences for retail outlets.

Study 1: Real Spending as a Function of Membership Fees
The purpose of Study 1 was to examine consumers' spending patterns when they shop at a store that charges a fee or not. To do this, we created our own stores in which we assigned participants to either a fee condition or a no fee condition, and recorded their willingness to shop and the total amount that they spent.

## Method

Participants $(N=80)$ were approached after they participated in a one-hour session of unrelated experiments. Participants were told on a sheet of paper that they were invited to shop
from a variety of products at discounted prices. Several of each of the following products were displayed on a table with their prices clearly visible: Gum (2 for \$0.25), Candy Bar (\$0.25), Pen printed with the university's logo (\$1.00), Beanie Baby (\$2.00), Compact Disc Carrying Case (\$5.00).

Participants were assigned randomly to either the fee condition or the no fee condition. Participants in the fee condition were told they were required to pay a $\$ 0.50$ fee in order to purchase anything from the store, while participants in the no fee condition were allowed to buy whatever they wished without any mention of a fee. Importantly, participants saw all of the products - and the prices we were charging for those products - before deciding whether or not to pay the fee, such that the fee was paid simultaneously with any purchases. Thus our results are unlikely to be driven by a sunk cost explanation, in which consumers justify having paid a fee by increasing subsequent consumption (Arkes and Blumer 1985; Staw 1981); we return to this issue in the General Discussion.

## Results

The results revealed that there was no significant difference in purchase likelihood between our two stores: $58 \%$ of participants in the fee condition chose to pay the fee and buy at least one item, while $55 \%$ of participants in the no fee condition did so, $\chi^{2}<1$. However, as predicted, participants in the fee condition $(M=\$ 1.17, S D=\$ 1.78)$ spent significantly more than those in the no fee condition $(M=\$ 0.51, S D=\$ 1.01), t(78)=2.05, p<.05$. We can further compare the implied profitability of the two conditions by calculating the expected value per customer - multiplying average spending by the percentage of those who bought something in each condition, and adding in revenues from fees. We found that expected value per customer
was three times higher in the fee condition $(M=\$ 0.97)$ than in the no fee condition $(M=\$ 0.28)$ (see Table 1).

Examining the data from a different perspective, only $30 \%$ of participants in the no fee condition spent $\$ 0.50$ or more (since $45 \%$ of participants in that condition did not buy anything and an additional $25 \%$ spent only $\$ 0.25$.) Any rational account would therefore posit that no more than $30 \%$ of participants in the no fee condition would have been willing to pay a $\$ 0.50$ fee if we had required them to do so, since $70 \%$ had a total willingness-to-pay of less than $\$ 0.50$. However, results showed that in the fee condition, $58 \%$ of participants (i.e., nearly double this $30 \%$ ) actually paid the fee and purchased at least one item, suggesting that the presence of the fee changed consumers' total budgets despite the fact that the goods and prices were exactly the same across our two stores.

In addition, these results appear to run against consumers' intuitions about the impact of fees. We showed a different set of participants $(N=76)$ pictures of the same products used in Study 1 at the same price points, and asked them to predict their buying behavior. Though fees had little impact on the actual number of people who made a purchase in Study 1, participants predicted that fees would serve to dissuade them from purchasing, as only half as many participants predicted they would make a purchase if asked to pay a $\$ 0.50$ fee as those participants who did not have to pay a fee $(44 \%$ vs. $80 \%), \chi^{2}(1)=10.29, p<.01$. Unlike with real spending, in which the presence of fees spurred additional purchasing, participants did not predict in the abstract that the presence of fees would change their total budget, as estimates of spending did not vary between the fee $(M=\$ 2.54, S D=\$ 4.48)$ and no fee conditions $(M=$ $\$ 2.99, S D=\$ 4.32), t<1$. Thus people predicted that the expected value per customer in the no fee condition was nearly double that in the fee condition, $\$ 2.39$ versus $\$ 1.39$, in direct contrast to
our actual spending results from Study 1 in which our store made three times more when we charged fees.

Despite people's intuitions to the contrary, Study 1 demonstrated that consumers were not dissuaded by the presence of our fees when they chose to enter our store, and, having paid the entry fee, actually spent more money in that store. We propose that this effect can be explained by an implicit "fees $\rightarrow$ savings" norm that consumers infer when shopping in stores that charge fees. In the next two studies, we tested this premise directly by assessing how consumers perceive prices at stores that either charge fees or not.

## Study 2: Consumer Perceptions of Discounts at Wal-Mart and Costco

In the introduction, we suggested that consumers may have difficulty understanding that at least some of the savings they receive at stores that charge fees are due merely to volume discounts, rather than to savings offered specifically by stores that charge fees. In this study, we wanted to show that people believe that Costco offers a discount over and above a regular volume discount they might get at a store like Wal-Mart, offering evidence that people may believe that stores that charge fees offer better deals than similar stores which do not.

Method

A nationally representative sample of participants ( $N=368,53 \%$ female, $M_{\text {age }}=40.3$ ) drawn from a pool maintained by an online survey company - completed the survey as part of a block of unrelated surveys.

We showed participants five products, with actual prices listed for the regular size of that product at Wal-Mart (see Table 2), and asked them to estimate how much each product would
cost in a bulk package size at Wal-Mart, then asked them to estimate how much each product would cost in that same bulk package size at Costco.

## Results

For each product, participants estimated a lower price for the bulk package size at Costco than at Wal-Mart: Opti-Free $\left(\mathrm{M}_{\text {Costco }}=\$ 12.80, \mathrm{M}_{\text {Wal-Mart }}=\$ 13.63, t(361)=5.37, p<.001\right)$, Vitamins $\left(\mathrm{M}_{\text {Costco }}=\$ 11.96, \mathrm{M}_{\text {Wal-Mart }}=\$ 13.10, t(365)=6.62, p<.001\right)$, Kleenex $\left(\mathrm{M}_{\text {Costco }}=\right.$ $\left.\$ 8.39, \mathrm{M}_{\text {Wal-Mart }}=\$ 8.73, t(365)=1.91, p=.056\right)$, Listerine $\left(\mathrm{M}_{\text {Costco }}=\$ 6.15, \mathrm{M}_{\text {Wal-Mart }}=\$ 6.52\right.$, $t(365)=4.61, p<.001), \operatorname{M\& Ms}\left(\mathrm{M}_{\text {Costco }}=\$ 5.23, \mathrm{M}_{\text {Wal-Mart }}=\$ 5.48, t(366)=3.31, p<.01\right)$.

Table 2 shows the imputed percent discounts implied by these price estimates. First, consumers did understand that larger package sizes lead to volume discounts at both Wal-Mart and Costco; averaging across all five products, they estimated a $24.8 \%$ volume discount at WalMart and a $29.3 \%$ volume discount at Costco. Most importantly for our account, however, they felt that Costco offered a $4.5 \%$ discount over and above the discount offered by Wal-Mart. Thus participants endorse the notion that Costco offers savings over and above Wal-Mart even for the exact same items available in the exact same package size.

Study 3: Consumer Perceptions of Discounts Solely as a Function of Fees
Of course, it may well be the case that Costco does in fact offer greater savings than WalMart in those cases when they do offer the same products in the same size. As we mentioned in the introduction, Costco may offer better deals than Wal-Mart over and above a volume discount due to other factors that differentiate the two retailers (most obviously, Costco's lower overhead due to its bare-bones approach reflected in its concrete-floored warehouses). Our contention is not that Costco never offers better prices than Wal-Mart, but that consumers overgeneralize the
"fees $\rightarrow$ savings" link even to situations in which fees do not actually signal savings, such that even stores which do not in fact offer additional savings are perceived as doing so, provided they charge a fee. To test this proposition, we controlled for any additional differences between existing stores like Costco and Wal-Mart by simply asking consumers in Study 3 about their general intuitions about the prices of stores that charged fees or not.

## Method

Participants $\left(N=49 ; 24\right.$ male, $\left.M_{\text {age }}=19.7, S D=2.5\right)$ were approached at the student center of a large northeastern university to complete a short survey. They read a description of two stores which offered goods at discounted prices, and were told that at one store membership was free while the other store charged a $\$ 100$ yearly membership fee. We then asked participants to choose which store they thought offered more discounted prices/better savings. Additionally, we showed them pictures of two products (a 10-pack of gum and an MP3 player), gave them the manufacturer's suggested retail prices of these products (\$4.40 and $\$ 249.00$, respectively), and asked them to indicate the price they thought each store (no fee or $\$ 100$ fee) would charge.

## Results

The vast majority of participants ( $88 \%$ ) thought the $\$ 100$ fee store offered better prices than the no fee store, $\chi^{2}(1)=27.94, p<.001$. While both stores were perceived as offering significant discounts on both items (one-sample $t s$ comparing estimated price to the given actual retail price, all $p \mathrm{~s}$ < .001), our prediction of perceptions of relatively better prices at the $\$ 100$ fee store was borne out. Participants predicted lower prices at the $\$ 100$ fee store than the no fee store on both the MP3 player ( $\$ 211.28$ and $\$ 229.08, S D s=\$ 36.65$ and $\$ 25.11$ ), paired $t(48)=4.88, p$ $<.001$, and the 10-pack of gum ( $\$ 3.28$ and $\$ 3.92, S D s=\$ 1.10$ and $\$ 0.70$ ), paired $t(48)=5.93, p$ <. 001 .

These results suggest that participants inferred the level of price discounts from the presence or absence of membership fees, perceiving stores that charge a fee to have more attractive prices than those that do not. These reductions mapped onto an $8 \%$ discount on the MP3 player and a $16 \%$ discount on the gum, even larger than the $4.5 \%$ discount we observed for predictions between Wal-Mart and Costco for the same-sized goods in Study 2, suggesting that fees have an impact on price perceptions independent of factors specific to particular retailers.

## Study 4: Real Spending and Price Perceptions

Studies 2 and 3 suggested that consumers inferred a "fees $\rightarrow$ savings" link when stores charge fees, while Study 1 demonstrated that the presence of fees drove increased consumer spending. In Study 4, we combined the paradigm from Study 1 with the insights from Studies 2 and 3, once again creating our own stores which either did or did not charge fees, and allowing participants to shop while also assessing their perceptions of the quality of our prices. In addition, Study 4 allowed us to further isolate the impact of fees on price perceptions independent of other differences that might be associated with cost savings - such as concrete floors or less lighting - between real-world retailers like Costco and Wal-Mart which vary in their fee levels: As in Study 1, the only difference between our "fee" and "no fee" stores was the fee itself.

## Method

Participants $(N=78)$ completed the experiment at the end of a session of unrelated experiments. We used the same procedure and materials as in Study 1, with two exceptions. First, we used a slightly different product array: Gum (2 for \$0.25), Candy Bar (\$0.25), Teddy Bear (\$1.00), Flashlight (\$2.00), Compact Disc Carrying Case (\$5.00). Second, and most importantly, we added several questions designed to measure participants' impressions of our
stores. After completing their purchases or declining to make a purchase, participants rated their satisfaction with their shopping experience (1: very dissatisfied to 7 : very satisfied), the quality of our products (1: very bad to 7: very good), and finally reported how they thought our prices compared to the actual retail prices of the products (1: much lower, 4: the same, 7: much higher).

## Results

While in Study 1 there was no difference in the number of people who chose to buy at least one item, in Study 4 the presence of fees actually caused more participants to choose to buy something in the fee condition ( $62 \%$ ) than in the no fee condition $(36 \%), \chi^{2}(1, N=78)=5.13, p$ <.03. As in Study 2, participants in the fee condition $(M=\$ 1.53, S D=\$ 2.42)$ spent significantly more than those in the no fee condition $(M=\$ 0.49, S D=\$ 1.02), t(76)=2.46, p<.02$. We again calculated the expected value per customer by adding in the profit from collecting fees for those who chose to pay them in the fee condition: Expected value per customer was seven times higher in the fee condition $(M=\$ 1.26)$ than in the no fee condition $(M=\$ 0.18)$ (see Table 3).

As predicted, and replicating Studies 2 and 3, fees were associated with greater perceptions of price quality: participants in the fee condition perceived the prices in our store to be significantly lower $(M=2.08, S D=.70)$ than those in the no fee condition $(M=2.81, S D=$ 1.39) $, t(74)=2.93, p<.01($ see Table 3).

One possible problem with charging fees is that though customers may spend more money, they might enjoy their shopping experience less due to the "pain of paying" (Prelec and Loewenstein 1998) which might decrease the likelihood of repeat spending. This did not appear to be the case with our participants; if anything, participants in the fee condition reported being more satisfied with their shopping experience $(M=5.33, S D=1.48)$ than those in the no fee condition $(M=4.86, S D=1.46)$, though this difference was not statistically significant, $t(73)=$
$1.39, p=.17$ (see Table 3). These results suggest that the increased spending that fees encourage do not result in subsequent dissatisfaction, an important point given these clubs' desire for their consumers to renew their memberships annually.

A second worry for stores that charge fees is that low prices might be coupled with a perception of lower quality goods (Milgrom and Roberts 1986; Rao and Monroe 1989; Shiv, Carmon, and Ariely 2005). This was not the case with our consumers, however, as participants in the fee and no fee conditions did not differ in their assessments of quality $(M s=4.51$ and 4.43), $t$ < 1 (see Table 3).

## Study 5: Fees Drive Store Choice

In Studies 1 and 4, we randomly assigned participants to stores that did or did not charge fees. In the real world, of course, consumers are free to choose whether to shop at stores with fees or at stores without fees. Even if we are correct that visiting stores that charge fees leads to greater spending, if fees were to dissuade a sufficient number of consumers from even entering a store - choosing to forgo paying a fee by shopping at a no fee store - then retailers should think twice about charging fees. While the real-world success of membership clubs such as Costco suggests that a sufficient number of consumers are willing to pay such fees - as do our results from Studies 1 and 4 - we wanted to explore this issue more explicitly. In Study 5, we showed consumers advertisements - designed to look like supermarket flyers - from two stores, one which charged a fee and one which did not, and assessed both consumers' inferences about the prices those stores charged as well as their store preferences. As in the real world where stores that charge fees tend to carry different products than those that do not, we created flyers with non-overlapping product offerings. We expected stores that charged fees to be seen as offering better prices, and expected participants to state that they would prefer to shop at such stores -
even when neither store actually offered better deals. Thus while stores that charge fees in the real world may differ in the actual savings they offer, we again test - as in Study 4 - whether the "fees $\rightarrow$ savings" link is generalized to the point where even stores which do not offer better value are seen as doing so provided they require a fee.

Method
Because students are less likely to frequent membership clubs, we collected data from a non-student sample by approaching consumers ( $N=113,57$ females, $M_{\text {age }}=28.5, S D=11.2$ ) outside of a video rental store.

We created mock flyers for two different stores, with four products for each store (e.g., Store A offered steak for $\$ 3.99 / \mathrm{lb}$, while Store B offered a bag of oranges for $\$ 3.99$; see Figure 1 for a sample of these flyers). We then varied which store charged a membership fee, and which did not. Thus in one version, Store A (steak) charged a fee while Store B (oranges) did not, while in the other, Store B (oranges) charged a fee while Store A (steak) did not. In short, we wanted to explore the impact of fees on perceptions of and preferences for stores independent of the specific products offered by those stores (see Norton, Vandello, and Darley 2004 for a similar paradigm), as a consumer might do when reading circulars in the Sunday newspaper and deciding which store to visit.

We also manipulated the size of the fee - either a $\$ 15$ or $\$ 25$ yearly fee - in an initial effort to explore whether fees send a signal regardless of their magnitude, or whether inferences about prices are driven in part by fee amount.

After viewing both flyers, participants indicated which store they felt offered better deals and lower prices on average, and then were asked to indicate which store they would choose to frequent if they had to choose one to shop at for an entire year.

## Results

Price Perceptions. As expected, participants thought that stores that charged fees offered better prices, as $71 \%$ selected the store with the fee, $\chi^{2}(1)=19.55, p<.001$; importantly, however, this occurred regardless of which store charged a fee. When Store A charged a fee, $65 \%$ of participants thought that this store had better prices; in the other condition, when Store B charged a fee, however, suddenly the majority ( $77 \%$ ) thought that this store offered better prices, $\chi^{2}(1)=19.91, p<.001$, again, even though the actual prices for the goods in the two stores were the same across both versions.

Choice. Most importantly, fees impacted consumers' store preference. Overall, 73\% chose the store with the fee, $\chi^{2}(1)=24.14, p<.001$. Again, this preference held regardless of which store charged the fee: When Store A charged a fee, $71 \%$ of participants chose Store A; when Store B charged a fee in the other version, however, $75 \%$ chose Store B, $\chi^{2}(1)=24.17, p<$ .001. Thus given two stores, participants preferred one that charged a fee - even when we controlled for the actual difference in savings that the two stores offered, and even though that store would be more costly overall due to the membership fee.

Impact of Fee Level. Finally, we explored how the level of fee impacted preferences. Results were similar for both fee levels: For price perceptions, when the fee was $\$ 15,77 \%$ of participants selected the store that charged a fee as the store with lower prices instead of the store that did not charge a fee, whereas when the fee was $\$ 25,68 \%$ selected the $\$ 25$ fee store over the store that did not charge a fee; for choice, when the fee was $\$ 15,70 \%$ preferred to shop at the store that charged a fee to the store that did not charge a fee, whereas when the fee was $\$ 25,75 \%$ picked the store that charged a fee over the store that did not, both $\chi^{2}<1$, ns. Thus the presence
of a fee, more than the actual amount of that fee, drove price inferences and store preferences in this study.

## General Discussion

We suggest that when stores charge fees, consumers infer a "fees $\rightarrow$ savings" link due to their belief that stores that charge fees do so because they offer better prices. Studies 2, 3, 4 and 5 all demonstrated that fees lead to inferences of savings, while both Studies 1 and 4 showed that the presence of fees leads to increased spending. Finally, Study 5 demonstrated the impact of fees not just on consumer spending but on choice of retail outlets, as consumers were more likely to express a desire to shop at stores that charged fees than those that did not, even when we controlled for the actual products and actual savings the different stores offered.

We stressed at the outset that it is not the case that membership clubs that charge fees never offer better prices than their no-fee counterparts. We have attempted to show, however, that over and above actual savings, consumers have a general belief that they will save on all products, inferences which are likely erroneous at times. Why do consumers fail to correct for these perceptions? As outlined in the introduction, the issue is partly one of ease of price comparisons. Because discount clubs offer sizes not available in smaller stores, and carry fewer SKUs, it is often difficult for consumers to compare prices across stores. Even were they to belong to two different discount clubs, and thus could compare products, it is unlikely that two discount clubs carry the same brands, since each club carefully selects only the best deals they can get, and given competition often do not land the same deal. Of course, one can imagine scenarios in which a Wal-Mart does offer the same product as a Costco, and a consumer notices that Wal-Mart is offering a better deal. Because this violates the implicit "pay us fees and we will offer savings" contract between membership clubs and their members, we would predict that
consumers would very quickly change both their perceptions of the prices at Costco and of the organization as a whole (Aggarwal 2004). In Study 5, we deliberately presented different products for the store that charged fees and the store that did not; obviously, had we shown the same products with the same prices, we would expect consumers to react very negatively to a store that charged fees without offering commensurate savings.

## A Broader View of Fees

We have focused on a domain - discount membership clubs - in which consumers generally associate paying fees with lower prices, and compared stores that charged a modest fee to ones which charged no fee. Only in Study 5 did we manipulate the level of fees (with stores with either $\$ 15$ or $\$ 25$ fees), though we found that this change made little difference in consumer perceptions. A $\$ 10$ range is of course quite small, and fees for products and services can range from as low as $\$ 0.01$ (as with some mail-order compact disc and book clubs) up to thousands of dollars for memberships to exclusive country clubs. This range begs the question: How do consumers react to different levels of fees? While we have argued that fees signal savings at discount clubs, a broader model of the impact of fees on consumers would posit that fees send a signal to consumers, but the precise nature of that signal can be quite variable. For instance, the one penny subscription fee that some compact disc clubs charge may be seen as a wonderful deal by new consumers, but members quickly realize that this low fee actually binds one to buying overpriced CDs in the future. Thus fees that are too low may in some cases raise consumer suspicion of later hidden costs (see Gabaix and Laibson 2006). In contrast, fees that are very high - as with memberships to exclusive health clubs - surely serve not as a signal of savings but as a signal of exclusivity and quality. In support of this logic, a recent meta-analysis demonstrated
that while higher prices do signal quality, this link is stronger for high priced goods (Völckner and Hofmann 2007). Thus while high fees may signal quality, smaller fees may send other signals: savings at discount clubs, or chicanery at CD clubs. These examples suggest a curvilinear relationship between fees and savings (with likely many exceptions): fees that are too low serve as a hook to make you pay more later, medium fees indicate good prices and decent quality and service, while high fees signal exclusivity (and high prices).

While our results from Studies 1 and 4 suggested that a $\$ 0.50$ fee was not sufficient to dissuade consumers from entering our store, and results from Study 5 show that the presence of fees may even attract more customers to retailers than it repels, it is quite clear that fees that are too high will repel more customers than they attract, in the same way that prices can become sufficiently high to exclude many consumers from purchasing (e.g., Ashraf, Berry, and Shapiro, 2007). We charged a $\$ 0.50$ fee for our stores that offered goods ranging in price from $\$ 0.25$ to $\$ 5.00$, while membership clubs like Costco charge fees ranging from $\$ 25-\$ 100$ for products ranging in price from a few to thousands of dollars. Clearly, further work is necessary to pinpoint the turning point at which fees move from incentive to barrier to entry; we note, however, that our $\$ 0.50$ fee reached fully $10 \%$ of the highest priced good in our store (a $\$ 5.00 \mathrm{CD}$ case) without dissuading entry, suggesting some latitude in the ratio of fees to product prices.

In addition, the "membership clubs" that we created in the laboratory were one-shot stores, but fees are often recurring in the real world, as consumers frequent stores, clubs, and gyms to which they pay fees on an ongoing basis. How do fees operate in the longer term? As with fee level, this is likely to depend on the domain. To take one instance that has received empirical attention, gyms and health clubs generate revenue by collecting membership fees, and in some sense would prefer people never to show up (since customer visits require additional
staff and more frequent equipment repair and replacement). In this domain, reminding consumers of having paid fees can encourage them to attend the gym to make up for sunk costs, such that attendance rises when yearly fees are renewed (Della Vigna and Malmendier 2006). The implication here is that, unless frequency of visits increases loyalty, gyms should hide fees as much as possible because as the salience of that fee fades, so does the sunk-cost-driven behavior it induces, leading to fewer visits (Gourville and Soman 1998). Discount membership clubs, on the other hand, do make money on purchases by customers despite their low margins, especially if customers do not merely cherry pick and buy across the range of goods offered (see Lal and Bell 2003); unlike gyms, then, these clubs in some sense want people to show up every single day. If fees lead consumers to infer lower prices, the implication of our findings is that discount membership clubs should remind consumers of their fees every day, or ask them to pay part of their fee each time they visit, rather than in one lump sum (Gourville 1998). Indeed, though the pain of paying can reduce consumption satisfaction (Prelec and Loewenstein 1998), at least for participants in our store in Study 4, their perceived savings outweighed their pain of paying fees, since they were just as satisfied with their experience in stores that charged fees and those which did not.

## Alternative Explanations

This last point about the psychological impact of the "pain of paying" raise what are at first glance two seeming alternative explanations for our findings: People pay fees, and having paid them, then justify that expense by buying more than they would have, falling victim to sunk costs (Arkes and Blumer 1985; Nunes and Dreze, 2006; Staw 1981). A similar second alternative account comes from shopping momentum (Dhar, Huber, and Khan 2007), where one purchase
causes people to be more likely to make a second. Neither explanation is likely to account for our findings, however, due to a key feature of our design: In both Studies 1 and 4, participants saw all goods and all prices of goods in our stores before they decided to pay the entry fee or not. In short, it was not the case that participants paid a fee and then decided whether or not to buy items - which might lead to sunk costs and shopping momentum - but rather that they decided whether or not to pay the fee after having decided what to buy. Because fees signal savings, they intended to buy more to capitalize on the seemingly great deals (though the deals were the same as in the no fee stores), thus leading them to decide simultaneously to pay the fee in order to avail themselves of these great deals. At the same time, however, price perceptions due to fees may lead to greater purchasing, which then sets shopping momentum into motion, a kind of perfect storm of consumer irrationality - and each perhaps accounts for some portion of the fifty pounds of pasta people end up lugging into their pantry. Future research should explore the interplay between these different influences on consumer behavior; for example, one way to tease the impact of sunk costs and fees apart would be to manipulate how far people have to drive to get to different stores and how much those stores charge for membership fees. The store that is both far and charges fees would likely lead to the most spending - though in the real world, as suggested by our empirical results in Study 5, it is also possible that fees may serve as the initial mechanism that makes people willing to drive further to gain access to those "great prices."

## Conclusion

Our results seem to suggest that consumers behave irrationally in response to membership fees, attributing low prices to the perceived savings offered by retailers that charge fees, and then trying to capitalize on these seeming savings by buying more than they otherwise
would. At the same time, however, the feeling of getting a good deal - whether erroneous or not - likely has positive (transaction) utility for these consumers (Thaler 1985), which would only be increased the more items placed in one's shopping cart. In addition, this transaction utility gained from perceived savings is unlikely to be offset by regret upon encountering a better deal, given the difficulty of comparing prices at other retailers. Although some utility may be offset by the vocal displeasure of the shopper's loved ones when forced to lug groceries into the house for 30 minutes, consumers may on average come out ahead despite their overgeneralized perception of the link between fees and savings.

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Table 1: Actual Spending (Study 1)

| No Fee | $55 \%$ | $\$ 0.51$ | Average <br> Amount Spent |
| :---: | :---: | :---: | :---: |
| Fee | Expected <br> Value per <br> Customer |  |  |
|  | $58 \%$ | $\$ 1.17$ | $\$ 0.97$ <br> (incl. fee) |

Table 2: Perceived Discounts at Wal-Mart and Costco (Study 2)

| Product | Actual Price ${ }^{\dagger}$ (regular size) | Average Estimated Price (bulk package size) |  | Average Imputed Volume Discount |  | Additional Discount at Costco over Wal-Mart |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Wal-Mart | Costco | Wal-Mart | Costco |  |
| Opti-free Contact | \$12.93 | \$13.63 | \$12.80 | 20.9\% | 25.8\% | 4.9\%*** |
| Lens Solution | (24 oz) | (32 oz) | (32 oz) |  |  |  |
| One-a-Day Women's Multivitamin | $\begin{gathered} \$ 12.86 \\ \text { (200 tablets) } \end{gathered}$ | $\$ 13.10$ <br> (250 tablets) | $\$ 11.96$ <br> (250 tablets) | 18.5\% | 25.6\% | $7.1 \% * * *$ |
| Kleenex 2-ply | \$4.54 | \$8.73 | \$8.39 | 42.3\% | 44.5\% | 2.2\%* |
| Tissues | (3 pk) | (10 pk) | (10 pk) |  |  |  |
| Listerine Mouthwash | $\begin{gathered} \$ 5.37 \\ (1.5 \mathrm{~L}) \end{gathered}$ | $\begin{gathered} \$ 6.52 \\ (2.1 \mathrm{~L}) \end{gathered}$ | $\begin{gathered} \$ 6.15 \\ (2.1 \mathrm{~L}) \end{gathered}$ | 13.2\% | 18.2\% | $5.0 \% * * *$ |
| M\&M’s Milk Chocolate Candy | $\begin{gathered} \$ 3.17 \\ (21.3 \mathrm{oz}) \end{gathered}$ | $\begin{gathered} \$ 5.48 \\ (52 \mathrm{oz}) \end{gathered}$ | $\begin{gathered} \$ 5.24 \\ (52 \mathrm{oz}) \end{gathered}$ | 29.2\% | $32.4 \%$ | $3.2 \% * *$ |

$\dagger$ These prices reflect the actual prices of these products at a Wal-Mart store in New England on March 4, 2006.
*** p < . 001
** $\mathrm{p}<.01$

* $\mathrm{p}=.06$

Table 3: The Impact of Fees on Actual Spending and Price Perceptions (Study 4)

|  | Consumer Spending |  |  | Store Perceptions (7-point scales) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% Buying | Average Amount Spent | Expected Value per Customer | Price <br> Perception | Shopping Experience | Quality Perception |
| No Fee | 36\% | \$0.49 | \$0.18 | 2.81 | 4.86 | 4.43 |
| Fee | 62\% | \$1.53 | $\begin{gathered} \$ 1.26 \\ \text { (incl. fee) } \end{gathered}$ | 2.08 | 5.33 | 4.51 |
|  | $p<.03$ | $p<.01$ |  | $p<.01$ | $n s$ | $n s$ |

Figure 1: Store Flyers Used in Study 5.


