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Price-Matching Guarantees and Consumer Evaluations of Price Information

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In 3 experiments, we show that price-matching guarantees affect the process through which consumers translate price information into subjective judgments. In Experiment 1, we find that price-matching guarantees appear to change the standard used in price evaluation by raising consumers' estimates of the lowest and average prices in the market. This leads consumers to perceive products and stores that offer price-matching guarantees as less expensive. In Experiment 2, we show that evaluations of product price information are affected by the presence of a price-matching guarantee only when consumers do not know the range of market prices. In Experiment 3, we extend these findings to show that consumer evaluations of the cost of products in a store, inferred on the basis of store characteristics, are also influenced by the presence of a price-matching guarantee.

Retailers frequently advertise that they will not be undersold. These advertisements are often accompanied by a price-matching guarantee such as "We promise to refund the difference if you find that you could have bought the same product cheaper locally at the time of purchase," or "In the unlikely event that you find an identical item that you purchased here for a lower price at another store, we will gladly refund the difference." Price-matching guarantees are common in many retail markets such as consumer electronics, appliances, office products, tires, auto supplies, furniture, and mattresses and are offered by a variety of retailers including high- and low-price stores (e.g., Nordstrom's®, Sears®, and Wal-Mart®), discount outlets (e.g., Service Merchandise®), and supermarket chains (e.g., Winn-Dixie®). These guarantees are unique because unlike most price promotions, they do not advertise a price reduction. Instead, they promise to match a competitor's lower price. In addition, price-matching guarantees are generally offered for all products in the store rather than only a few.

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Marketing researchers have only recently begun to examine the effect of price-matching guarantees on consumers (e.g., Biswas, Pullig, Yagci, & Dean, 2002; Chatterjee, Heath, & Basuroy, 2003; Jain & Srivastava, 2000; Kukar-Kinney & Walters, 2003; Srivastava & Lurie, 2001, 2004). These studies have typically found that such guarantees influence judgments about whether products or stores are expensive or inexpensive, the perceived value of product offerings (i.e., perceived quality relative to cost), prepurchase search behavior, and store choice (e.g., Biswas et al., 2002; Srivastava & Lurie, 2001). However, an understanding of how the presence of a price-matching guarantee influences consumers' evaluation of price information and the extent to which such effects depend on consumer knowledge of market prices remains unclear.

Previous research on how consumers evaluate prices in the presence of a price-matching guarantee has provided somewhat conflicting results. For example, Srivastava and Lurie (2001) found that judgments of a product or store as expensive or inexpensive as well as search intentions were lower in the presence of a price-matching guarantee regardless of whether the price of a product at the store was high or low. In contrast, Biswas et al. (2002) found that, although perceived value was higher in the presence of a guarantee,

these effects were taken away when either high or low reference prices accompanied the guarantee. Further, Biswas et al. found that when a price-matching guarantee was present, perceived value was higher for stores associated with high prices but not for stores associated with low prices. Based on their findings, Biswas et al. argued that price-matching guarantees affect consumer perceptions of value when there is cue conflict, that is, when a high-priced store offers a price-matching guarantee. However, this argument does not explain either Biswas et al.'s reference price results or Srivastava and Lurie's (2001) results. An alternative explanation is that price-matching guarantees affect consumer perceptions when consumers are unable to assess whether a particular price is low. Testing these alternative explanations was one of the goals of this study.

Beyond resolving the disparate finding of previous research, in this article, we add to existing research on price-matching guarantees. First, we explain how price-matching guarantees affect consumer evaluations of price information. In particular, we argue that when consumers are unable to evaluate products on price alone, price-matching guarantees lead consumers to perceive products and stores as less expensive by influencing the standards used in price evaluations. Second, we show that price-matching guarantees have greater effect when prices are high. This contrasts with previous research, which has shown that many retail tactics, such as deal restrictions, are more effective when prices are low (Inman, Peter, & Raghubir, 1997). Third, we examine the role of market price knowledge in how price-matching guarantees affect consumer evaluations of price information. Finally, we examine whether the effects of price-matching guarantees extend to the evaluation of store descriptions in addition to product prices.

An identification of the conditions under which price-matching guarantees influence consumer evaluations of price information is important for several reasons. From a theoretical perspective, it is important to understand how a price-matching guarantee influences the process through which consumers translate objective price information into subjective judgments and to understand the boundary conditions of this influence. For example, the presence of a price-matching guarantee might change consumer expectations of average market prices for a product that in turn could affect perceptions about whether a product or store is expensive or inexpensive. If a price-matching guarantee affects perceptions of a product or store as expensive or inexpensive, product and service quality perceptions may be concurrently affected. From a practical perspective, the conditions in which price-matching guarantees are likely to lead consumers to evaluate a particular product or store as expensive or inexpensive have important implications for competitive pricing strategy. For example, such guarantees might have a greater impact on consumer evaluations of price information for high-priced stores such as Nordstrom's than for low-priced stores such as Wal-Mart. Understanding how and when a price-matching guarantee influences consumer judgments of whether a particular product or store is expensive or inexpensive is the primary goal of this article.

CONCEPTUAL BACKGROUND

Reference Standards

Considerable research has focused on the process through which consumers translate objective price information into subjective judgments. This translation has been characterized as a categorization process whereby consumers evaluate a new price by comparing it to a standard or a referent (Adaval & Monroe, 2002; Monroe, 1990). The categorization process might be memory based, in which case the standard of comparison is internal and primarily a function of previously encountered price information (e.g., Lichtenstein, Bloch, & Black, 1988; Monroe, 1990). In other cases, however, the standard of comparison might be based on information in the immediate shopping environment such as store characteristics or individual product prices (Alba, Broniarczyk, Shimp, & Urbany, 1994; Buyukkurt, 1986; Lichtenstein & Bearden, 1989; Urbany, Bearden, & Weilbaker, 1988).

We also conceptualize price perception as a process in which objective price information is translated into a subjective judgment by comparing the price to a standard or a referent. According to Helson (1964), the subjective value of an attribute is a function of the difference between the actual attribute value and an "adaptation level." In this context, this adaptation level or standard could be influenced by both previously encountered prices (e.g., Winer, 1988) and the perceived range of prices in the marketplace (e.g., Janiszewski & Lichtenstein, 1999). Judgment of whether a product or store is expensive or inexpensive thus depends on the location of its price relative to the standard. For example, consumers are likely to judge a store that sells a DVD player for $125 as less expensive if they believe that the average selling price of the product in the market is $200 than if they believe it is $130. This suggests that, holding a target price constant, contextual information that leads consumers to raise the standard used in evaluating a target price should lead consumers to perceive a product as less expensive.

Price-matching guarantees might also affect the standard used in the evaluation of price information. Consumers might reason that stores with higher than average prices would be deterred from offering a price guarantee. That is, many people would find lower prices at competing stores and enforce the guarantee (Srivastava & Lurie, 2004), and this would cause the store to incur a monetary loss. Therefore, they may believe that only stores with a lower than average product price can afford to offer a price-matching guarantee, so the price at a store that offers this guarantee is likely to be at the low end of the price distribution. The presence of a

price-matching guarantee may thus lead consumers to raise their estimates of the average and lowest prices for the product. This upward shift in the standard used to evaluate a product's price should then lead consumers to perceive the product as relatively less expensive.

This prediction should be qualified, however. If consumers can classify a product as inexpensive based on its price alone, a price-matching guarantee is unlikely to produce a significant shift in the standard used to evaluate this price. For example, if consumers encounter a $125 price for a DVD player made by a major manufacturer, they may classify the product and store as inexpensive based on the price alone. In this case, the presence of a price-matching guarantee should have little influence. In contrast, if consumers encounter a price of $300 for the same model and do not know market prices with certainty, the presence of a price-matching guarantee should raise their estimates of the average and lowest prices in the market. In other words, the effect of a price-matching guarantee on the standard used in price evaluations and thus on subjective judgments about whether a product or store is expensive or inexpensive is contingent on consumers' ability to classify products as expensive or inexpensive based on price alone.

The effect of a price-matching guarantee on how consumers evaluate a product price also has implications for judgments of overall store costs (i.e., whether the products at a store are expensive or inexpensive). In particular, previous research has demonstrated that consumer judgments of overall store costs may be based on the cost of an individual item carried by the store (Nystrom, Tamsons, & Thams, 1975; Simester, 1995). We therefore expect that the presence of a price-matching guarantee is likely to have a greater effect in lowering perceptions of store cost when the specific product price is high than when it is low.

This discussion suggests the following three hypotheses (Hs):

H1: The presence of a price-matching guarantee will raise consumer estimates of the lowest and average prices available in the market to a greater extent when the price of a product is high than when it is low.

H2: The presence of a price-matching guarantee will lower perceptions of the cost of a product (i.e., the extent to which it is inexpensive) to a greater extent when the price of a product is high than when it is low.

H3: The presence of a price-matching guarantee will lower perceptions of store costs (i.e., the extent to which products in the store are inexpensive) to a greater extent when the price of a product is high than when it is low.

Implicit in H1, H2, and H3 is the assumption that consumer knowledge of market prices is an important factor in price evaluations. In particular, consumers who have knowledge of prices in the market have a clear standard against which to judge product price information. Therefore, the standard they use in making price evaluations is less likely to be altered by contextual factors such as a price-matching guarantee. This suggests the following:

H4: When consumers do not know the range of prices in the market, the presence of a price-matching guarantee will lower cost perceptions (i.e., the extent to which a product or store is judged as inexpensive) to a greater extent when the price of the product is high than when it is low. When consumers know the range of prices in the market, however, the presence of a price-matching guarantee will have a limited influence on consumers' subjective cost perceptions regardless of whether the price of the product is high or low.

Do Price-Matching Guarantees Change Quality and/or Value Perceptions?

Extensive research on the relation between price and perceived quality suggests that consumers often use price as an indicator of quality (Monroe, 1990). It is therefore possible that in communicating a low-cost image, price-matching guarantees also convey a low-quality image. To this extent, price-matching guarantees may not change perceptions of value (i.e., the benefit received from a product or service relative to the monetary sacrifice required in acquiring it; see Monroe, 1990).

On the other hand, price-matching guarantees are often offered for branded products of known quality (even by "high-service" retailers such as Nordstrom's). In this case, price-matching guarantees might lead consumers to perceive a product in a store as less expensive without affecting their perceptions of product or service quality. If this is so, perceptions of value should be higher in the presence of such guarantees. As already noted, consumers are less able to categorize high-priced products as inexpensive based on price alone, so price-matching guarantees are more likely to affect consumers' evaluations of a high price than a low price. Therefore, any effects of price-matching guarantees on value perceptions should also be greater for high than low prices.

H5: The presence of a price-matching guarantee will raise consumers' value perceptions to a greater extent when the price of a product is high than when it is low.

We report on three experiments in this article. In Experiment 1, we tested H1, H2, H3, and H5 by manipulating the presence of a price-matching guarantee in conjunction with product prices. In Experiment 2, we specifically tested H4 by manipulating market price knowledge. Finally, extending the inquiry beyond product price information, in Experiment 3,

we examined whether the presence of a price-matching guarantee affects consumer perceptions of the cost of products at a store whose prices are inferred indirectly from information about store characteristics.

EXPERIMENT 1

In Experiment 1, we examined whether a price-matching guarantee changes the standard that consumers use to evaluate price information and thereby alters their perceptions of the extent to which a product is expensive or inexpensive.

Method

Design. A total of 120 participants, ranging in age from 22 to 54 years, were recruited at a major airport to participate in a study in which they were asked to imagine they were shopping for a hi-fi, stereo videocassette recorder (VCR). The price of the VCR was either high or low, and the store selling the VCR either offered or did not offer a price-matching guarantee. They were randomly assigned to one of four conditions of a 2 (price: high vs. low) × 2 (price-matching guarantee: present vs. absent) between-subject experimental design. In the high-price condition, the price of the VCR was $375; in the low-price condition, the price was $175.[1] When the price-matching policy was present, participants were given the additional information that Milo Electronics offered a price-matching guarantee that states, "If you buy a product at Milo Electronics and ever see the same product for sale, anywhere, for a lower price, we will gladly refund the difference."

Procedure. Participants were told that after careful deliberation including looking through catalogs, they had decided to purchase a Panasonic™ PV–8661 VCR. They were given a detailed description of the model they had chosen to purchase and were told that a number of stores carried the Panasonic VCR. They were told that the first store they decided to visit was Milo Electronics. On entering the store, they found that Milo Electronics carried the VCR model for $175 and $375 in the low- and high-price conditions, respectively. After reading the purchase scenarios, participants responded to the dependent measures.

Dependent variables. The standard used in price evaluations was measured by asking participants to estimate the lowest and average prices in the market for the Panasonic VCR. Participants were asked, "My best estimate of the lowest price at which the Panasonic PV–8661 VCR can be obtained in the market is $_____." They were also asked, "The amount that I would expect to pay for a VCR like the Panasonic PV–8661 VCR is $_____." Half of the participants provided an estimate of the lowest price first followed by an estimate of the average price and the other half responded to these questions in the reverse order. No significant order effects were found, and the data were thus aggregated over the two order conditions.

Subjective perceptions of the VCR at the store as expensive or inexpensive were measured by averaging two 7-point scale items (r = .86): "The price of the Panasonic PV–8661 VCR at Milo is," ranging from 1 (*very low*) to 7 (*very high*), and "The price of the Panasonic PV–8661 VCR is high," ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Perceptions of the store as expensive or inexpensive relative to competitors were measured by averaging two 7-point scale items (r = .90): "The overall prices at Milo are most likely to be," ranging from 1 (*lower than average*) to 7 (*higher than average*), and "Relative to other electronic stores, the prices at Milo are most likely," ranging from 1 (*very low*) to 7 (*very high*).

Perceptions of value were measured by averaging two 7-point scales (r = .81): "The Panasonic PV–8661 VCR at Milo is an excellent buy for the money," and "I am getting a good bargain for the Panasonic PV–8661 VCR at Milo," ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Perceptions of product quality at the store were measured by averaging two 7-point scale items (r = .76): "The Panasonic PV–8661 VCR carried by Milo is likely to be of high quality," ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), and "The quality of products that Milo carries is likely to be," ranging from 1 (*very low*) to 7 (*very high*). Two 7-point items were averaged to measure perceptions of service quality (r = .76): "The overall service quality at Milo is most likely," ranging from 1 (*lower than average*) to 7 (*higher than average*), and "My expectations about the service at Milo are," ranging from 1 (*very bad*) to 7 (*very good*).

Results

Results show that price-matching guarantees change the standard used in price evaluations as well as perceptions of a product or store as expensive or inexpensive relative to competitors but that the effect of a price-matching guarantee on these variables is stronger when the product price is relatively high. Table 1 shows estimates of the lowest and average market prices, subjective cost perceptions, and value perceptions in the different experimental conditions.

Standard used in price evaluations. H1 predicted that the effect of price-matching guarantees on estimates of the lowest and average prices in the market for a given prod-

[1]At the time of the study, these prices were at the low and high end of prices for VCR players in the market. A pretest with 30 undergraduates confirmed that participants were more certain and confident that the price was one of the best available in the market in the $175 condition relative to the $375 condition ($M$s = 5.09 and 3.48, respectively), $F(1, 29) = 12.24$, $p < .001$. We replicated the results in another study with undergraduate participants. The product category used was a portable stereo, and the low and high prices used were $100 and $300, respectively.

TABLE 1
Standards Used in Price Evaluations and Subjective Perceptions of Cost and Value
(Experiment 1)

Measure and Variable	*No Guarantee*	*Price Guarantee*	*Difference*
Lowest market price			
High price	$\$280.74_a$	$\$323.43_b$	–42.69
Low price	$\$143.54_c$	$\$150.77_c$	–$7.23
Average market price			
High price	$\$295.48_a$	$\$325.17_b$	–$29.69
Low price	$\$155.68_c$	$\$164.00_c$	–$8.32
Product cost perceptions			
High price	4.91_a	4.17_b	0.74
Low price	3.98_b	3.77_b	0.21
Store cost perceptions			
High price	5.26_a	3.87_b	1.39
Low price	3.55_b	3.60_b	–0.05
Value perceptions			
High price	3.19_a	3.80_b	–0.61
Low price	3.81_b	4.46_c	–0.65

Note. Lowest and average market prices are estimates of the lowest and average market prices of the Panasonic VCR in the market. Product and store cost perceptions are perceptions of the product or store as inexpensive relative to competitors. Lower numbers indicate lower cost and value perceptions. Means with different subscripts for a given measure differ significantly at $p < .05$.

uct depends on whether consumers are able to classify a product as inexpensive on the basis of price alone. In particular, price-matching guarantees should change the standard used to evaluate product prices only when consumers are uncertain if a particular price is low. Consistent with H1, the interaction of price and price-matching guarantee was significant for estimates of the lowest price, $F(1, 116) = 4.67$, $p < .03$, as well as estimates of the average price in the market, $F(1, 116) = 3.78$, $p < .05$. As Table 1 shows, the presence of a price-matching guarantee did not affect estimates of the lowest or average price available in the market when the product prices were low. When prices were high, however, participants' estimates of the lowest price available and the average price were both significantly higher when a price-matching guarantee was present.

Product and store cost perceptions. H2 and H3 proposed that a price-matching guarantee is more likely to influence subjective perceptions of the product or store as expensive or inexpensive when prices are not clearly low. Marginal support was found for H2, and significant support was found for H3. When the product price was low, perceptions of product and store prices as expensive or inexpensive were unaffected by the presence of a guarantee. In contrast, when the product price was high, product and store prices were perceived as significantly less expensive in the presence of a price-matching guarantee. The interaction of price-matching guarantee and price was marginally significant in analyses of product cost perceptions, $F(1, 116) = 3.10$, $p < .07$ and reliable in analyses of store cost perceptions, $F(1, 116) = 13.93$, $p < .0001$.

Mediation analysis. A mediation analysis assessed whether the change in the standard used in the high-price condition to evaluate price information mediated the effect of the price-matching guarantee on perceptions of a product as less expensive. The presence of a price-matching guarantee on product cost perceptions was significant, $F(1, 59) = 8.28$, $p < .004$. However, this effect was reduced to nonsignificance when estimates of the lowest price available in the market were controlled for, $F(1, 58) = 2.61$, $p > .10$ and was also reduced when estimates of the average price in the market were controlled for, $F(1, 58) = 5.12$, $p < .03$, whereas estimates of the average price remained significant, $F(1, 58) = 23.64$, $p < .0001$. A mediation analysis of store cost perceptions yielded similar results. These results suggest that the effect of price-matching guarantees on evaluations of price information was mediated by changes in the standards used in price evaluations.

Value perceptions. H5 proposed that the presence of a price-matching guarantee has a greater effect on perceptions of value when the target price is high than when it is low. Although perceptions of value were significantly higher in the presence versus absence of a price-matching guarantee (*M*s = 4.13 vs. 3.50, respectively), $F(1, 116) = 8.85$, $p < .003$, and perceptions of value were also higher when the stated price was low than when it was high (*M*s = 4.14 vs. 3.49, respectively), $F(1, 116) = 9.12$, $p < .003$, the interaction between price-matching guarantee and price did not have a significant effect on value perceptions, $F < 1$. H5 was thus not fully supported. In addition, neither product quality nor service quality perceptions were significantly affected by the presence of a price matching guarantee, $F < 1$.

Discussion

Results of Experiment 1 suggest that price-matching guarantees altered the standard used in evaluating prices and thus affected the process through which an objective price was translated into subjective perceptions of product or store cost. Specifically, estimates of the lowest and average market prices for a particular product were higher in the presence of a price-matching guarantee, and products and stores that offered guarantees were perceived as less expensive relative to competitors. These effects, however, depended on the specific price being evaluated. When consumers were able to classify a product as inexpensive on the basis of its price alone, there was no significant shift in the standard or in subjective perceptions of the product or store as expensive or inexpensive. This result suggests that when the price-matching guarantee and the objective price have similar implications, the presence of a guarantee does not alter the judgment that would be made on the basis of price alone. It is unlikely that our results are due to floor effects, given that subjective cost perceptions in the low price conditions range from 3.55 to 3.98 on a 7-point scale. It is also interesting to note that although price had a significant influence on perceptions of product and store cost when a price-matching guarantee was not provided, it did not influence perceptions of the product or store as expensive or inexpensive when a guarantee was available.

Results of Experiment 1 also suggest that price-matching guarantees led consumers to perceive products and stores as less expensive without concurrently lowering quality perceptions. As a consequence, consumers' value perceptions were higher in the presence of a price-matching guarantee. These results help explain the process through which price-matching guarantees lower subjective cost perceptions, decrease search intentions, and increase purchase likelihood (Srivastava & Lurie, 2001).

EXPERIMENT 2

H4 asserts that when consumers know the range of prices available in the market and therefore can easily evaluate price information, a price-matching guarantee will no longer affect their subjective perceptions of a product as expensive or inexpensive regardless of whether its price is high or low. Note that support for H4 would rule out an alternative explanation of the results of Experiment 1. For example, it is possible that the effect of a price-matching guarantee on consumers' perceptions of a product as expensive or inexpensive is observed only when the price is high because consumers pay more attention to the stimuli when they are inconsistent with each other (i.e., price-matching guarantee and high price) relative to when they are consistent (Biswas et al., 2002). If this were so, the results of Experiment 1 should persist regardless of consumers' market price knowledge. Support for H4, however, would call this alternative interpretation into question.

Method

A total of 131 undergraduate business students (juniors and seniors) participated in the experiment for course credit. Participants were assigned randomly to each of eight combinations of price-matching guarantee (present and absent), price (high and low), and price range knowledge (known and unknown). Participants were asked to imagine that they were shopping for a DVD player and that the first store they visited was Milo Electronics. Based on a pretest, participants were told that the price of the DVD was either $125 or $325. The price-matching guarantee statement was as follows: "If you buy a product at our store and find the identical product for a lower price elsewhere within 90 days, we will gladly refund the difference." Participants in the price-matching guarantee present condition were given a product description as well as information about Milo Electronics' price-matching guarantee, whereas in the guarantee absent condition, participants were only given the product description.

Price knowledge was manipulated by providing participants information about the range of marketplace prices for the DVD player. In the price range known condition, participants were told, "According to a recent *Consumer Reports* article, the retail price of the Panasonic PV–8661 ranges between $120 and $330 in the marketplace." In the price range not known condition, participants were not given this information. Participants were asked to read the purchase scenario carefully and then respond to a series of dependent measures measuring subjective perceptions of the cost of the DVD player, the cost of products in the store, and quality and value perceptions. These measures were identical to those used in Experiment 1.

Results

Product and store cost perceptions. H4 predicted that when consumers do not know the range of market prices, price-matching refunds will have a greater effect on consumer evaluations of high versus low price information. However, when consumers know the range of prices in the market, price-matching guarantees will no longer affect consumer evaluations of either high or low price information. This hypothesis was supported by a significant three-way interaction of price, price-matching guarantee, and market price knowledge on both product cost perceptions, $F(1, 123) = 7.62$, $p < .01$ and store cost perceptions, $F(1, 123) = 6.04$, $p < .02$. Data relevant to these effects are summarized in Table 2. When consumers did not know the range of prices in the market, price-matching guarantees led consumers to perceive the product and store as less expensive. As in Experiment 1, these effects were stronger when prices were high than when they were low. When consumers knew the range

TABLE 2
Subjective Perceptions of Cost and Value (Experiment 2)

	Price Range Unknown			*Price Range Known*		
Measure and Variable	*No Guarantee*	*Price Guarantee*	*Difference*	*No Guarantee*	*Price Guarantee*	*Difference*
Product cost perceptions						
High price	5.18_a	4.00_b	**1.18**	5.94_c	6.06_c	–0.12
Low price	3.00_d	3.00_d	**0.00**	$2.85_{d,e}$	2.00_e	0.85
Store cost perceptions						
High price	4.97_a	3.17_b	**1.80**	5.84_c	$5.56_{a,c}$	0.28
Low price	3.16_b	3.05_b	**0.11**	$2.50_{b,d}$	1.96_d	0.54
Value perceptions						
High price	3.27_a	4.03_b	**–0.76**	2.19_c	$2.72_{a,c}$	–0.53
Low price	5.24_d	5.00_d	**0.24**	5.70_d	5.55_d	0.15

Note. Product and store cost perceptions are perceptions of the product or store as inexpensive relative to competitors. Lower numbers indicate lower cost and value perceptions. Means with different subscripts for a given measure differ significantly at $p < .05$.

of prices in the market, however, price-matching guarantees did not have a significant effect on subjective cost perceptions in either the high- or low-price conditions.

Value perceptions. As shown in the third section of Table 2, perceptions of value were significantly higher in the presence (vs. absence) of a price-matching guarantee when the price of the product was high but not when its price was low. This conclusion, which is consistent with H5, is confirmed by an interaction of price-matching guarantee and price, $F(1, 123) = 4.01$, $p < .05$. This is in contrast to Experiment 1 in which the presence of a price-matching guarantee increased value perceptions in both high- and low-price conditions.

The interaction of price and price-range knowledge on value perceptions was also significant, $F(1, 123) = 16.16$, $p < .001$. When the price of the product was low, consumers' value perceptions did not depend on whether or not they had knowledge of the range of prices in the market. When the price of the product was high, however, consumers' value perceptions were significantly lower when they had knowledge of the price range than when they did not. These results provide support for the underlying contention that when the price is low, additional information is unlikely to alter the standard used in evaluating prices, so contextual cues are unlikely to affect perceptions of product value (and cost). However, when the price is high, consumers are unable to evaluate product value on price alone, so the standard as well as perceptions of product value (and cost) are affected by the presence of a price-matching guarantee.

Discussion

Experiment 2 provides a clear test of the argument that price-matching guarantees change consumers' evaluations of price information only when they cannot classify a product as expensive or inexpensive on the basis of its price alone. In this case, the presence of a price-matching guarantee altered the standard used to evaluate objective price information. When knowledge of market prices was available, however, no change in standard occurred, so a price-matching guarantee no longer had an effect on judgments. These results do not support alternative explanations of the differential effectiveness of price-matching guarantees in high-and low-price environments such as increased attention to price-matching guarantees in the presence of high prices or inconsistent price information. Rather, these findings are consistent with the idea that a price-matching guarantee affects consumers' price estimates only when there is uncertainty about the product's price relative to prices available elsewhere.

EXPERIMENT 3

Experiments 1 and 2 showed that a price-matching guarantee affected consumer perceptions of product cost. Although individual product prices are clearly a source for judging a product or store as expensive or inexpensive relative to competitors, consumers may also evaluate other contextual information such as store atmosphere and service level in making these judgments (Alba et al., 1994; Buyukkurt, 1986). Accordingly, in Experiment 3, we examined whether the effects of product prices would generalize to situations in which consumers make judgments of product cost on the basis of store characteristics. For example, a family-owned store that provides a high level of service is generally perceived to have higher operating costs and therefore higher prices on average than a store that is part of a national chain and provides little or no service. If this is so, H3 suggests that the presence of a price-matching guarantee is more likely to influence subjective perceptions of the cost of products at a store when the store is family owned than when it is part of a chain.

Method

A total of 136 participants, ages 24 to 56, were recruited at a major airport to participate in this study.[2] Participants were approached individually and asked to participate in an academic study on decision making. If they agreed to participate, they were given a two-page survey with the store description on the first page and the dependent variables on the second page. The experimenter returned in approximately 5 min to pick up the study. Each participant was randomly assigned to one of the six conditions. The study used a 3 (price expectations: high vs. low vs. control) × 2 (price-matching guarantee: present vs. absent) between-subject design.

Participants read a description of an electronic and appliance store and then completed a questionnaire on the dependent measures and selected covariates. Price expectations were manipulated through store descriptions that were based on pretests and provided participants with information that indicated that prices in the store were likely to be high or low. Price expectations were varied through descriptions of store characteristics. In the high-expectations condition, participants were told that the store was family owned, had friendly personnel, and provided services such as in-home installation and carry-out service. In the low-expectations condition, participants were told that the store was part of a large chain and that there was nothing fancy about the interior decoration or lighting. In a third control condition, participants were simply told that the store was new and recently had a grand opening.[3]

When the price-matching guarantee was present, participants were told "Electronic Mart has a price-matching refund policy that states that: 'If you buy a product at Electronic Mart and see the same product on sale for a lower price, we will gladly refund the difference.'" After reading the scenario, participants provided perceptions of the subjective cost of products available in the store in general as expensive or inexpensive and their confidence in finding low prices at the store.

Dependent variables. Participants' perception of the cost of products in the store as expensive or inexpensive was inferred from the average of their responses to three items (Cronbach's $\alpha = .90$) pertaining to (a) overall expectations for the prices at the store on a scale ranging from 1 (*not at all expensive*) to 7 (*very expensive*), (b) the cost of products at this store on a scale ranging from 1 (*low*) to 7 (*high*), and (c) prices at the store compared to those at other electronic stores on a scale ranging from 1 (*much lower than average*) to 7 (*much higher than average*). Participants' confidence in finding low prices at the store was inferred from their average response to two items pertaining to their certainty that the store had low prices and their confidence that the store's prices were among the lowest available.

Results and Discussion

Subjective cost perceptions and confidence in finding low prices are shown in Table 3 as a function of store information and the availability of a price-matching guarantee. Based on H3, the effect of price-matching guarantees on evaluations of price information should be stronger when consumers are unable to clearly identify a store as inexpensive based on store characteristics alone. In support of our contention, the effect of the guarantee on perceptions of products in the store as being less expensive was greater when the store description was associated with higher prices and in the control condition than when the store description was associated with low prices. The results of participants' confidence in finding lower prices at the store followed a similar pattern. These conclusions were confirmed by interactions of external information-based price expectations and the price-matching guarantee in analyses of both cost perceptions, $F(2, 130) = 4.90$, $p < .01$ and confidence, $F(1, 130) = 3.62$, $p < .02$.

GENERAL DISCUSSION

The main purpose of this research was to examine how and when price-matching guarantees affect consumer evaluations of price information. Our results show that price-matching guarantees changed the standard used in price eval-

TABLE 3
Subjective Cost Perceptions and Confidence in Finding Low Prices (Experiment 3)

Measure and Variable	*No Guarantee*	*Price Guarantee*	*Difference*
Subjective cost perceptions			
High expectations	5.03_a	3.88_b	1.15
Low expectations	3.08_c	3.06_c	0.02
Control	4.41_d	3.31_c	1.10
Confidence			
High expectations	2.40_a	3.57_b	–1.16
Low expectations	4.62_c	4.65_c	–0.03
Control	2.77_a	4.30_c	–1.53

Note. Cost perceptions are subjective perceptions of store prices as low relative to prices at competitive stores. Confidence is confidence in finding low prices at the store. Lower numbers indicate lower subjective cost perceptions and lower levels of confidence. Means with different subscripts differ significantly at $p < .05$.

[2]The findings of Experiment 3 were replicated with undergraduate participants.

[3]The effectiveness of the price expectation manipulation was examined in a pretest with 60 undergraduate participants. Each participant was randomly assigned to one of the three conditions and asked to provide their impressions of overall store prices and their certainty of obtaining a good deal on the television set. The pretest data show that participants expected store prices to be highest in the high price expectations condition, intermediate in the control condition, and lowest in the low condition (Ms = 5.03, 4.32, and 3.07, respectively), $F(2, 57) = 20.44$, $p < .0001$. Further, participants were most uncertain of obtaining a good deal in the high price expectations condition, somewhat uncertain in the control condition, and most certain in the low condition (Ms = 3.22, 3.94, and 5.66, respectively), $F(2, 57) = 16.48$, $p < .001$.

uations, and this in turn led products and stores that offered such guarantees to be perceived as less expensive. At the same time, these effects depended on consumers' uncertainty about market prices and their inability to make evaluations based on price alone. If consumers were knowledgeable about market prices, or if prices were sufficiently low, price-matching guarantees had a limited or no effect on how price information was used to infer product costs.

Experiment 1 suggests that price-matching guarantees lower subjective cost perceptions by raising consumer expectations of the lowest and average market prices. This shift in standard leads products and stores to be perceived as less expensive. These results are similar to the reference price effects found by Urbany et al. (1988). However, our results suggest that a price-matching guarantee changes the standard used in price evaluations only when objective price information is not diagnostic of a specific category. Thus, the shift in the standard used in evaluating a price is contingent on the absence of other low-price information and not on the believability of the information as was the case in Urbany et al. To the extent price-matching guarantees are used to infer whether individual products are expensive or inexpensive, a price-matching guarantee constitutes an "umbrella pricing" strategy that usually applies to all products carried by the store, unlike retailer-supplied reference prices and "loss leader" promotions. Importantly, price-matching guarantees only led to lower subjective cost perceptions when consumers were uncertain about finding a good price (i.e., when prices were high).

Although price-matching guarantees can influence how price information is evaluated, they do not affect product and service quality perceptions. Consequently, the presence of a price-matching guarantee leads to higher perceptions of value. These results suggest that firms can effectively use price-matching guarantees to communicate a low-cost image without adversely affecting their quality image.

Experiment 2 showed that when consumers knew the range of prices in the market, price-matching guarantees had no effect on evaluations of high or low price information. This finding supports the possibility that the effects of price-matching guarantees on evaluations of price information depends on consumer uncertainty about whether a particular price is low.

Experiment 3 showed that the effect of price-matching guarantees can depend on indirect indicators of price such as characteristics of the store in which products are found. Thus, price-matching guarantees led consumers to perceive a store as less expensive when the description of the store suggested high prices but not when the store's description made consumers believe that it had low prices.

The idea that price-matching guarantees change the standard used in evaluating price information when consumers are uncertain about market prices helps to explain the seemingly contradictory findings of previous research on price-matching guarantees (Biswas et al., 2002; Jain & Srivastava, 2000; Srivastava & Lurie, 2001). Jain and Srivastava's (2000) finding that the price-matching guarantee lowered subjective cost perceptions can be explained by the absence of other information and thus consumer uncertainty about market prices. Similarly, Biswas et al.'s finding that the price-matching guarantee increased perceived value for high- but not low-image stores may reflect the fact that consumers are less certain they will get a good deal at a high image store. The seeming contradiction between Srivastava and Lurie's (2001) finding that a price-matching guarantee lowered subjective cost perceptions for both high and low prices and Biswas et al.'s finding that there was no effect of price guarantees for either high or low reference prices may be explained by the absence and presence, respectively, of information about regular store prices. Experiment 2 clearly showed that providing consumers with market price information effectively reduced consumer uncertainty about product prices and took away the effects of a price-matching guarantee.

It is possible that consumers perceive subjective costs to be low in the presence of a guarantee even though facts belie such perceptions (at least in the short run). Marketers may use price-matching guarantees to dupe consumers into believing that a mediocre deal is a good one. The potential for misleading consumers suggests that if stores that offer price-matching guarantees actually have high prices, attempts to draw the attention of regulatory agencies toward such pricing policies are justified (cf. Blair & Landon, 1981). In contrast, if these stores actually have lower than average prices, then consumers may be better off believing that price-matching guarantees are associated with low prices. It is thus important from a public policy and a theoretical perspective to determine empirically whether stores that offer price-matching guarantees actually have relatively high or low prices.

It is perhaps not surprising that a price-matching guarantee affects subjective cost perceptions in the absence of other sources of information. However, consumers are often exposed to price-matching guarantees in conjunction with other information that may affect price image. Other types of information, such as price beating offers and claims such as "we have the lowest prices," may have important implications for consumer evaluations of price information. A key issue is how different types of information interact to affect consumers' subjective cost perceptions and subsequent behavior. This remains an important question for further study.

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REFERENCES

Adaval, R., & Monroe, K. B. (2002). Automatic construction and use of contextual information for product and price evaluations. *Journal of Consumer Research, 28,* 572–589.

Alba, J. W., Broniarczyk, S., Shimp, T. A., & Urbany, J. E. (1994). The influence of prior beliefs, frequency cues, and magnitude cues on consumers' perceptions of comparative price data. *Journal of Consumer Research, 21,* 219–235.

Biswas, A., Pullig, C., Yagci, M. I., & Dean, D. H. (2002). Consumer evaluation of low price guarantees: The moderating role of reference price and store image. *Journal of Consumer Psychology, 12,* 107–118.

Blair, E. A., & Landon, E. L., Jr. (1981). The effects of reference prices in retail advertisements. *Journal of Marketing, 45,* 61–69.

Buyukkurt, B. K. (1986). Integration of serially sampled price information: Modeling and some findings. *Journal of Consumer Research, 13,* 357–373.

Chatterjee, S., Heath, T. B., & Basuroy, S. (2003). Failing to suspect collusion in price-matching guarantees: Consumer limitations in game-theoretic reasoning. *Journal of Consumer Psychology, 13,* 255–267.

Helson, H. (1964). *Adaptation level theory.* New York: Harper & Row.

Inman, J. J., Peter, A. C., & Raghubir, P. (1997). Framing the deal: The role of restrictions in accentuating deal value. *Journal of Consumer Research, 24,* 68–79.

Jain, S., & Srivastava, J. (2000). An experimental and theoretical analysis of price-matching refund policies. *Journal of Marketing Research, 37,* 351–362.

Janiszewski, C., & Lichtenstein, D. R. (1999). A range theory account of price perception. *Journal of Consumer Research, 25,* 353–368.

Kukar-Kinney, M., & Walters, R. G (2003). Consumer perceptions of refund depth and competitive scope in price-matching guarantees: Effects on store patronage. *Journal of Retailing, 79,* 153–160.

Lichtenstein, D. R., & Bearden, W. O. (1989). Contextual influences on perceptions of merchant-supplied reference prices. *Journal of Consumer Research, 16,* 55–66.

Lichtenstein, D. R., Bloch, P. H., & Black, W. C. (1988). Correlates of price acceptability. *Journal of Consumer Research, 15,* 243–252.

Monroe, K. B. (1990). *Pricing: Making profitable decisions.* New York: McGraw-Hill.

Nystrom, H., Tamsons, H., & Thams, R. (1975). An experiment in price generalization and discrimination. *Journal of Marketing Research, 12,* 177–181.

Simester, D. (1995). Signalling price image using advertised prices. *Marketing Science, 14,* 166–189.

Srivastava, J., & Lurie, N. H. (2001). A consumer perspective on price-matching policies: Effect on price perceptions and search behavior. *Journal of Consumer Research, 28,* 296–307.

Srivastava, J., & Lurie, N. H. (2004). Price-matching guarantees as signals of low prices. *Journal of Retailing, 80,* 117–128.

Urbany, J. E., Bearden, W. O., & Weilbaker, D. C. (1988). The effect of plausible and exaggerated reference prices on consumer perceptions and price search. *Journal of Consumer Research, 15,* 95–110.

Winer, R. (1988). Behavioral perspective on pricing: Buyers' subjective perceptions of price revisited. In T. DeVinney (Ed.), *Issues in pricing: Theory and research* (pp. 35–57). Lexington, MA: Lexington.

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