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The authors investigate the conditions in which price promotions affect pretrial brand evaluations. A price promotion is theorized to be informative about brand quality when it stands out because it deviates from either its own past behavior or industry norms. Product category experts, who have alternative sources of information to make quality judgments, are expected to make less use of price promotions as a quality cue than novices are. The authors describe three laboratory studies in the context of a price promotion that is designed to increase trial in a service industry. Results suggest that consistency with past promotional behavior, distinctiveness in terms of how common it is to promote in an industry, and consumer expertise are important variables that moderate when price promotions have an unfavorable effect on brand evaluations. The authors highlight implications for service providers that are offering promotions to attract new customers in industries in which promotions are uncommon and discuss the theoretical implications of the finding that expertise moderates the effects of distinctiveness and consistency on evaluations in the context of price promotions.

When Do Price Promotions Affect Pretrial Brand Evaluations?

Promotions have increased in popularity during the past few decades. The positive short-term impact of price promotions on brand sales is well documented (for a review, see Blattberg and Neslin 1990). A price promotion typically reduces the price for a given quantity or increases the quantity available at the same price, thereby enhancing value and creating an economic incentive to purchase. However, if consumers associate promotions with inferior brand quality, then, to the extent that quality is important, a price promotion might not achieve the extent of sales increase the economic incentive otherwise might have produced.

Price promotions often are used to encourage trial among nonusers of products and services. Thus, it is important to understand the effects of promotions on evaluations made by consumers who do not have prior experience with the promoted brand. Such promotions include those for new brand introductions, as well as those targeted at nonusers of an established brand. If promotions damage brand evaluations, they will undercut the positive economic and psychological incentives promotions supply and reduce the likelihood of trial. Furthermore, those who purchase for the first time in response to the promotion may be less likely to purchase again when the promotion ends.

But do price promotions lead to unfavorable brand evaluations? And if so, when? The literature on the effect of promotions on brand evaluations is equivocal. In their review of the sales promotion literature, Blattberg and Neslin (1990) observe that though “for years advertising executives have been warning marketing executives that promotions will destroy their brand’s image” (p. 473), “it is not clear that promotions do detract from a brand’s consumer franchise” (p. 465). This article is a step toward reconciling conventional wisdom that price promotions unfavorably affect brand evaluations (Ogilvy 1963) with academic research, which has found mixed evidence of this effect. Specifically, though it is well documented that the likelihood of purchasing a brand after a deal retraction is lower if the prior purchase was a promotional one (Guadagni and Little 1983;
Shoemaker and Shoa 1977), it is debatable whether this decrease is due to lowered brand evaluations. One of the explanations offered for this finding is that there is an attitude change at the individual level (Dodson, Tybout, and Sternthal 1978; Doob et al. 1969; Scott 1976). Dodson, Tybout, and Sternthal (1978) argue that, if a person buys a brand on deal, he or she is likely to attribute his or her behavior to the deal rather than to having a favorable attitude toward the brand, as compared with customers who bought the brand at full price. Although their results are consistent with an individual-level attitude change due to attributional thinking after a purchase on deal, Dodson, Tybout, and Sternthal’s study does not measure brand evaluations directly and so cannot rule out alternative explanations for the pattern of results (Neslin and Shoemaker 1989).

Scott and colleagues have examined the effect of promotions on evaluations at the individual level after subjects tried a promoted brand. They find that promotions could affect brand evaluations negatively (e.g., subjects preferred the taste of [brand name] when they tasted without a coupon), but that this effect depended on whether subjects thought the reasons for their choice before choosing (Scott and Yalch 1980), when they thought about their behavior (Scott and Tybout 1979), and whether they had prior brand knowledge (Tybout and Scott 1983). Davis, Inman, and McAlister (1992) also examine the difference between pre- and postpromotion brand evaluations at the individual level but find no evidence that price promotions affect evaluations for frequently purchased branded packaged goods. Across three promoting brands in each of four different product categories, evaluations of promoted brands in the postpromotion period are not found to be lower than in the prepromotion period. The studies by Scott and colleagues indicate that promotions have a damaging effect on posttrial evaluations, whereas Davis, Inman, and McAlister’s study suggests that the impact of promotions on brand evaluations in these packaged goods categories is, on average, nonexistent.

There are several possible explanations for this seeming inconsistency. These relate to (1) the timing of the promotional exposure and brand evaluation relative to trial, (2) whether the consumer has seen promotions for the product in the past, and (3) differences among product categories. In this article, we rephrase the question of whether price promotions affect brand evaluations to what conditions they do so and identify situations in which promotions should not have an effect and those in which they should. We control for the timing of the promotional exposure and vary past promotional patterns and industry-related variables. This enables us to resolve some of the controversy surrounding this issue.

We isolate the informational effects of a promotion from effects of purchase and usage by studying pretrial evaluations. The vast majority of research that has assessed the effect of price promotions on brand evaluation has studied the effect after product trial, rather than pretrial (Scott and Tybout 1979; Scott and Yalch 1980; Tybout and Scott 1983). This is an important distinction because the effect of promotions has been found to be lower in the presence of well-defined internal knowledge structures (Tybout and Scott 1983). This suggests that the effect of promotions on brand evaluations is likely to be moderated by the extent of consumer expertise in a product category, particularly pretrial, when direct experience with the brand is unavailable as a source of information. Unlike previous studies, which examined the effects of price promotions after trial, we examine the effects of price promotions pretrial to isolate their informational impact on brand quality perceptions from the potentially moderating effect of prior personal experience with the brand. Thus, our results are particularly pertinent to new product introductions and situations in which existing products are offered to new user groups.

Our overall proposition is that the effect of price promotions on brand evaluations is contingent on factors that affect the extent to which a consumer perceives that a single promotional offer contains information regarding a brand’s quality. The extent to which a promotion is informative is theorized to be a function of (1) the past promotional pattern of the firm, (2) the consumer’s product category expertise, and (3) the extent to which other firms in the industry promote. We propose that novice consumers are more likely to draw unfavorable quality inferences when brands have not been promoted previously, particularly when deals are uncommon in the industry. Prior research has examined only brands that were likely to have been promoted in the past and categories in which promotions are common, which explains why null effects have been found so often. For example, the products examined in Davis, Inman, and McAlister’s (1992) study were likely to have been promoted at some time before the study, and all came from categories in which promotions are common, both factors that reduce the likelihood that consumers used the promotion to infer brand quality.

In the three studies reported here, we use laboratory experiments to investigate specific conditions in which price promotions (short-term discounts) offered to final consumers to induce trial affect pretrial brand evaluations. The experimental scenarios used focus on the service sector—dentists, health clubs, and the mutual fund industry. These are all primarily experience goods, for which consumers have less access to search attributes to make quality judgments. Thus, they are likely to depend more on marketing signals to assess quality prior to trial. Study 1 explores the direction (valence) of the effect of promotions on evaluations and whether it is moderated by the brand’s promotional history. Study 2 replicates the findings of Study 1 in a different industry and investigates the role of promotions as information on brand quality that might be used to form an assessment in the absence of prior industry experience. Study 3 replicates the Study 1 and 2 findings in a third industry and examines the moderating effect of industry promotional norms on brand evaluations. Our results suggest that price promotions have a negative effect on pretrial brand evaluations, but only in conditions in which the promotion being offered is used as information about brand quality.

**STUDY 1: PROMOTING ONCE (IS) TOO MUCH**

Because promotions are temporary prices, their institution and retraction contain information that consumers may use to make judgments related to the product. A price promotion (or its absence) may serve a simple informative function (for similar conceptualizations, see Inman, Peter, and Raghunir 1997; Raghunir 1998). However, does a pro-
motion contain valenced information? That is, is it a positive or negative cue?

The Valence of a Promotion

The price-quality literature has found that a relatively lower price generally is interpreted as an indicator of inferior quality and that this effect is magnified when only price information is available to make a judgment (e.g., Edgar and Malhotra 1981; Monroe and Petrosius 1981; Olson 1977; Rao and Monroe 1988). Although the economic aspect of price leads to reduced demand at higher prices, the quality inference leads to enhanced demand at higher prices or requires a trade-off between price and inferred quality (Hagerty 1978; Levin and Johnson 1984). The extent to which consumers use price as an indicator of quality depends on the availability of alternative diagnostic information (Szybillo and Jacoby 1974). For example, Rao and Monroe (1988) find evidence that, with increased product familiarity, people increasingly used intrinsic (versus extrinsic) product quality cues to make quality judgments. The greater the amount of other information available, the smaller will be the effect of price on perceived quality (Rao and Monroe 1988). Because price promotions reduce price and because lower prices are associated with lower quality, we predict that when other information diagnostic of quality is not available, offering price promotions will lead to inferences of lower quality.

Predictions of a negative effect also are implied by attribution theory. Attribution theory suggests that consumers assign causes for managerial actions (for a review of attribution theory applications to marketing, see Folkes 1988). When consumers are exposed to a promotion, they attribute a reason for it. These attributions may be to the brand or to some external force.1 A study that examines attributional valence finds that brand-specific attributions for a promotion were valenced negatively, whereas nonbrand reasons were positive or neutral (Lichtenstein, Burton, and O’Hara 1989). When subjects were asked why a brand might promote, the brand-specific reasons they gave were associated with perceptions of poorer quality, whereas the nonbrand reasons were neutral or complimentary to the brand. Similarly, Lichtenstein and Bearden (1986) examine product, circumstance, and person attributions for a promotion. They find that product attributions were valenced negatively, for example, “because the car is inferior” and “because the car has poor styling.” Therefore, if consumers undertake attributional thinking when exposed to a price promotion and if these attributions are to the brand, the attributions are more likely to lead to unfavorable brand evaluations.

When Is a Promotion Informative?

The preceding leads to the question: What is the likelihood that a given promotion will be attributed to brand-related factors rather than external, situational factors?

1Attributional thinking does not necessarily require systematic, effortful thought. Social psychological research has shown that attributions can be fairly effortless and unintentional (Gilbert, Pelham, and Krull 1988; Winter and Uleman 1984) and are quite uncontrollable (Burgh 1984), particularly if they are used schematically or heuristically (Leddin, Abelson, and Gross 1984; Schank and Abelson 1977). However, the likelihood of attributional thinking increases with greater motivation and ability to engage in analytical processing (Chaiken, Liberman, and Eagly 1989), as well as when the event is more extreme, negative, or unexpected (e.g., Hastie 1984).

Attribute theorists, starting with Heider (1958), have found that observers attribute another person’s behavior to intrinsic or dispositional qualities rather than to situational factors, even when the behavior easily could be explainable by the latter. This phenomenon, called the “fundamental attribution error” (or “correspondent inference theory”; Jones and Davis 1965), predicts that consumers attribute promotional behavior to the disposition of the brand rather than industry characteristics. Thus, because consumers are more likely to attribute promotions to brand-related (versus industry-related) factors and because these factors are typically negative, offering a promotion should affect brand evaluations unfavorably.

In summary, both the price-quality and attribution theory literature suggest that when price promotions serve an informational function, they are likely to have a negative effect on pretrial brand evaluation. The issue of whether price promotions affect brand evaluations therefore might be restated to ask whether they serve an informational function. The promotion’s information value is context-specific. One context in which a promotion may be perceived as containing information relevant to brand quality is when the act of promoting is a deviation from past behavior. This indicates there has been a change, and a reevaluation of the brand may be in order. To illustrate, if a brand that has been promoted frequently in the past is promoted currently, the current promotion conveys little that is new about the brand to consumers, and they are not likely to give the current behavior much thought. Conversely, if a brand that has never been promoted in the past is promoted, this is informative and more likely to lead to a reevaluation of the brand. This construct, formally termed “consistency” in the attribution literature, has been shown to affect the extent to which people make personality inferences about another person given his or her actions (Einhorn and Hogarth 1986; Hastie 1984; Hilton and Slagowski 1986; Jones and Davis 1965; Kelly 1967, 1972). Consistent with this logic, in the context of reference prices, Lichtenstein and Bearden (1989) find that consumers’ price perceptions were dependent on the consistency of merchants’ price claim policies. Consumers should find promotional behavior more informative of a brand’s quality when it is inconsistent with past behavior than when it is consistent.

Furthermore, the information value of promotional inconsistency will depend on whether the information value of the promotion is negative or positive. We argue that negative inconsistent behavior (promotion of a brand for the first time) is more informative than positive inconsistent behavior (absence of promotion for a brand frequently promoted in the past). The valence (the intrinsic positive or negative characteristic) of a behavior has been well researched in social psychology and shown to affect the salience (Fiske 1980) and the processing of information (Fiske 1980; Skowronski and Carlson 1989). Taylor (1991) summarizes the differential effects of positive and negative information, arguing that they have asymmetric effects. These effects include, for example, that negative experiences are elaborated upon more than positive experiences, that people search more for negative (versus positive) information when making judgments, and that they weight this information more heavily because they find it more diagnostic than positive information (e.g., Fiske 1980; Hamilton and Zanna
1972, 1974; Herr, Kardes, and Kim 1991; Kanouse and Hanson 1972). In one of the few studies that assess the effects of valence on attributional thinking, Gidron, Koehler, and Tversky (1993) demonstrate that the number of times a behavior had to be performed by a person for the trait associated with that behavior to be ascribed to the person was significantly greater for positive behaviors than for negative behaviors. In short, it is more difficult to change people's negative attitudes in a positive direction than it is to influence their positive attitudes negatively.

Given these results, we expect that, if consumers are aware that a brand has been promoted repeatedly in the past (negative behaviors), the absence of a promotion on a given occasion (a positive behavior) is not likely to have an appreciable positive effect on consumer evaluations. This effect also may result from consumer awareness that promotions are periodic and not to be expected on every shopping trip. In contrast, we expect a brand for which a promotion never has been offered (consistent positive behaviors) to benefit from its reputation for not being promoted only as long as no promotion is offered. When the brand is promoted even once, we expect the negative behavior to have a damaging effect on evaluations. Thus,

\[ H_1: \text{The effect of price promotions on brand evaluations is moderated by the brand's past promotional behavior, such that (a) the evaluation of a brand that is promoted for the first time will be diminished by that act and (b) the evaluation of a brand that is not promoted after a history of consistently being promoted will not change.} \]

Method

Subjects were 86 students enrolled in an introductory marketing course at New York University who took part in the experiment to complete a course requirement.

A 2 (currently promotes: yes/no) \( \times \) 2 (promoted in the past: frequently/never) between-subjects design was used. Subjects were assigned randomly to experimental conditions and presented with a short description of a dentist. A pretest (\( n = 29 \)) showed that the quality of the dental services industry is important to subjects. The descriptive vignette manipulated the experimental information, which was embedded in other information about the dentist and situation to ensure that subjects had more than just the promotional information available to make their evaluations. Subjects were given no information on original or promotional prices for dentist services but were told that the dentist was offering a "25% discount on fees." Using the approach suggested by Gautschi and Rao (1990) to isolate the information effect of price in price-quality studies, the impact of the promotion’s economic incentive was reduced by presenting a scenario in which the subjects’ insurance carriers covered the regular price of the service. Because subjects did not have to “pay” for the service, they were expected to be more sensitive to the informational content of the promotion than to the savings, which isolates the effect of the promotion on brand evaluations. Subjects were instructed to form an overall opinion of the dentist. They then were asked to complete the dependent measures and manipulation checks and were debriefed. The procedure took approximately 15 minutes.

The dependent measure was Brand Evaluation, measured using nine seven-point semantic differential scales with anchors ranging from “Not at all” (1) to “Very” (7) good, (much) better, professional, qualified, competent, reliable, busy, quality conscious, and well-known. (Pretests of these scales found that they loaded on one factor and that their reliability was high.) The nine scales were averaged to form an index (\( \alpha = .91 \)).

Results and Discussion

True–false questions were used to identify subjects who could not recall whether the dentist currently was offering a promotion or had done so in the past. Sixteen subjects did not respond correctly to the true–false task and were eliminated from further analysis, leaving a usable sample of 70 subjects.\(^2\) The analysis was a 2 \( \times \) 2 ANOVA on brand evaluations. Means appear in Table 1.

The ANOVA yielded significant main effects of promoting currently and past promotions and a significant ordinal interaction. The effect of promoting currently indicates that when the dentist offered a promotion, brand evaluations were less favorable (\( \bar{x} = 4.00 \)) than when no promotion was offered (\( \bar{x} = 4.40, F(1,66) = 3.45, p < .05, \eta^2 = .045 \)). The effect of past promotion indicates that brand evaluations were less favorable when the dentist frequently had offered a promotion in the past (\( \bar{x} = 3.94 \)) than when a promotion never had been offered (\( \bar{x} = 4.49, F(1,66) = 6.68, p < .01, \eta^2 = .068 \)).

However, the main effects must be interpreted in light of the significant interaction predicted in \( H_1 \), (\( F(1,66) = 10.62, p < .001, \eta^2 = .139 \)). This interaction is driven by the higher mean evaluation of the no past promotion or current promotion condition (\( \bar{x} = 4.97 \)) as compared with the other three conditions in which a promotion was offered currently, had been offered in the past, or both (\( \bar{x} = 3.89, 3.79, \) and 4.12, respectively, contrast \( ps > .05 \)). Specifically, when promotions had been offered frequently in the past, promotion in the current period led to evaluations no worse than had the current promotion not been offered (\( \bar{x} = 4.12 \) versus 3.79, \( F(1,66) = 1.52, p > .20, \eta^2 = .023 \)). However, when promotions had never been offered before, promoting in the current period led to significantly lower evaluations (\( \bar{x} = 3.89 \)) than not offering a promotion (\( \bar{x} = 4.97, F(1,34) = 14.32, p < .001, \eta^2 = .178 \)). These results suggest that when a brand has been promoted, its evaluation is lower than if it had never been promoted, even if a promotion is not being offered currently.

\( H_1 \), which predicts that the effect of offering a promotion will be contingent on the brand's past promotional behavior, is strongly supported. We found that dentists were evaluated

\(^2\)Results do not change with the inclusion of the 16 subjects.
less favorably when they offered a price promotion, but only when they had never offered a promotion in the past. We believe this was due to the greater informational power of the promotional cue in this condition. Study 2 investigates whether the effect of price promotions on brand evaluations is moderated by individual differences in a characteristic that is related to the information value of a promotion: category expertise.

**STUDY 2: THE MODERATING ROLE OF EXPERTISE**

We have argued that price promotions have information about a brand's quality. How heavily that information is relied on to make evaluations is contingent on the availability of alternative sources of information to make the same judgment. Prior research has demonstrated that the use of one source of information is related inversely to the availability and diagnosticity of alternative sources of information (Feldman and Lynch 1988; Inman, Peter, and Raghurib 1997; Menon, Raghubir, and Schwarz 1995; Raghubir 1998). One alternative source of information is the consumer's prior knowledge. Individual expertise has been proposed as an important moderator for a range of information-processing tasks (Alba and Hutchinson 1987) and been shown to moderate a range of consumer judgments (Maheswaran and Sternthal 1990; Sujan 1985). In the price promotion context, expertise has been demonstrated to reduce the differences a consumer draws from a promotional communication (Inman, Peter, and Raghurib 1997). Consumers who are knowledgeable about the category and have well-formed attitudes should be less likely to use the information contained in promotion behavior to make brand evaluations than those who are less knowledgeable. Tybout and Scott (1983) demonstrate this with consumers who had recourse to immediate sensory taste data when they made their judgments. Product familiarity also has been shown to moderate the use of price in making a quality assessment; consumers are more likely to use intrinsic product cues when they are familiar with the product (Rao and Monroe 1988). Therefore, we hypothesize the following:

H$_2$: Individual expertise in the category will moderate the effects hypothesized in H$_1$, such that experts will be less likely than novices to evaluate a brand unfavorably because it promotes.

**Method**

Subjects were 225 students enrolled in introductory marketing classes at two universities, New York University (n = 71) and University of California at Berkeley (n = 154), who took part in the experiment to complete a course requirement. None had participated in Study 1. The design used was a 2 (current promotion: yes/no) × 2 (promoted in the past: frequently/never) × 2 (expertise: expert/novice) between-subjects design. The first two factors were manipulated as in Study 1, and expertise was measured. The stimulus chosen was a health club. The promotion was the same as in Study 1 and manipulated similarly. Again, nonpromotional information on the health club was provided to give subjects a broader basis for their evaluations. As in Study 1, to control for the economic effect of the promotion, subjects were informed that their employer would pay the monthly charges. Subjects were instructed to form an overall opinion of the service prior to completing dependent measures and manipulation checks. As in Study 1, true–false questions were used to identify subjects who did not encode the two promotion manipulations correctly. Twenty subjects did not respond correctly to the true–false question and were withheld from future analysis, leaving a total of 205 subjects. The procedure took approximately 15 minutes.

There were two sets of dependent measures: (1) a brand evaluation index, composed similarly to Study 1 using the mean ratings of eight seven-point semantic differential scales with anchors ranging from “Not at all” (1) to “Very” (7) good, professional, qualified, competent, reliable, busy, quality conscious, and well-known (α = .91); and (2) a brand belief index, which used the mean likelihood rating (1 = “Not at all likely” to 7 = “Very likely”) of six belief statements about attributes of the health club: “The health club uses the latest equipment,” “The health club offers a full range of services,” “The health club is well-maintained,” “The club’s facilities are hygienic,” “The health club uses the latest technology,” and “The club is targeting a high-income clientele” (α = .91). Factor analysis confirmed that the six product belief statements and the eight evaluative ratings loaded onto two separate factors. Subjects' attributions to competitive causes for the promotion also were measured. They rated the extent to which they believed “other health clubs in the area offered discounts” and that there were “a lot of health clubs in the area” (seven-point scales, “Not at all likely” to “Very likely”). These statements were used as covariates in the analyses.

We measured expertise using a two-item index created from self-report measures: “How knowledgeable are you about health clubs?” and “How interested are you in health clubs?” Both were elicited using seven-point scales anchored at 1 = “Not at all” and 7 = “Very” (r = .83, p < .01). A split on this index (x = 5 on a seven-point scale) divided the sample into relative experts (n = 97, median > 5) and relative novices (n = 66, median < 5), with the middle group (n = 42) categorized as neither experts nor novices. Post hoc analysis confirmed that this classification was orthogonal to the manipulations (p > .10). It also confirmed that those categorized as experts visited a health club more frequently than those categorized as novices (X = 106.20 versus 7.88 visits per year, F(1, 157) = 123.72, p < .001) and had visited a greater number of health clubs overall (X = 5.40 versus 2.56, F(1, 157) = 31.62, p < .001).

**Results and Discussion**

Results appear in Table 2. The analysis used is a 2 × 2 × 2 (current promotion × past promotion × expertise) ANOVA reporting overall main and interaction effects, followed by hypothesized contrasts. Reported p levels are based on directional hypotheses.

The ANOVA on the evaluation index with the two belief statements as covariates revealed significant effects of the covariates (F(1, 152) = 3.88, p < .05, η$^2$ = .049) and main effects of both currently (F(1, 152) = 6.51, p < .01, η$^2$ = .041) and past (F(1, 152) = 5.01, p < .05, η$^2$ = .032) promoting. The predicted three-way interaction with expertise was also significant (F(1, 152) = 2.64, p < .05, η$^2$ = .017).

A similar analysis on the product belief index yielded an even stronger pattern of results. The effects of the covariates 3Results do not change with the inclusion of the 20 subjects.
Table 2
STUDY 2: MEANS OF DEPENDENT MEASURES BY EXPERIMENTAL CONDITION

<table>
<thead>
<tr>
<th></th>
<th>No Past Promotion</th>
<th>Frequent Past Promotion</th>
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<tbody>
<tr>
<td><strong>Brand Evaluation Index</strong></td>
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<tr>
<td>Novices</td>
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</tr>
<tr>
<td>Currently does not promote</td>
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<td>n = 28</td>
<td>n = 20</td>
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<tr>
<td>Experts</td>
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<tr>
<td>Currently does not promote</td>
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<td>4.84</td>
</tr>
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<tr>
<td><strong>Product Belief Index</strong></td>
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<tr>
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<tr>
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<td></td>
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<tr>
<td>Currently promotes</td>
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<td>n = 28</td>
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<td>Experts</td>
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<tr>
<td>Currently does not promote</td>
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<td>5.07</td>
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were significant (F(2,152) = 3.50, p < .05, \( \eta^2 = .044 \)), as were the main effects of currently (F(1,152) = 25.83, p < .001, \( \eta^2 = .145 \)) and past (F(1,152) = 3.61, p < .05, \( \eta^2 = .023 \)) promoting. The two-way interaction between currently promoting and promoting in the past is also significant, as in Study 1 (F(1,152) = 6.20, p < .05, \( \eta^2 = .039 \)), but is qualified further by the predicted three-way interaction with expertise (F(1,152) = 4.43, p < .05, \( \eta^2 = .028 \)).

To examine whether the results of Study 1 are replicated, we first tested \( H_1 \). We expected that the negative effect of currently promoting would be greater when the health club never had promoted in the past than when it had done so frequently. Both measures produced this pattern of results. When the club had promoted frequently in the past, there was no difference in brand evaluations between current period promoting (\( \bar{X} = 4.55 \)) and not promoting (\( \bar{X} = 4.70 \), contrast \( F < 1 \)). However, when the club had not promoted in the past, offering a promotion led to lowered evaluations (\( \bar{X} = 4.64 \) versus 5.11, contrast \( F(1,157) = 10.91, p < .001, \( \eta^2 = .065 \)). Similarly, there was a substantially stronger negative effect on brand beliefs in offering a promotion when the brand never had been promoted before (\( \bar{X} = 4.44 \) versus 5.62, contrast \( F(1,157) = 41.34, p < .001, \( \eta^2 = .21 \)) than when it had been promoted frequently (\( \bar{X} = 4.60 \) versus 4.95, contrast \( F(1,157) = 4.28, p < .05, \( \eta^2 = .027 \)).

\( H_2 \) predicts that the effect of promotions hypothesized in \( H_1 \) will be greater for novices. To test for this, we analyzed contrasts for novices and experts for both dependent measures. The analysis of brand evaluations for novices showed main effects for currently promoting and promoting in the past, as well as an interaction of current with past promotion, as predicted by \( H_1 \) (F(1,153) = 6.08, 4.66, and 5.28, respectively, all ps < .05, \( \eta^2 = .038, .030, \) and .033, respectively). The form of the two-way interaction for novices is as hypothesized in \( H_1 \); that is, novices evaluated brands less favorably in the presence of a promotion when the brand had not been promoted in the past (\( \bar{X} = 4.54 \) versus 5.16, contrast \( F(1,155) = 13.84, p < .001, \( \eta^2 = .082 \)), but this effect was not found when the brand had been promoted frequently in the past (\( \bar{X} = 4.52 \) versus 4.51, \( F < 1 \)). For experts, however, there were no significant effects (all ps > .20).

A similar pattern emerged with the product belief index. The effects of offering a promotion currently and in the past and their interaction were significant for novices (F(1,153) = 24.68, 5.24, and 13.27, respectively, all ps < .05, \( \eta^2 = .139, .033, \) and .080, respectively), with promotions leading to less favorable beliefs when the brand had not been promoted in the past (\( \bar{X} = 4.35 \) versus 5.74, contrast \( F(1,155) = 45.48, p < .001, \( \eta^2 = .227 \)), but not when the brand had been promoted frequently in the past (\( \bar{X} = 4.59 \) versus 4.78, \( p > .25 \)). For experts, there is an overall main effect of promoting (F(1,153) = 6.95, p < .01), which, as we expected, is weaker than the effect noted for novices (\( \eta^2 = .043 \) versus .139 for experts versus novices). Therefore, \( H_2 \) is supported. Expertise moderates the effect of promotions on brand evaluations.

We conducted post hoc analyses to examine whether product beliefs mediated the route to evaluations, as would be predicted by the Theory of Reasoned Action (Fishbein and Ajzen 1975), or whether evaluations affected beliefs about specific aspects of the service provider, as would be predicted by a halo effect. We tested both models and found support for the former. When brand beliefs were added as a covariate in the brand evaluation analysis, all previously significant effects dropped to nonsignificance (ps > .10), and the only significant covariate was the belief index. This suggests that brand beliefs perfectly mediate the route to lowered brand evaluations (Baron and Kenny 1986). In contrast, when the evaluation index was added as a covariate to the brand belief analysis, the original pattern of significant covariates remained. This suggests that the effect of promotions on product beliefs is not mediated by evaluations, as would be suggested by a halo effect.

In summary, we found that offering a promotion is informative as a function of past promotional behavior and that this effect is greater for consumers who have limited access to alternate information on which to base their judgments. We also found that beliefs regarding the competitive environment (the number of health clubs in the area and their promotional policies) affected evaluations and beliefs, as was evidenced by the significant covariates. The next study follows up on this result and investigates the role of industry factors, a contextual variable that theoretically can be expected to moderate the information value of price promotions through its effects on whether promotions are attributed to brand- or competition-related factors.

STUDY 3: THE MODERATING ROLE OF INDUSTRY NORMS

Studies 1 and 2 demonstrated that brand evaluations are less favorable when a brand is promoted than when it is not, but that this effect is contingent on contextual variables, such as past promotional patterns and individual expertise in
the industry. Study 1 manipulated the normality of the firm's promotional behavior in terms of consistency with its own past behavior. Study 2 showed that beliefs regarding the number of other health clubs in the area and whether they offered discounts also affected brand evaluations. This implicates another variable that has been shown to have a strong effect on the extent to which people make dispositional inferences based on behaviors: "distinctiveness," namely, how many other people engage in the same behavior (Einhorn and Hogarth 1986; Hastie 1984; Hilton and Slusoski 1986; Jones and Davis 1965; Kelly 1967, 1972). When a behavior is distinctive, it is presumed to contain information about the nature of the person. When the behavior is the same as everyone else's, attributions are more likely to be made to an external cause or not at all. In the context of advertisements using reference prices, the distinctiveness construct has been shown to affect source credibility and price perceptions (Lichtenstein and Bearden 1989). Here, we extend the notion to pretrial evaluations of quality.

In this context, a promotion is distinctive when promotions are uncommon in the industry. A brand's promotional patterns will not be very informative of its quality in industries in which promotions are common because the promotion is attributed easily to industry norms. However, when a brand promotes in an industry in which other brands do not, consumers may be more likely to use this different behavior as a source of information about the brand and infer brand quality-related reasons for the promotion. As we discussed previously, research suggests that brand-specific attributes are more likely to be negative. For example, we (1995) have found that, across nine industries, promoting more often than others in an industry was associated with unfavorable brand evaluations, whereas promoting less often than others led to favorable evaluations. Accordingly, we hypothesize the following:

$H_3$: Perceptions of how common it is to promote in an industry will moderate the effect of promotions on brand evaluations, such that they will be more unfavorable when promotions are perceived as uncommon.

**Method**

One hundred sixteen subjects from the New York University pool used in Studies 1 and 2 participated in this experiment for partial course credit. There was no overlap among samples. A 2 (promotes: frequently/never) × 2 (industry: promotions common/uncommon) × 2 (expertise: expert/novice) design was used, in which the first two factors were manipulated between subjects and the third factor was measured. Note that we manipulated past promotional behavior and imply that current behavior is consistent with the past, rather than manipulating current promotional behavior separately. For the purpose of testing $H_3$, it was not necessary to separate current from past behavior, because promotions are periodic and the lack of a promotion in any one period may not be as informative of a brand's promotional policy as a summary of the brand's promotional history. Expertise was measured using an objective test. The mutual funds industry was chosen on the basis of a pretest that confirmed that the subjects generally knew little about it. This was important to ensure that we could manipulate perceptions of how common it is to promote in the industry successfully. The same pretest revealed that subjects believed fund quality was important and that they were interested in the industry.

Subjects were presented with a short vignette describing the mutual funds industry and a mutual fund (see the Appendix). They were informed that they had $25,000 to invest for five years and that the mutual fund described had come to their attention. The vignette manipulated the experimental information, indicating whether the brand promoted frequently or never promoted. The promotion itself was a waiver of a front-end load of 1% for $25,000 (or higher) deposits, which is a fairly common way for mutual funds to price promote. The vignette also manipulated perceptions of how common it is to promote in the mutual funds industry by informing subjects that promotions are "very common (uncommon)" in the mutual fund industry, that "As many as 9 (Only 1) out of every 10 funds offer a promotion," and that "this is an extremely high (low) percentage."

We used both objective and self-report measures. Note that because we chose an industry that was unfamiliar to subjects (to allow for manipulation of promotional norms), expertise must be interpreted in relative terms. A person who had worked in the financial industry constructed a five-item questionnaire eliciting factual knowledge about mutual funds. Subjects responded "true," "false," or "don't know" to the following statements, which represent a range of sophistication: "Mutual funds charge annual management fees," "The price at which you buy into a fund is the fund's bid price," "The bid-offer spread in mutual fund prices is typically around 5%," "Mutual funds can invest in stocks by borrowing money from banks," and "Mutual funds can guarantee that they will not yield a negative return." The number of correct answers per subject was used as the measure of expertise. A median split showed that those subjects we categorized as experts had three or more correct answers, whereas those categorized as novices had only one or two correct answers out of five. (Note that a person who was guessing true or false to all five questions would, on average, score 2.5 correct answers.) As in Study 2, expertise was not related to either of the manipulated variables.

Because familiarity has been shown to exert nonlinear effects on learning (Johnson and Russo 1984) and quality inferences from price signals (Rao and Monroe 1988), we also conducted a three-way split of expertise, separating the novices into those who were more and less familiar with the industry.

Subjects were instructed to form an overall opinion of the mutual fund and asked to estimate the fund's annual rate of return for the next five years, using an open-ended format. At the end of the experiment, they responded to the manipulation checks and completed the expertise scale and a suspicion probe. The procedure took approximately 25 minutes. Subjects were debriefed at the end of the session.

**Results**

**Manipulation checks.** The first manipulation check determined whether subjects correctly read the "factual" information provided in the vignette. Subjects were presented with a true-false question that asked whether the experi-

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4We thank a reviewer for this suggestion.
industry. The $2 \times 2 \times 2$ ANOVA revealed that both interactions are significant ($F(1,109) = 3.57$ and $5.53$, respectively, $p < .05$, $\eta^2 = .032$ and .048), as are the main effects of promoting ($F(1,109) = 4.21$, $p < .05$, $\eta^2 = .037$) and industry ($F(1,109) = 5.32$, $p < .05$, $\eta^2 = .047$). No other effects are significant. Means appear in Table 3.

A similar analysis using a three-way split of expertise to examine nonlinearities in the price-quality relationship at different levels of expertise (Rao and Monroe 1988) showed a similar pattern of results: Both main effects of promoting and industry are significant ($F(1,105) = 6.62$ and $5.36$, respectively, $p < .05$), as are the two hypothesized interactions of promoting (with expertise: $F(2,105) = 3.01$; with industry: $F(1,105) = 6.07$; both $p < .05$). The pattern of the promotion $\times$ expertise interaction extends the pattern found in Study 2. The three expertise categories are termed lower, medium, and higher. As in Study 2, higher-expertise subjects' brand evaluations were unaffected by whether the fund offered promotions ($\bar{x} = 12.67\%$ versus $15.30\%$, $F(1,113) = 1.55$, $p > .20$, $\eta^2 = .014$). Conversely, mirroring the effect for novices in Study 2, medium-expertise subjects estimated higher rates of return when the fund was never promoted ($\bar{x} = 18.75\%$), compared with when it was ($\bar{x} = 13.14\%$, $F(1,113) = 4.84$, $p < .05$, $\eta^2 = .041$). However, the lowest-expertise subjects did not appear to use the presence of a promotion as a signal for brand quality ($\bar{x} = 15.13\%$ for both, $F < 1$, $\eta^2 < .0001$). Note that, in Study 2, all subjects may be presumed to have some basic knowledge of the health club industry, a presumption that is less justified in the context of the mutual fund industry. This may explain the differences in results between the two studies. Alternatively, it is possible that the lowest-expertise subjects simply may have been uninvolved in the experimental task, presumably because of their lack of knowledge. This result qualifies the support for $H_2$ found in Study 2 and implies that a minimum level of industry knowledge may be required before consumers will use a price promotion as a cue for brand evaluations.

The pattern of the promotion $\times$ industry interaction is also as we expected. When subjects believed that others in the industry did not offer promotions, they estimated a higher rate of return for the fund that never had been promoted ($\bar{x} = 19.53\%$) than for the fund that had been promoted ($\bar{x} = 13.54\%$, $F(1,109) = 7.46$, $p < .01$, $\eta^2 = .064$). In contrast, when subjects believed that promotions were common in the industry, there was no difference between the estimated rates of return of the fund that was promoted ($\bar{x} = 13.94\%$) and the fund that was not ($\bar{x} = 13.70\%$, $F < 1$, $\eta^2 < .01$). Therefore, $H_3$, which argues that the effect of promotions on brand evaluations is contingent on perceptions of how common it is to promote, is supported.

In summary, we received further support for the proposition that contextual and individual factors affect whether promotions have an unfavorable effect on brand evaluations. The effect was unfavorable only when the context made the promotional signal seem diagnostic of quality and when consumers were relative, but not complete, novices.

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5Prior to dropping subjects who failed the manipulation check, we confirmed that they did not differ from the remaining subjects in their level of expertise. An ANOVA on the expertise score of rejected versus accepted subjects was not significant ($F < 1$), and a cross-tabulation of the failed subjects as novices and experts showed a similar proportion of each, compared with the subjects who passed the manipulation test ($\chi^2(1) = 1.31$, $p > .25$).

6The results of our tests of $H_2$ and $H_3$ are robust and are not compromised by the inclusion of all subjects in the sample. The industry was one with which subjects were unfamiliar, to enable manipulation of industry norms. There was no difference across conditions in the number of subjects who did not respond correctly to the question. We do not include subjects who did not recall manipulated information correctly because the model requires that consumers encode whether a promotion is being offered for this information to affect brand evaluations.

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7Evidence of a nonlinear pattern is supported by regression analysis. The beta coefficient of the interaction between promoting and expertise measured as a continuous variable is positive, but the coefficient of a similar interaction term between promoting and the square of the expertise scale is negative, suggesting an inverted-U relationship.
GENERAL DISCUSSION

We found that price promotions affect pretrial brand evaluations and do so unfavorably, but only in some specific conditions. The moderators identified were past promotional history (Studies 1 and 2), individual expertise in the category (Studies 2 and 3), and perceptions of how common promotions are in an industry, both manipulated within an industry (Study 3) and examined across industries (Study 1 versus Study 2). Specifically, (1) offering a promotion is more likely to lower a brand's evaluation when the brand has not been promoted previously, compared with when it has been frequently promoted; (2) promotions are used as a source of information about the brand to a greater extent when the evaluator is not an expert but has some basic industry knowledge; and (3) promotions are more likely to result in negative evaluations when they are uncommon in the industry.

Given these results, Davis, Inman, and McAlister's (1992) finding that promotions do not affect brand evaluations can be understood better. They study categories with which consumers had considerable prior experience and in which promotions were common. Furthermore, the brands they examine had been promoted in the past (prior to the experiment). All these are conditions identified in our research as limiting the impact of promotions on brand evaluations.

Theoretical Contributions

At a general level, this article addresses the issue of how price promotions are more than simply economic incentives to purchase a brand. In some situations, they serve an informational function. The specific question studied here was whether and in what conditions promotions are informative about a brand's quality. Other research has investigated whether consumers use coupon values to estimate price (Raghurub 1998), whether they use the presence of promotional displays as an indicator of a price cut (Inman and McAlister 1993; Inman, McAlister, and Hoyer 1990), whether aspects of a promotion (e.g., presence of restrictions) affect a consumer's deal evaluations and intent to purchase a brand because they signal value (Inman, Peter, and Raghurub 1997), and how the pure semantics of communicating a promotion, for example, as a percentage-off versus a dollar-off deal, affects deal evaluations (RaghurubDas 1992). The research presented here adds to the growing evidence that price promotions serve more than an economic function. This is important because the informational value of a promotion can undercut its economic benefits.

We showed that consumers make quality inferences on the basis of a firm's promotional behavior, but in a manner slightly different than that predicted by attribution theory. Classical attribution theory (Kelly 1967, 1972) predicts that, the more consistent a behavior is across time, the greater the likelihood that a personality inference will be made on the basis of that behavior. Consistent with this perspective, we argued that, for behaviors with a positive implication (e.g., not promoting), consistently performing the behavior is necessary for consumers to infer good quality. In contrast, we argued that promoting once is all that is required to induce lower quality inferences. Repeated promotions are not necessary because a single promotional act is sufficient to damage a brand's perceived quality. It appears that for behaviors with negative implications, behavioral consistency may not be a prerequisite for consumers to make inferences; once may be enough. In summary, our results suggest that the intrinsic valence of a behavior moderates the extent to which behavioral consistency is necessary for people to make inferences on the basis of a behavior. This adds to the growing body of evidence for the asymmetrical effects of negative and positive information (Taylor 1991) in the attributional domain.

We also showed that the effects on brand evaluations of a promotion's distinctiveness and consistency were moderated by the expertise of the consumer, with both subjective and objective measures of knowledge. We found that novices were more likely to be affected by a promotion's consistency and distinctiveness than were experts. This fits with the theory that price promotions have an informational effect, because novices have no information at their disposal other than that contained in the promotion's consistency and distinctiveness and thus are more likely to attend to and integrate that information. These results suggest that the classical attribution theories of Kelly and Jones (Jones and Davis 1965; Kelly 1967, 1972) might be moderated by individual differences in the perceiver. They may be more applicable to those with knowledge structures that are less well-formed than to perceivers with sophisticated knowledge structures.

Managerial Implications

Prior to examining individual-level attitude change in response to a price promotion, measured posttrial, addresses the question of how to increase the efficacy of promotions by retaining customers who try on promotion (e.g., Davis, Inman, and McAlister 1992; Scott and Tybout 1979; Scott and Yelech 1980; Tybout and Scott 1983). This article addresses a different managerial objective of offering a price promotion: increasing trial (versus retaining those who try). Generalizing across the factors we examine (promotional history, consumer expertise, and industry promotional norms), it appears that promotions are a signal of lower brand quality when consumers do not have access to alternative information regarding brand quality (i.e., they are not experts) and when the promotional behavior stands out because it deviates from the industry norm (i.e., is distinctive) and the brand's own past behavior (i.e., is inconsistent). The expertise construct also is implicated in the manner in which the distinctiveness and consistency dimensions of a promotion differentially affect pretrial brand evaluations, with these exerting a greater effect for novices versus experts. The results of this research suggest that, though in some conditions offering a price promotion does not affect brand evaluations, in others it clearly does. Promotions are likely to result in lower brand evaluations when the brand is being promoted for the first time in an industry in which promotions are uncommon to relatively unknowledgeable consumers who have not tried the brand previously. In these situations, promotions may inhibit trial.

Limitations and Further Research

Demonstration of the robustness and boundary conditions of the effects noted in this article requires replication in other product and service categories that vary in terms of whether they are luxuries or necessities, products or services, and so forth. The stronger effect of promotions in the dental services industry, compared with the health club industry, suggests that whether a search, experience, or cre-
ence good is being marketed may affect the intensity of the effects. Furthermore, the effects also may depend on the direction and strength of the true correlation between quality and the offering of promotions in a specific industry.

Additional research also might explore situations in which promotions are likely to lead to positive quality inferences. Some possible examples are promotions that are interpreted as rewards for existing customers, contexts in which consumers believe that a low price implies higher quality, nonprice promotions, and so forth. Such research also could examine whether expertise is related to beliefs in the price-quality schema and whether schematic framing moderates the effects of promotions on brand evaluations. By the same token, does providing a reason for a promotion inhibit attributional thinking and inferences by consumers?

Another interesting extension of this work would be to investigate whether a promotion serves as a quality signal directly or through its effect on a brand’s reference price. If price promotions affect brand evaluations directly, as well as through their effect on the brand’s reference price, offering a promotion may lead to a double whammy. By the same token, the research presented here suggests that providing an external reference price may improve deal evaluations (e.g., Lichtenstein and Bearden 1989) because it “holds up” quality perceptions. A direct examination of this issue is an area for further research.

Our use of a laboratory experiment paradigm with student subjects in the United States raises the issue of ecological validity. Despite the limitations of experimental methods, they seem appropriate at this stage. When we understand the basic phenomena being examined, conclusions drawn on the basis of experimentation should be tested in the field. A possible method to examine the effect of historical behavior would be to examine the brand equity of two similar companies within the same industry, one that promotes frequently and one that does not. A possible way to examine the effect of industrial norms is to examine brand equity across time, because promotions have become increasingly common.

Other ways to provide greater confidence in the findings reported here would be to supplement brand evaluation measures with process measures, such as thought listings and beliefs in the price-quality schema. Furthermore, other measures and varieties of category expertise might be explored, such as objectively recorded product category experience, knowledge gained from independent sources, and so forth.

APPENDIX

Scenario Used for Study 3

Mutual funds. Mutual funds are a convenient vehicle for a consumer to use to invest in the stock markets. They spread the risk associated with holding individual stocks by investing in a variety of markets and are particularly recommended for those investors who wish to invest over a period of at least five years. Mutual funds vary substantially from one another in terms of the return they provide the customer.

Although some funds perform much better than the individual markets they invest in, others could actually yield a negative return and lose money. Typically, an individual consumer buying into a mutual fund pays a one-time “load” or a fee, which is meant to cover the fund’s transaction costs.

Industry situation. Most of these funds have been offering a short-term incentive to investors. To encourage people to invest, many funds offer promotions. A typical investor promotion involves waiving the one-time load of 1% for investments of $25,000 or more. Offering incentives to investors is very common among mutual funds investing in the Pacific region. As many as 9 of every 10 funds have offered this promotion over the last couple of years. This is an extremely high percentage.

The problem. Assume you have just earned a $25,000 bonus. You plan to put this money into a mutual fund investing in the Pacific region and leave it there for five years. You would like to invest in a fund that is safe but will give a high return over the next five years. Given on the next page is a description of a fund in which you are considering investing. Please form an impression of this fund and answer the questions that follow.

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