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ABSTRACT

In this paper we investigate the conditions under which price promotions affect pre-trial brand evaluations. Three laboratory studies within the context of a price promotion designed to increase trial in a service industry are described. Results suggest that consistency with past promotional behavior, perceptions of how common it is to promote in an industry, and consumer expertise are important variables moderating when price promotions have an unfavorable effect on brand evaluations. Managerial implications for service providers offering promotions to attract new customers in industries where promotions are uncommon are offered, and theoretical implications for the importance of expertise moderating the effects of distinctiveness and consistency in the context of price promotions are discussed.
When Do Price Promotions Affect Pre-Trial Brand Evaluations?

Price promotions are often used to encourage trial among non-users of products and services. Given this, 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 non-users of an established brand. If promotions have an unfavorable effect on brand evaluations, they will undercut the positive economic and psychological incentives promotions supply, reduce the likelihood of trial, and potentially hurt repeat purchase rates for those who do try once the promotion ends. A simplified representation of the manner in which we propose price promotions can affect purchase through a lowering of brand evaluations is depicted in Figure 1. Note that the final effect on intentions of offering a promotion can be positive even when promotions have a negative effect on brand evaluations if this negative informational effect is weaker than the positive economic effect of offering a deal.

--- Insert Figure 1 around here. ---

But do price promotions lead to unfavorable brand evaluations? And if so, when? In their review of the sales promotion literature, Blattberg and Neslin (1990) observe that although "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). For example, researchers examining post-trial purchase behavior have found conflicting results concerning the effects of sales promotions (Davis, Inman, and McAlister 1992; Dodson, Tybout, and Sternthal 1978). Research on whether consumers associate promotions with inferior brand quality leaves important questions unanswered: What are the conditions under which promotions affect brand evaluations and why? We examine the effects of price promotions pre-trial to isolate their informational impact on brand quality perceptions from the potentially contaminating effect of prior personal experience with the brand. As controlling for
brand trial does not rule out prior experience with other brands in the product category as a potential source of information, the effect of expertise in the product category is also studied.

We examine the effect of sales promotions on brand evaluations using a series of laboratory experiments designed to focus on constructs that we predict moderate the effect of sales promotions on pre-trial brand evaluations: the brand's past promotional history, the consumer's expertise with the product category, and the consumer's perceptions of how common promotions are in the industry. Our emphasis is on price promotions or short-term discounts, designed to increase trial, offered to final consumers. Scenarios chosen focus on the service sector--typically "experience" goods, where consumers do not have the ability to examine the unfamiliar brand physically to assess quality and are less likely to have access to independent evaluations, and so must depend on marketing signals to assess quality prior to usage.

By reformulating the question of whether price promotions affect brand evaluations to when and why price promotions affect brand evaluations when they are first established--before trial, we isolate the pure informational effects of offering a promotion under various scenarios. Our results suggest that price promotions do have a negative effect on pre-trial brand evaluations, but only under specific conditions. 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) or the brand's own past behavior (i.e., is inconsistent). The expertise construct is also implicated in the manner in which the distinctiveness and consistency dimensions of a promotion differentially affect pre-trial brand evaluations, with these exerting a greater effect for novices versus experts.

BACKGROUND

Promotions have increased in popularity over the last few decades. The positive short term
impact of sales promotions on brand sales is well documented (Ehrenberg 1986; Guadagni and Little 1983; Gupta 1988; Neslin and Shoemaker 1983). A sales promotion typically reduces price for a given quantity, or increases 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, and to the extent that quality is important, a sales promotion may not achieve the extent of sales increase the economic incentive might otherwise have produced (see Figure 1) and the company will be less likely to retain customers attracted by the promotion, resulting in lower repeat-purchase rates.

Surprisingly, the literature on the effect of promotions on brand evaluations is sparse and equivocal, and the vast majority of research that has assessed the effects of sales promotions on brand evaluations has studied the effect after product trial (Scott and Yalch 1980, Scott and Tybout 1979, Tybout and Scott 1983). Thus, results are due to some combination of pre-trial evaluation and post-trial satisfaction with the product.

Scott and her colleagues examined the effect of promotions on evaluations after subjects had tried the promoted brand. They found that promotions can negatively affect brand evaluations (subjects preferred the taste of ... when they tasted without a coupon), but that this effect depended on a) whether subjects thought about the reasons for their choice before choosing (Scott and Yalch 1980), b) when they thought about their behavior (Scott and Tybout 1979), and c) whether they had prior brand knowledge (Tybout and Scott 1983). For example, Scott and Yalch (1980) found that when subjects were given a coupon and asked to think about the reasons for their choice of a soft drink before tasting it, they were less receptive to the taste of the soft drink than when they were not given a coupon or not encouraged to think. Scott and Tybout (1979) found that when subjects were asked to think about their behavior, it influenced the direction of the effect of the incentive on brand attitudes. When subjects were asked to think about their behavior immediately after choosing, the nature of their attributions led to more negative brand evaluations. However, when they were encouraged to think after a short delay, the promotion had a positive reinforcing
effect on brand evaluations. By focusing on post-trial attitudes, these studies addressed the question of how to increase the efficacy of promotions by retaining customers who try on promotion. They also provide important evidence for the moderating effect on brand evaluations of attributional thinking about a sales promotion. Importantly, Tybout and Scott's (1983) result that self-perception effects are lower in the presence of well-defined internal knowledge structures, suggests that the effect of promotions on brand evaluations is likely to be moderated by the extent of consumer expertise in a product category, even in a pre-trial situation where direct experience with the brand is unavailable as a source of information.

Davis, Inman and McAlister (1992) examined the difference between pre-promotion and post-promotion evaluations of packaged goods and found no evidence that sales promotions affect brand evaluations. They initially measured evaluations of selected brands in eight categories of frequently purchased products. Then three brands in each of four of those product categories (canned pasta, pain relievers, toothpaste, and toothbrushes) were promoted in rotation for three months. None of the brands in the other four product categories (microwaveable popcorn, saline solution, cereal, and mouthwash) was promoted during this period and they served as controls. After three months a second evaluation measure was taken. One brand each from the promoted and control product categories was evaluated by another group of subjects who had observed the brands over the experimental period. Mean evaluations of promoted brands in the post-promotional period were not found to be lower than those in the pre-promotional period.

The Davis et al. study suggests that the impact of promotions on brand evaluations in these packaged goods categories is, on average, nonexistent. However, the possibility remains that promotions may have had different effects on those who had vs. had not tried the product at the time of exposure to the promotion. Further, the products examined in the Davis et al. study were likely to have been promoted at some time before the study and all came from categories in which promotions are common. We investigate whether the effect of promotions on pre-trial evaluations is different when a brand has not previously been promoted and in categories in which promotions
are uncommon.

In the three studies reported here, we investigate specific conditions under which promotions affect pre-trial brand evaluations. Our overall proposition is that the effect of price promotions on brand evaluations is contingent on factors that affect the extent to which a single promotional offer is informative. The extent to which a promotion is informative is itself theorized to be a function of contextual factors such as the past promotional pattern of the firm, the extent to which other firms in the industry promote, and the consumer's product category expertise. 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 may be used to form an assessment in the absence of prior experience with the brand. 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.

**STUDY 1**

**Hypothesis**

Since promotions are temporary prices, their institution and retraction contain information that consumers may use in some conditions to make judgments related to the product. A price promotion (or its absence) may serve a simple informative function. (See Inman, Peter and Raghunir forthcoming, Raghunir 1996, for similar conceptualizations.) This leads to the question of whether a promotion is a positive or negative signal.

The price-quality literature has found that a lower price is generally interpreted as a signal of inferior quality as compared to a higher price and that this effect is magnified when price information alone is present as a basis for making a judgment (e.g., Etgar and Malhotra 1981; Gerstner 1985; Monroe and Petroshius 1981; Olson 1977; Rao and Monroe 1989). While the economic aspect of price leads to reduced demand at higher prices, the quality signal leads to
enhanced demand at a high price or requires a trade-off between price and quality (Hagerty 1978, Levin and Johnson 1984). But, the extent to which price is used as an indicator of quality depends on the availability of alternative diagnostic information (Szybillo and Jacoby 1974). For example, Gerstner (1985) found that the strength of the price-quality relationship was greater for infrequently purchased products than for frequently purchased products and Rao and Monroe (1989) found evidence that with increased product familiarity, the use of intrinsic product quality cues increases. Typically, the greater the amount of other information available, the smaller will be the effect of price on perceived quality (Rao and Monroe 1989). Since price promotions reduce price, and lower prices are associated with lower quality, we predict that offering price promotions will lead to inferences of lower quality.

Predictions of a negative effect are also implied by attribution theory. Attribution theory suggests that consumers assign causes for managerial actions. (See Folkes, 1988, for a review of attribution theory applications to marketing situations.) When consumers see promotions they may assume reasons for the promotion and these attributions may be to the brand or to some external force. A study directly examining attributional valence found that brand-specific attributions for a promotion were negatively valenced, whereas non-brand reasons were positively or neutrally valenced (Lichtenstein, Burton, and O’Hara 1989). When subjects were asked reasons why a brand might promote that were due to the brand, the reasons were associated with perceptions of poorer quality, while reasons that were not brand-specific were neutral or complimentary to the brand. Similarly, Lichtenstein and Bearden (1986), examined product, circumstance, and person attributions for a promotion. They found that product attributions were negatively valenced, e.g., "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 these attributions are to the brand, they are more likely to lead to unfavorable brand evaluations.

The question then is, what is the likelihood that a given promotion will be attributed to brand-related factors? The fundamental attribution error (Heider 1958) is a robust finding and
occurs when one attributes another person's behavior to dispositional qualities rather than to situational factors, even when these situational factors are facilitative in nature. (This phenomenon is also referred to "correspondent inference theory;" Jones and Davis 1965) In this context, a fundamental attribution error would lead observers to attribute promotional "behavior" to the "disposition" of the brand--its nature or quality--rather than characteristics of the industry and other external explanations. There is tentative evidence in a study by Raghubir (1994) for the predominance of brand attributions in a promotional context--i.e., a promotion was significantly more likely to be attributed to brand-related factors than contextual factors such as competition in the industry (Means = 2.4 vs. .31, for brand-related and non-brand related attributions, respectively).

In sum, both the price-quality literature and attribution theory suggest that when price promotions serve an informational function, they are likely to have a negative effect on pre-trial brand evaluation. Given this, the issue of whether price promotions affect brand evaluations can be restated in terms of when they serve an informational function. The promotion's information value is context specific (Lichtenstein and Bearden 1989) and depends in part on whether the act represents a change in behavior. To illustrate, if a brand that has frequently been promoted in the past is currently promoted, this conveys little to consumers about the brand and they are not likely to give the behavior much thought. On the other hand, if a brand is promoted that has never been promoted in the past, this is informative and is 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 a person given the person's behavior (Einhorn and Hogarth 1986; Hastie 1984; Hilton and Slugoski 1986; Jones and Davis 1965; Kelly 1967, 72). Consistent with this logic, in the context of advertisements using reference prices, Lichtenstein and Bearden (1989) found that consumers' price perceptions were dependent on the consistency of merchants' price claim policies (see also Lichtenstein and Bearden 1986).

Promotional behavior should be more informative of a brand's quality when it is inconsistent with
past behavior as compared to when it is consistent.

Further, the informativeness of promotional inconsistency should itself be dependent on whether the information value of the promotion is negative or positive. The valence, or the intrinsic positive or negative characteristic of a behavior, has been well researched in social psychology and has been shown to affect the salience (Fiske 1980) and the processing of information (Fiske 1980, Skowronska and Carlton 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 (vs. positive) information while 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 assesses the effects of valence on attributional thinking, Gidron, Koehler, and Tversky (1993) demonstrated 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. For example, a person had to perform a larger number of honest behaviors (Mean = 8.58) to be judged honest, than dishonest behaviors (Mean = 3.78) to be judged dishonest. In short, it is more difficult to change people's negative attitudes in a positive direction than it is to negatively influence their positive attitudes.

Given these results, we expect that if 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. On the other hand, we expect a brand for which a promotion has never been offered (positive behaviors) to benefit from its reputation for not being promoted only as long as no promotion is offered. Once the brand is promoted, we expect that negative behavior to have a damaging effect on evaluations. Thus,

**H1:** 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 to the level of an equivalent brand that has been promoted consistently in the past.

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 class at a large northeastern university, who took part in the experiment to complete a course requirement.

A 2 (currently promotes: yes/no) x 2 (promoted in the past: frequently/ never) between-subjects design was utilized. Subjects were randomly assigned to experimental conditions and presented with a short description of a dentist. This vignette manipulated the experimental information which was embedded in general information about the location of the dentist and the facilities offered. The experimental manipulations of promotional information were presented along with more generic information about the service provider to ensure that subjects had more than just the promotional information available to make an evaluation. The promotion used was a "25% discount on fees." To control for the economic effect of the promotion, the impact of the economic incentive the promotion offered was reduced in the manner suggested by Gautschi and Rao (1990) to isolate the information effect of price in price-quality studies, by presenting a scenario in which their insurance carriers covered the regular price of the service. As 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, isolating the effect of the promotion on brand evaluations. Subjects were instructed to form an overall opinion of the dentist. They were then asked to complete the dependent measures and manipulation checks, and were debriefed. The procedure took approximately 15 minutes.

The dependent measure was Overall Brand Evaluation, measured using nine 7-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 onto one factor and that their reliability was high.) The nine scales were added to form an index (α = .91).

Results and Discussion

Results are presented in Figure 2. The analysis used was a 2 x 2 ANOVA reporting overall main and interaction effects followed by simple-effects tests where the interaction is significant.

--- Insert Figure 2 about here ---

Manipulation Check. True-false questions were used to identify subjects who could not recall whether or not the dentist was currently offering a promotion or had done so in the past. A total of sixteen subjects did not respond correctly to the true-false task and were eliminated from further analysis, leaving a usable sample of 70 subjects.

Overall Brand Evaluations. The 2 x 2 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 (Mean = 4.00) than when no promotion was offered (Mean = 4.40, F(1,66) = 3.45, p < .04). The effect of past promotion indicates that brand evaluations were less favorable when the dentist had frequently offered a promotion in the past (Mean = 3.94) as compared to when a promotion had never been offered (Mean = 4.49, F(1.66) = 6.68, p < .01).

However, the main effects need to be interpreted in the face of the significant interaction which is predicted in H1 (F(1,66) = 10.62, p < .001). The form of this interaction shows that when promotions had frequently been offered in the past, promotion in the current period led to evaluations no worse than would have occurred had the promotion not been offered (Mean = 4.12 vs. 3.80, F = 1). On the other hand, when promotions had never been offered in the past,
promoting led to significantly lower evaluations (Mean = 3.89) than not offering a promotion (Mean = 4.97, F(1,34) = 14.14, p < .001). Once a brand has been promoted, its evaluation sinks to the lower level and stays there even in the absence of promotion in the current period.

H1, 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 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 signal in this condition. Study 2 is designed to replicate the results of Study 1 in a different category and with different measures to test robustness of the effects. We also investigate whether the route to lower brand evaluations is mediated by less favorable beliefs regarding attributes of the brand and moderated by individual differences.

**STUDY 2**

**Hypothesis**

We have argued that consumers use the presence of a price promotion as a source of information. In Study 1, we demonstrated through an examination of overall brand evaluations that this information use was contingent on the brand’s past promotional behavior. This leads to the question of whether promotions cause consumers to evaluate the brand less favorably in a holistic manner or whether the effect applies to specific attributes of the brand. If it is the latter, this implies that the "damage" to brand evaluations might be more controllable if a firm can communicate that the product is strong on the attributes of concern. Such a strategy would be particularly useful if the route to lowered brand evaluations is perfectly mediated (cf. Baron and Kenny, 1986) by beliefs regarding specific brand attributes.

We argued that price promotions are associated with lower brand evaluations, in part because consumers associate lower price with lower quality. This suggests that price promotions influence beliefs regarding the individual attributes of a brand, rather than the brand as a whole.
Therefore, the price promotion should affect beliefs regarding specific aspects of a brand's quality, and this should be reflected in lowered overall brand evaluations. To test this, we extend H1, as follows:

**H1c:** The effect of price promotions on specific product beliefs is moderated by the brand's past promotional behavior in a manner similar to the effect on brand evaluations.

**H1d:** Beliefs regarding product attributes mediate the route through which a firm's promotional behavior affect brand evaluations.

We have argued that price promotions are information. 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 inversely related to the availability of an alternative source of information (Feldman and Lynch 1988; Menon, Raghubir, and Schwarz 1995). One alternative source of information is the consumer's own knowledge. Individual expertise has been shown to moderate a number of consumer judgment tasks (e.g., Alba and Hutchinson 1987, Inman, Peter, and Raghubir forthcoming, Maheswaran and Sternthal 1990, Sujan 1985). Knowledgeable consumers with 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 about the product category. This result was demonstrated strongly by Tybout and Scott (1983) with consumers who had recourse to immediate sensory taste data when they made their judgments. Therefore, we hypothesize:

**H2:** Individual expertise in the category will moderate the effects hypothesized in H1, such that experts will be less likely than novices to evaluate a brand unfavorably because it promotes.

**Method**

Subjects were seventy-one students enrolled in an introductory marketing class at a large northeastern university who took part in the experiment to complete a course requirement. None had participated in Study 1.
The design used was 2 (currently promotes: yes/no) x 2 (promoted in the past: frequently/never) x 2 (expertise: expert/novice) between subjects. The first two factors were manipulated as in Study 1 and expertise was measured.

The scenario chosen was that of a health club. The promotion was the same as in Study 1 and manipulated similarly. Again, a quantity of non-promotional information on the health club was also provided to give subjects a broad and realistic 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. The procedure took approximately 15 minutes. The dependent measures was the brand evaluation index, created in a manner identical to Study 1 ($\alpha = .90$). In addition, we measured beliefs regarding specific product attributes using six 7-point agree-disagree scales (with higher numbers indicating greater agreement) on statements related to the quality of the health club. These statements read: "The health club uses the latest equipment," "The health club offers a full range of services," "The health club is well-maintained," "The health club’s facilities are hygienic," "The health club uses the latest technology," and "The health club is targeting a high-income clientele." (Pretests of these scales found that they loaded onto one factor and that their reliability was acceptable.) Responses to the six agree-disagree statements were added to form an overall Product Belief index ($\alpha = .91$).

We measured expertise through two self-reports on subjects’ knowledge about, and interest in, health clubs. Since the measures were highly correlated, they were combined to form a single Expertise index ($r = .84$, $p < .01$). A median split on this index (Median = 5 on a 7 point scale) divided the sample into relative experts and novices, who differed significantly in mean expertise (Means = 5.71 vs. 3.15, $F(1,65) = 123.54$, $p < .0001$). Post hoc analysis confirmed that this classification was orthogonal to the manipulated variables ($p > .50$).
Results and Discussion

Results are presented in Figures 3a through 3d. The analysis used is a 2 x 2 x 2 ANOVA reporting overall main and interaction effects followed by simple-effects tests where interactions are significant.

--- Insert Figures 3a--3d around here ---

**Manipulation Checks.** As in Study 1, true-false questions were used to identify subjects who did not correctly encode the two promotion manipulations. Four subjects did not respond correctly to the true-false question and were withheld from future analysis, leaving a total of 67 subjects.

**Brand Evaluations.** A 2 x 2 x 2 (current promotion x past promotion x expertise) analysis of variance reveals a significant main effect of currently promoting \( (F(1,59) = 6.61, p < .01) \), as well as a significant interaction between promoting in the past and currently promoting \( (F(1,59) = 6.90, p < .01) \). The pattern of the means mirrors the pattern in Study 1. While there was no difference in evaluations due to offering a promotion if the firm had frequently been promoted in the past \( (\text{Means} = 4.83 \text{ vs. } 4.82, F < 1) \) evaluations were lower when the firm had never been promoted in the past and was currently promoted \( (\text{Mean} = 4.39) \), than if it was not currently promoted \( (\text{Mean} = 5.35, F(1,34) = 14.87, p < .0001) \). Thus, we were able to replicate the results of Study 1, where we found that a firm that promotes, either currently or in the past, has a lower evaluation than one that has never offered a promotion.

All other effects are non-significant except for the predicted three-way interaction \( (F(1,59) = 1.73, p < .10) \). To test for H2, which predicts that the effect of promotions hypothesized in H1 will be greater for novices, we conducted separate 2 x 2 analyses for experts and novices. Experts do not appear to have used promotions as a source of information (no significant effects), while the same analysis for novices shows a main effect of promoting currently \( (F(1,32) = 3.73, p < .03) \), qualified by an interaction with past promotion, as predicted by H1 \( (F(1,32) = 7.43, p < .01) \). The form of this interaction is as hypothesized in H1, i.e., novices evaluated brands less favorably in
the presence of a promotion when the brand had not been promoted in the past (Means = 4.28 vs. 5.32, \(F(1,22) = 9.24, \ p < .006\)), but this effect was not found when the brand had been promoted frequently in the past (Means = 4.89 vs. 4.36, \(F < 1\)). Therefore, H2 is supported.

**Product Belief Index.** The results for the product belief index mirror those for the evaluation index, supporting H1c. The 2 x 2 x 2 ANOVA reveals a significant main effect of currently promoting (\(F(1,58) = 17.88, \ p < .001\)), as well as a significant interaction between promoting in the past and currently promoting (\(F(1,58) = 13.84, \ p < .001\)). While there was no difference in evaluations due to offering a promotion if the firm had frequently promoted in the past (Means = 4.91 vs. 4.99, \(F < 1\)), evaluations were lower when the firm had never promoted in the past and currently promoted (Mean = 4.36), than if it did not currently offer a promotion (Mean = 5.93, \(F(1,34) = 32.74, \ p < .0001\)). Note again, that the interaction is driven by the higher evaluation in the condition where the firm had never promoted in the past and did not currently, versus all others, again showing that once a firm promotes, evaluations drop.

The only other significant effect is the three-way interaction predicted by H2 (\(F(1,58) = 5.39, \ p < .02\)). The individual 2 x 2 analyses for experts and novices show that while experts rated the service less favorably if the firm offered a promotion than if it did not (Means = 4.77 vs. 5.57; \(F(1,26) = 6.43, \ p < .001\)), the effect was stronger for novices. The 2 x 2 analysis for novices shows a main effect of promoting currently (\(F(1,32) = 11.52, \ p < .002\)), qualified by an interaction with the past promotion factor, as predicted by H1 (\(F(1,32) = 19.22, \ p < .0001\)). Again, the form of this interaction is as hypothesized in H1c--novices evaluated brands less favorably in the presence of a promotion when the brand had never been promoted in the past (Means = 4.26 vs. 6.05, \(F(1,22) = 32.88, \ p < .0001\)), but this effect does not reach significance when the brand had frequently been promoted in the past (Means = 4.93 vs. 4.13, n.s.). Therefore, H2 is also supported for the product belief index.

**Mediation Analysis.** Using the method suggested by Baron and Kenny (1986), we tested for the mediation hypothesis H1d, by including the proposed mediating variable (product beliefs)
as a covariate in the analysis of variance for the dependent variable (brand evaluations). Given
that H1 is supported for both dependent measures (i.e., the independent variables of promoting
currently and in the past had interactive effects on both the proposed mediating variable and the
dependent variable), perfect mediation can be established if the ANCOVA shows that the effect of
the covariate (product beliefs) is significant and the effect of independent variables (promoting
currently and in the past) becomes non-significant. This is what we found. The 2 (current
promotion) x 2 (past promotion) ANCOVA on brand evaluations with specific product beliefs as a
covariate yields a significant effect of the covariate (F(1,61) = 45.07, p < .001), while all main and
interaction effects are non-significant (F’s < 1, p’s > .45). This shows that, as hypothesized in
H1d, the route to lowered brand evaluations is perfectly mediated through less favorable beliefs for
specific service attributes.

In sum, we showed that the effects on brand evaluations extended to and were mediated by
specific product beliefs and expertise emerged as an important moderator of the effect of
promotions on brand evaluations.

There was one important difference between the results of Studies 1 and 2. While there
was no effect of past promoting for health clubs (Study 2), this effect was significant in Study 1
where the context was dental services. It is possible that this difference is attributable to the
differential strength of the promotion signal across these industries. The next study introduces
industry norms for the use of promotions—another contextual variable that can theoretically be
expected to moderate the information value of price promotions.

STUDY 3

Hypothesis

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 and individual
variables, such as past promotional patterns and individual expertise with the industry. Study 1
manipulated the "normality" of the firm’s promotional behavior in terms of consistency with its own behavior in the past. Another variable that has been shown to have a strong effect on the extent to which people make inferences based on behaviors is their "distinctiveness," i.e., how many other people engage in the same behavior (Einhorn and Hogarth 1986; Hastie 1984; Hilton and Slugoski 1986; Jones and Davis 1965; Kelly 1967, 1972). In the context of advertisements using reference prices, the distinctiveness construct has been shown to affect source credibility and consequent price perceptions (Lichtenstein and Bearden 1989). Here, we extend the notion to pre-trial 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 will be attributed to industry norms. On the other hand, when a brand promotes in an industry in which other brands do not, consumers are more likely to use this different behavior as a source of information about the brand and infer brand quality-related reasons for the promotion. Research suggests that these are more likely to be negative: For example, Raghunbir and Corfman (1995) found that across nine industries, promoting more often than others in an industry was associated with unfavorable brand evaluations, whereas promoting less often led to favorable evaluations. Accordingly, we hypothesize:

**H3:** 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 unfavorable only when promotions are not common.

**Method**

One hundred and sixteen subjects from the same 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) x 2 (industry: promotions common/ uncommon) between-subjects design was used. Expertise was measured using an objective test. The mutual funds industry was chosen on the basis of a pretest which confirmed that subjects generally knew little
about the industry. This was important to ensure that we could manipulate perceptions of how common it is to promote in that industry. The same pretest revealed that fund quality was important, and it was an industry subjects were interested in.

Subjects were presented with a short vignette describing the mutual funds industry and a particular mutual fund. They were informed that they had $25,000 to invest for five years and that the mutual fund listed had come to their attention. The vignette manipulated the experimental information, indicating whether or not the brand promoted frequently or never did so. 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". Interestingly, a recent study of mutual funds recorded that funds which switched from load to no-load had a lower return over a subsequent 10 year period as compared to funds which retained the front-end load (Elton, Gruber, Das, and Hlavka 1993). 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."

Given the Study 2 results, we needed to control for the effects of expertise. Expertise was measured using an objective scale rather than being based on a self-report, as suggested by Maheswaran and Sternthal (1990; see also Sujan 1985). Note that as we chose an industry with which subjects were not very familiar, "expertise" must be interpreted in relative terms. A 5-item questionnaire eliciting factual information about mutual funds was constructed by an expert who had worked for a number of years in the financial industry. Subjects responded "true," "false," or "don't know" to statements representing 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 individual 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 who were 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.

Subjects were instructed to form an overall opinion of the mutual fund and asked to estimate the experimental fund's estimated 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 encoded the "factual" information provided in the vignette. Subjects were presented with a true/false question that asked whether the experimental mutual fund had offered a promotion in the past. Of the 153 who participated, 116 answered the question correctly and were retained for further analysis. Note that the promotional information presented in the vignette was hidden in two pages containing a large quantity of other factual information about the mutual fund industry and the mutual fund in particular (e.g., where it invested). As this information was unfamiliar to subjects, it probably demanded relatively more of their attention. There was no difference across conditions in the number of subjects who did not correctly respond to the question.

Next, to ensure that subjects believed the manipulation of how common it was to promote in the mutual fund industry, they were asked to rate how common promotions are on a 7-point scale (1= "Not at all common" to 7= "Very common") On average, subjects rated that the promotion was significantly more common in the "common" condition (Mean = 5.03), than in the "uncommon" condition (Mean = 3.43, F(1,111) = 31.58, p < .0001). Further, the promotion factor exerted no main or interaction effect, as desired, to demonstrate orthogonality of manipulations.
Finally, to assess whether the promotional behavior was considered to be distinctive (i.e., that the manipulation of how common it was to promote in the industry worked in the manner intended), we asked subjects to rate how distinctive the firm’s promotional behavior was on a 7-point scale (1=“Not at all distinctive” to 7=“Very distinctive”). As intended, offering a promotion was rated as less distinctive in the “common” condition (Mean = 3.61), than in the “uncommon” condition (Mean = 4.31, F(1,111) = 6.81, p < .01).

**Hypotheses Tests.** Results are presented in Figures 4a and 4b. H2 predicts a significant interaction between promotion and expertise and H3 predicts a significant interaction between promoting and perceptions of how common promotions are in the industry. As expected, the 2 x 2 x 2 ANOVA reveals that both interactions are significant (F(1,109) = 3.42 and 5.71, respectively, p < .05), as is the main effect of promoting (F(1,109) = 3.91, p < .05). No other main and interaction effects are significant.

-- Insert Figures 4a and 4b around here --

The pattern of the promotion by expertise interaction mirrors the pattern found in Study 2. Expert subjects’ brand evaluations were unaffected by whether or not the fund offered promotions (Mean = 15.12% for both). On the other hand, novices estimated higher rates of return when the fund was never promoted (Mean = 17.18%) than when it was (Mean = 12.96%, F(1,66) = 5.02, p < .03). This adds to the support for H2 found in Study 2. We conducted a *post hoc* analysis to examine whether experts’ evaluations were the same as those of novices in the no-promotion condition. This analysis shows that while there is no difference between experts’ and novices’ expected rates of return when the firm does not promote (t_{68} = .82, n.s.), the novice mean when the firm promotes is substantially lower (t_{93} = 1.94, p < .05). Again, it appears that experts use the presence of price promotions as a source of information to make quality judgments to a lesser extent than novices who infer lower quality in the presence of a promotion.

The pattern of the promotion by industry interaction is also as expected. When subjects believed that others in the industry did not offer promotions, they estimated a higher rate of return
for the fund that had never been promoted (Mean = 19.53%) than for the fund that had been promoted (Mean = 13.54%, $F(1,56) = 5.49, p < .03$). On the other hand, 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 (Mean = 13.94%) and the fund that was not (Mean = 13.70%, $F < 1$). Therefore, H3, which argues that the effect of promotions on brand evaluations is contingent on perceptions of how common it is to promote, is supported.

In sum, we received further support for the proposition that contextual and individual factors affect whether or not promotions have an unfavorable effect on brand evaluations. The effect was unfavorable only when consumers had limited access to alternative sources of information, due to their lack of expertise or to the presence of contextual reasons for the promotion to be offered.

**GENERAL DISCUSSION**

We found that price promotions do affect pre-trial brand evaluations and do so unfavorably, but only under some conditions. The moderators identified were past promotional history (Studies 1 and 2), individual expertise in the area (Studies 2 and 3), and perceptions of how common it is to offer promotions in the industry (Study 3). Specifically, a) offering promotions lowers a brand’s evaluation only when the brand has not been promoted previously, b) a previously promoted brand’s evaluation is unaffected when a promotion is not offered, c) promotions are used as a source of information about the brand to a greater extent when the evaluator is not an expert, d) promotions result in negative evaluations only when they are uncommon in the industry, and e) the route to lowered brand evaluations is perfectly mediated by beliefs regarding service attributes.

Given these results, the Davis, Inman, and McAlister (1992) finding that promotions do not affect brand evaluations can be better understood. They looked at categories of frequently purchased products with which consumers have had considerable experience and in which
promotions are common, and the brands they examined had been promoted in the past (prior to the experiment). All of these are conditions identified in this paper as limiting the impact of promotions on brand evaluations.

**Theoretical Contributions**

At a general level, this paper 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 under what conditions, they are informative about a brand’s quality. Other research has investigated whether consumers use coupon values to estimate price (Raghubir 1996), use the presence of a promotional displays as an indicator of a price cut (Inman, McAlister and Hoyer 1990; Inman and McAlister 1993), and 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 Raghubir, forthcoming). The research presented here adds to the growing evidence that price promotions serve more than an economic function. This is important as their informational value may undercut the economic benefit promotions offer consumers.

We showed that consumers made quality inferences based on a firm’s promotional behavior, but did so in a manner slightly different from that predicted by attribution theory. Classical attribution theory (Kelly 1967, 1972) predicts that the more consistent a behavior 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. On the other hand, 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 do all the damage promotions can do to a brand’s perceived quality. It appears that for behaviors with negative implications, behavioral consistency may not
be a prerequisite for individuals to make inferences—once may be enough. In sum, our results suggest that the intrinsic valence of a behavior moderates the extent to which behavioral consistency is necessary for individuals to make inferences based on a behavior. This adds to the growing 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 individual, both with 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, as novices have no information at their disposal other than that contained in the promotion's consistency and distinctiveness and are, thus, 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 themselves be moderated by individual differences in the perceiver—being more applicable to those with knowledge structures that are less well formed than to perceivers with more sophisticated knowledge structures.

Managerial Implications

The results of this study have a variety of implications for marketing managers. Managers whose brands are new or have hitherto not been promoted for other reasons, who target consumers who have not tried the brand, (e.g., where the marketing objective is to stimulate trial), who target consumers who are not category experts, or whose brands belong to industries or markets in which promotions are not common (e.g., many service industries and non-Western markets), should think carefully about the possible negative effects on brand evaluations of offering promotions. These account for a substantial proportion of marketing situations, underlining the fact that while promotions may have a negative effect in only some situations, in these situations they should be used with extreme caution. Those managers whose brands have been promoted in the past, who
target those who have used the product, who target category experts, or whose brands are in industries in which promotions are common, will need to be less concerned about the potential negative consequences of promotions on evaluations. These conclusions should help managers predict when promotions are likely to have negative effects on brand evaluations and help them use information on their brands, their target consumers, and industry and market promotional norms to assess the pros and cons of promoting.

While we focused on an important issue for a company considering the use of promotions to stimulate trial of a new or existing product, our conclusions also have implications for the problem of how to retain customers who try on promotion. If consumers perceive diminished brand quality because a brand is promoted (as argued here), but buy on promotion anyway because of the economic incentive, they may not repurchase without the incentive unless their experience with the product is so much more positive than they expected, that it changes their evaluation. For credence goods and products whose advantages over the competition are not large or readily apparent, this may be a particular problem.

This research may also be 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. For example, it is well documented that the likelihood of purchasing a brand after deal retraction is lower if the prior purchase was a promotional one (Doob et al. 1969; Dodson, Tybout and Sternthal 1978; Guadagni and Little 1983; Scott 1976; Shoemaker and Shoaf 1977). One of the explanations that has been offered for this finding is that there is an attitude change at the individual level (Doob et al. 1969; Dodson, Tybout, and Sternthal 1978; Scott 1976). Dodson, Tybout and Sternthal (1978) argued that if a person buys a brand on deal, they are likely to attribute their behavior to the deal rather than to having a favorable attitude toward it, as compared to customers who bought the brand without a deal (at full price). They also hypothesized and found that this effect was greater when the deal was easy vs. difficult to encash. (See also Cole and Chakraborty 1987.) While the results of Dodson et al. (1978) are
consistent with an individual level attitude change due to attributional thinking after a purchase on deal, their study did not measure brand evaluations directly and so could not rule out alternative explanations for their pattern of results. One such alternative explanation was offered by Neslin and Shoemaker (1989) who argued that heterogeneity in the propensity to purchase on deal would, at an aggregate level, also be reflected in lower repeat purchase rates following a promotional purchase. Neslin and Shoemaker (1989) contend that the results of Dodson et al. cannot be used as evidence of promotions affecting brand evaluations at the individual level. Davis, Inman and McAlister (1992) examined change in brand evaluations at the individual level and found no evidence that sales promotions affect brand evaluations. Note that all these studies were in the realm of post-trial evaluations, whereas the focus of this paper is on pre-trial evaluations. This notwithstanding, by rephrasing the question of whether price promotions affect brand evaluations to under what conditions they do so, we were able to identify situations in which promotions did not have an effect and those in which they did. This allows us to resolve in part the controversy surrounding this issue. As such, these findings are an important contribution to the understanding of whether price promotions affect brand evaluations.

Limitations and Future Research

Demonstration of the robustness of the effects noted in this paper requires replication in other product and service categories and use of other types of promotional messages. Other variations among categories may influence the effect of promotions. It is also quite possible that consumers associate different promotional tools with different levels of brand quality. For example, promotions that require more effort on the part of the consumer or that include restrictions (e.g., one per customer) may result in more positive brand evaluations.

Future research might examine whether the effect of promotions on brand evaluations is moderated by the type of product category (search, experience, credence; durable/non-durable; luxury/necessity). Theoretically speaking, one would expect that the informational effects of sales
promotions would be low for search goods and high for credence goods, with the effect somewhere in the middle for experience goods and moderated by usage. An interesting issue to examine would be whether the effects of promotions extend to the post-trial scenario when brand experience is ambiguous, as is the case with credence goods. Further, while the contexts chosen in this paper were from the service industry, there is reason to expect on theoretical grounds that they should translate into similar effects for durables and possibly even non-durables. However, extending the empirical boundaries of the propositions of this paper is an area of future research.

The proposition that sales promotions have a negative effect on brand evaluations was based on consumers’ believing in the "price-quality" schema. However, it is possible that in some situations (e.g., promotions targeted at existing consumers), price promotions may also be interpreted as rewards and bonuses and have a positive effect on brand evaluations. Analogously, in contexts where consumers believe that a low price implies higher quality (e.g., because the lower price is due to the use of a new technological platform associated with higher quality, as in the case of the telecommunications industry), offering price promotions may lead to enhanced brand evaluations. In such situations offering a promotion may be an asset rather than a liability. Future research could examine the conditions under which a price promotion may be a positive quality cue and examine the moderating role of schemas such as these on the effect of price promotions.

An interesting extension of this work would be to investigate whether a promotion serves as a quality signal directly or via its effect on a brand’s reference price (i.e., via beliefs regarding what is a fair price, a brand’s regular price, or a competitive price). Recent research suggests that the robust finding of lower repeat purchase rates after promotional purchases can be explained in terms of lowered reference prices leading to a lower likelihood of purchase and that this effect is moderated by the brand’s initial price level (Wathieu and Bronnenberg 1996). If price promotions affect brand evaluations directly, as well as through their effect on the brand’s reference price, then in some conditions, offering a promotion may lead to a double whammy.
Our use of a laboratory experiment paradigm raises the issue of ecological validity. Despite the limitations of experimental methods, they seem appropriate at this stage. Once we understand more about the basic phenomena being examined, conclusions we are ultimately able to draw on the basis of experimentation should be tested in the field.

Another area for future research is to study a third dimension of price promotions, distinct from their informational and economic aspects: an affective aspect that makes consumers "feel" good or bad about themselves and their shopping behavior when they avail of a promotion. A starting point to assess this aspect of price promotions is to explore the dimensions that affect the psychology of "deal proneness" (cf. Lichtenstein, Netemeyer and Burton 1991, 1995).
1. Attributional thinking need not necessarily require systematic, effortful thought. Social psychological research has shown that attributions can be fairly effortless and unintentional (Winter and Uleman 1984, Gilbert, Pelham and Krull 1988) and are quite uncontrollable (Bargh 1984), particularly if they are used schematically or heuristically (Abelson 1981, Leddo, Abelson and Gross 1984, Schank and Abelson 1977). The likelihood of attributional thinking would, however, increase 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).
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Exhibit 1
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 5 years. Mutual funds vary substantially from each other in terms of the return they provide the customer. While 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 around 5 years. You would like to invest in a fund that is safe but will give a high return over the next 5 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.
Figure 1
A Simplified Model of the Route through which a Price Promotion affects Purchase

Route in bold depicts the information route through which price promotions affect intent via a negative effect on perceived quality.

The other route is the direct economic route through which a price promotion affects intent to purchase via providing an economic incentive to the consumer.
Figure 3

Results of Study 2

a: Evaluation Index

b: Evaluation Index

c: Product Belief Index

d: Product Belief Index
Figure 4
Results of Study 3

a: Promoting by Expertise Interaction

b: Promoting by Industry Norm Interaction
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