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The Asymmetric Effect of Discount Retraction on Subsequent Choice

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This article examines the subsequent impact of a temporary price discount on brand preference after the promotion is retracted. Theorizing that price salience has an impact on price sensitivity, we propose that the effects of retracting a discount depend on the promoted brand's regular price-quality positioning. In a first experiment in which we track consumer choices across a sequence of choice occasions, we show that retracting a discount posted by a higher quality, higher price brand is detrimental to that brand. In contrast, a discount posted by a lower quality, lower price brand is capable of enduringly diverting consumers away from high-end brands. A second experiment relies on process measures to provide evidence for the underlying price salience mechanism. A third experiment tests our hypotheses with real incentives and offers additional support for our price salience theory by testing its most peculiar behavioral implication.

There is little doubt that temporary price discounts have an immediate positive effect on sales. The effects of discounts on brand preference during the postpromotion period, however, remain largely uncharted (Blattberg, Briesch, and Fox 1995). Whereas some authors have suggested that promotions can initiate a lasting process of preference reinforcement, a perhaps greater number of researchers have warned that retraction of discounts can be detrimental to brand preference. This article proposes that the effect of discount retraction on subsequent choice depends critically on the promoted brand's relative positioning in terms of the regularly offered price-quality trade-off. Although relative positioning has been identified as a major determinant of direct promotion effects (Blattberg and Wisniewski 1989; Bronnenberg and Wathieu 1996), its role as a determinant of discount retraction effects has been overlooked in existing literature.

We submit that the effect of discount retraction is asymmetric in the following sense: higher quality, higher regular price brands are less likely to be chosen after posting and retracting a price discount, whereas lower quality, lower regular price brands will continue to divert buyers away from higher quality brands after the discount is retracted with no detrimental impact on their own initial customer base. Thus, whereas high quality, high price brands are known to have a principal advantage in terms of direct promotion effect, we argue that the opposite holds true with respect to discount retraction effects.

This prediction is motivated by a theory of price salience. The contrasting of temporary discounts with quality invariance influences the level of attention consumers place on the price attribute. This impact on price salience is contextual, depending on the identity of the promoted brand as well as the initial preference of individual consumers. As salience usually causes a perception of importance (McArthur 1981; Taylor and Thompson 1982), it has an impact on the importance of price in subsequent decisions, which gives rise to asymmetric retraction effects. Despite its simplicity, the price salience hypothesis engenders a range of testable predictions that sharply contrasts with existing research on the aftereffects of price discounts.

An earlier empirical study by Boulding, Lee, and Staelin (1994) found that the long-term effect of promotions varied depending on whether the promoted brand's regular price was above or below average for the product category. They suggested that promotions might be drawing consumer attention to the price dimension. The present research deepens this intuition and provides experimental evidence of its significance.

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EARLIER RESEARCH ON DISCOUNT RETRACTION

The existing literature on postpromotion effects does not explicitly account for the role of relative positioning. But when the literature is reexamined with different quality tiers in mind, it appears that some theoretical arguments undoubtedly hold unconditional predictions and that other theories implicitly lead to asymmetric postpromotion effects.

Among the theories that will not accommodate asymmetries, one can list reinforcement theories, inferential theories, and the trade-off contrast and attribute-range hypotheses. On the basis of the notion of positive reinforcement, Rothschild and Gaidis (1981) proposed, somewhat optimistically, that promotions could serve as incentives for trial, instilling sensitization and repeat purchase behavior. Inferential theories are more pessimistic. Consumers who have come to expect a correlation between price and quality should believe a promotion to signal poor quality (Raghubir and Corfman 1999). Moreover, consumers who form price expectations over time will perceive any promoted brand to be disappointingly expensive after deal retraction (Kalwani and Yim 1992; Winer 1986).

The trade-off contrast hypothesis introduced by Simonson and Tversky (1992) to interpret context-dependent choice regularities can also be used to predict an unconditional negative postpromotion effect: promoted brands offer an improved price-quality trade-off, and, by an effect of contrast, the regular price offering loses attractiveness when the promotion is retracted. Finally, Huber, Payne, and Puto’s (1982) attribute-range hypothesis holds that retraction of promotions should always hurt the promoted brand: promoting a cheaper brand, because doing so temporarily increases the range of prices available on the market and thereby reduces the perception of regular price differences, subsequently favors the more expensive brands. In contrast, promoting the most expensive brand, because doing so temporarily decreases the range of prices on the market, serves to accentuate regular price differences. All these predictions imply a negative retraction effect independent of brand positioning.

Two of the most classical articles on postpromotion effects suggest asymmetric effects of discount retraction. Doob et al. (1969) argued from the notion of cognitive dissonance that consumers who buy on discount will exert less effort to appreciate the nonprice dimension of the purchased product and will be less likely to repurchase at the regular price. Somewhat similarly, the classical essay of Dodson, Tybout, and Sternthal (1978), based on self-perception theory (Bem 1972), asserted that consumers who buy on discount would attribute their purchase behavior to the offered discount rather than to an intrinsic liking for the brand. Both the cognitive dissonance and self-perception mechanisms should mostly be detrimental to top-tier brands, whose success depends on the ability of consumers to focus on quality. The present research identifies the same asymmetry in discount retraction effects, even as it introduces price salience as a more straightforward and parsimonious causal mechanism.

TEMPORARY DISCOUNTS AND PRICE SALIENCE

The salience of a stimulus to a perceiver is inherently contextual. Salience relies on a sufficient degree of relative novelty or intensity, and it is accentuated by incongruity between a stimulus and a perceiver’s expectations (Fiske and Taylor 1991). Salience generates increased immediate attention (Berlyne 1974), and, more interestingly, its elements subsequently receive disproportionate weight in judgments and choices (Taylor and Thompson 1982). Accordingly, relative to brand qualities that remain invariant over time, the posting and retraction of temporary price discounts should focus consumer attention increasingly on price and subsequently elevate its importance as a decision attribute.

A key refining aspect of our theory is that not all price variations should have the same impact on price salience. In a context in which differently positioned brands compete with one another, the brand that originates the discount can determine the implied degree of price salience. A price discount posted by a brand not typically assumed by consumers to compete on the basis of price (i.e., a discounted higher quality, higher price brand) is particularly likely to be perceived as unusual and should cause price salience. A discount offered on a cheaper brand, being more congruent with the brand’s positioning, should attract less attention.

Another nuance emerges when a perceiver’s initial preferences are considered. A discount on a consumer’s preferred brand is likely to be welcomed as a bonus without challenging the consumer’s habitual approach to price-quality trade-offs. In contrast, a discount posted on a less preferred brand will cause a reevaluation that might subsequently increase the importance accorded to the price attribute. Collectively, these considerations imply that discounts posted by low-end brands are not expected to affect the price sensitivity of initial adopters significantly.

To develop testable hypotheses, we focus on a simple framework wherein a higher quality, higher price brand, named Brand A, competes with a lower quality, lower price brand, named Brand B. Consistent with our experimental paradigm (elaborated in the next section), we assume a situation wherein initial preferences can be elicited before any discount is offered, and we make predictions regarding preferences as they appear after a discount has been offered and retracted.

Hypotheses 1 and 2, which relate to the case in which the initially preferred brand is promoted, capture the intuition that discounts offered by brands not assumed to compete on price cause increased price salience. Hypotheses 3 and 4 relate to the case wherein the initially less preferred brand is promoted, which is also expected to cause price salience.

> **H1:** For consumers who initially prefer Brand A, a discount on A will, when it is retracted, reduce

the preference for A.

H2: For consumers who initially prefer Brand B, a discount on B will, when it is retracted, have no significant effect on brand preference.

H3: For consumers who initially prefer Brand A, a discount on B will, when it is retracted, reduce the preference for A.

H4: For consumers who initially prefer Brand B, a discount on A will, when it is retracted, increase the preference for B.

As stated earlier, this set of hypotheses could be derived from a background explanation based on cognitive dissonance or self-perception; even hypothesis 2 could be consistent with these mechanisms (e.g., the self-perception of thriftiness of a consumer who initially prefers B is unlikely to change after buying B on sale). There is a subtle conceptual difference between our theory and these other explanations, however. Our theory argues that temporary price changes underscore the importance of price, whereas the other theories maintain that temporary discounts override a consumer's natural ability to appreciate quality. This nuance will be exploited in one of our studies to provide specific support for the price salience argument.

EXPERIMENT 1

The 172 respondents who participated in this experiment received course credits for doing so. The task was to choose between two new brands of correction pen, a frequently purchased good familiar to the respondents. Price and quality information about Pen A and Pen B were provided in the form of expert ratings. Pen A was reportedly rated highly by 30, and Pen B by only 21, of 40 experts. A pretest ($n = 34$) confirmed that these expert ratings caused respondents to rate Pen A more highly than Pen B in terms of overall quality. The same pretest was used to determine regular price levels in Hong Kong dollars (HK$54 for Brand A, HK$36 for Brand B) that would induce approximately equal choice between the two brands.

Participants engaged in a sequence of three opportunities to choose between A and B, described as distinct choice occasions. The first (initial) and third (final) choice occasions involved regular prices for all participants. The second choice occasion was subject to manipulation: one third of participants were offered a 30% discounted price for A and the regular price for B (A^d condition), one third a 30% discounted price for B and the regular price for A (B^d condition), and one third the regular price for both brands (control condition).

Results

We crossed the three promotion conditions (A^d, B^d, and control) with the participants' initial choices (labeled A^i or B^i) to form six experimental groups. A logistic analysis revealed significant differences among these groups (Wald $\chi^2 = 13.96$, $p < .001$). The dependent variable of interest was the proportion of participants who chose B in the third choice occasion, subsequent to discount retraction. Table 1 summarizes the choice patterns for the different conditions. Hypotheses 1–4 were tested by performing a series of Z tests that compared the propensity to choose B after a discount was retracted (A^d or B^d) with the propensity to choose B when no discount was offered (control condition). When the number of participants who chose either A or B was five or less, we used instead the Fisher exact test.

TABLE 1

FINAL CHOICE SHARE OF THE LOWER PRICE–LOWER QUALITY BRAND (BRAND B) AFTER DISCOUNT RETRACTION IN EXPERIMENT 1

	Initial preference for Brand A (A^i)	Initial preference for Brand B (B^i)
Control	.33 ($n = 27$)	.67 ($n = 30$)
After discount on A (A^d)	.61 ($n = 28$)	.875 ($n = 32$)
After discount on B (B^d)	.62 ($n = 26$)	.72 ($n = 29$)

In the case of a brand's own promotion (hypotheses 1 and 2), it appears that when the initial choice was A, relative to the proportion of participants who chose B in the control condition (.33), retracting a discount on A leads a greater proportion of participants to choose B (.61). This difference is significant ($Z = 2.03$, $p < .05$), corroborating hypothesis 1. When, however, the initial choice was B, relative to the final share for B in the control condition (.67), we find, consistent with hypothesis 2, no significant impact in the B^d condition (.72, $Z = .48$, $p > .6$).

In support of hypotheses 3 and 4, it appears that retracting a discount posted by the brand that was not initially preferred will always induce a preference shift toward B. Experimental group $A^i - B^d$'s final share of .62 for B compares with a control share of .33 ($Z = 2.06$, $p < .04$); experimental group $B^i - A^d$'s final share of .875 for B is greater than the .67 control share under B^i (Fisher exact test right: $p < .05$).[1]

A separate experiment involving 199 participants that replicated the procedures of experiment 1 using orange juice as a product category yielded equally strong support for the four hypotheses. A further replication of the results is embedded in experiment 3 below.

Discussion

The results of experiment 1 (and its replications) show the asymmetric effect of discount retraction on subsequent choice. The findings are consistent with our price salience theory, as discount retraction caused increased price sensitivity except in participants who exhibited price sensitivity in the first place and were offered a discount on the cheaper brand. This experiment does not, however, offer direct evidence of the underlying price salience mechanism. The next experiment purports to do so.

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[1] Alternative interpretations of the findings might exist because of possible idiosyncratic characteristics of respondents associated with self-selection into the experimental groups based on initial choice.

EXPERIMENT 2

This computerized experiment, which involved 89 participants against a monetary incentive, combined (1) the observation of repeated choices as in the previous experiment (initial choice and choice in the presence of a discount, involving 1.5 L bottles of orange juice) with (2) the observation of process features (processing durations and change in attribute weights). Participants first rated the importance of price in 14 frequently purchased product categories, including orange juice, by assigning 100 points between price and quality. Allocating zero points to price would imply that quality was the exclusive consideration; allocating 100 points to price would imply that price was the paramount consideration.

Twenty minutes after this initial rating task, participants made their initial choices (between alternatives A and B) in five product categories, including orange juices. The (immediately following) second choice occasion involved a 25% discount on either A (A^d) or B (B^d). There was no control group. Initial choices in two other categories that also were discounted were skewed toward one brand, making it impossible to assess the impact of promotions.

Both choice occasions involved three computer screens. The first stated simply that a market research firm wanted to understand the participant's preferences in several product categories. The second provided price and quality information about A and B in each brand category in the same manner as in experiment 1. The third screen recorded participants' choices. The time taken to process the (price and quality) information presented on the second screen was recorded for each choice occasion as a surrogate measure of participants' attention. Twenty minutes later, importance weights for price in the five product categories, including orange juice, were again elicited.

Results

We crossed respondents' initial choices with the promotion manipulation to obtain a 2 (A^i or B^i) × 2 (A^d or B^d) between-subjects design. The dependent variables were (1) the time to process information about the brands right before making the second choice and (2) the shift in importance weight allocated to the price attribute (final weight elicited minus initial weight elicited).

According to our theory of price salience, discounts should occasion increased attention to price and greater weight being accorded to price in subsequent decisions, save in condition $B^i - B^d$, owing to the discount in this condition being congruent with the consumer's decision and brand expectations. These propositions were tested via a series of contrasts that compared the $B^i - B^d$ experimental group with the other groups.

Process time data were submitted to a single-factor (four groups) ANOVA, and this analysis revealed a significant effect of group ($F(3, 85) = 2.73$, $p < .05$; see table 2 for the means). Contrast of interest ($B^i - B^d$ vs. the other three groups) was also significant ($F(1, 85) = 7.48$, $p < .01$), the $B^i - B^d$ condition featuring the lowest processing time. The shift in importance of price (final weight elicited minus initial weight elicited) was submitted to a one-way ANOVA, the results of which also suggested a significant effect of group ($F(3, 85) = 3.57$, $p < .02$). The shifts were in the predicted direction; the lowest shift in the $B^i - B^d$ condition was as predicted (see table 2), contrasting significantly with the other three groups ($F(1, 85) = 9.65$, $p < .01$).

We used the Baron and Kenny (1986) method to test the hypothesis that the combined effect of initial choice and discount retraction on the shift in the weight allocated to price is mediated by attention placed on price during the second choice occasion. We included processing time as a covariate in a model that tested the effects of experimental groups on the weight shift for the price attribute. Including processing time caused the previously significant contrast between the $B^i - B^d$ group and the other three groups to become nonsignificant ($F(1, 84) = 2.38$, $p > .12$; the effect mean square reduced by approximately 80%). The overall effect of group also became nonsignificant ($F(3, 84) = 1.7$, $p > .17$), but the effect of the covariate was highly significant ($F(1, 84) = 97.8$, $p < .0001$).

Discussion

This experiment offered strong support for the proposed process. The presence of a salient discount leads to greater consumer attention to, and increases the weight of, the price attribute. This result might be consistent with some of the other theories of discount retraction effects (e.g., those based

TABLE 2

PROCESS MEASURES IN EXPERIMENT 2

Initial preference—origin of discount	$A^i - A^d$	$B^i - A^d$	$A^i - B^d$	$B^i - B^d$
Time to process information about alternatives (including posted discount) in millisec.	14,624	13,409	13,966	10,475
Mean initial importance weight allocated to price attribute (out of 100)	41.9	58.6	45.3	59.0
Shift in mean importance weight allocated to price attribute after promotion episode	9.2	9.4	7.6	3.8

on self-perception). The next experiment gathers further evidence in support of the price salience explanation.

EXPERIMENT 3

This experiment also uses the repeated choice paradigm introduced in experiment 1 but involves real choices and an additional refinement that offers evidence of the underlying price salience process. If our theory is valid, an undue price increase (price shock) should engender price salience, and its retraction should have the same consequences as a price discount. In contrast, under both the cognitive dissonance and self-perception theories, a price shock should induce in consumers a greater appreciation for the quality dimension and a concomitant shift toward A on retraction.

We included five conditions in this experiment: (1) a no-discount control condition, (2) a discount for the cheaper brand (B^d), (3) a discount for the expensive brand (A^d), (4) a temporary price increase for the cheaper brand (B^s), and (5) a temporary price increase for the expensive brand (A^s). The two additional conditions were the only changes made from the basic design and procedures of experiment 1. Unlike the previous experiments, in which we relied on hypothetical choices, this experiment introduced real stakes. Using rewritable DVD-RAM discs as a product category, we announced that at the end of the experiment, by a lucky draw, 10 participants would be selected to receive what they had chosen. The price paid would come out of an allowance of HK$600 (prices ranged between HK$306 and HK$552), and the winner could pocket the saved surplus.

Three hundred and seven business students participated in this experiment. As in the previous experiments, regular prices were determined by a pretest so as to yield an equal split in market share between the two brands (51% initial share for A and 49% initial share for B).

Results

Choices in the control condition were compared with those in the price discount conditions (overall Wald $\chi^2 = 19.45$, $p < .001$) and in the price shock conditions (overall Wald $\chi^2 = 28.85$, $p < .001$), separately. Table 3 presents the final choice share for B in the third choice occasion under the various conditions. When the initial choice was A, the choice share of B increased significantly in both the A^d ($Z = 2.72$, $p < .01$) and B^d ($Z = 2.51$, $p < .02$) conditions relative to the control condition. The price shock conditions also generated increased demand for B in both the A^s ($Z = 3.19$, $p < .001$) and B^s ($Z = 2.06$, $p < .05$) conditions.

For participants who chose B in the initial round, the postpromotion choice in the B^d condition did not differ significantly from the choice in the control condition ($Z = .281$, $p > .6$). Because the number of respondents who chose the A brand in the remaining three conditions was five or less, we used the Fisher exact test instead of the Z test. The proportions of participants who chose B in the A^d (control vs. A^d Fisher exact test right, $p < .05$) and A^s (control vs. A^s Fisher exact test right, $p < .05$) conditions were greater than the proportion in the control condition. Even the B^s condition caused price salience (presumably because a price increase is incongruent for B) and an increased share for B on retraction (control vs. B^s Fisher exact test right, $p < .05$).[2]

TABLE 3

FINAL CHOICE SHARE OF THE LOWER PRICE–LOWER QUALITY BRAND (BRAND B) AFTER DISCOUNT OR PRICE SHOCK IN EXPERIMENT 3

	Initial preference for Brand A (A^i)	Initial preference for Brand B (B^i)
Control	.21 ($n = 29$)	.64 ($n = 28$)
After discount on A (A^d)	.55 ($n = 31$)	.85 ($n = 34$)
After discount on B (B^d)	.52 ($n = 33$)	.68 ($n = 28$)
After price shock on A (A^s)	.61 ($n = 31$)	.90 ($n = 29$)
After price shock on B (B^s)	.45 ($n = 33$)	.87 ($n = 31$)

Discussion

The results of this experiment offer additional evidence of asymmetric discount retraction effects and confirm the validity of price salience as an underlying mechanism. As suggested in our discussion of the literature, cognitive dissonance and self-perception could also cause asymmetric postdiscount effects in favor of lower quality, lower price brands. But these theories are separable from price salience theory when a price shock is posted in lieu of a price discount. Experiment 3 suggests that price salience is a more parsimonious and effective theory for explaining preference shifts after a temporary price change.

GENERAL DISCUSSION

In three experiments we examined the effects of discount retraction on subsequent choice. Our findings indicate that discount retraction does not always have a negative effect as is often suggested. Our contention is that the direction of the effect depends on individual consumers' initial preferences as well as on the regular price positioning of the promoted brand. Temporary discounts tend to diminish a consumer's preference for higher quality, higher price brands, and discounts posted by higher price brands tend to reinforce a consumer's initial preference for lower quality, lower price brands. A discount posted by a lower quality brand does not have a significant impact on consumers who would pick such a brand in the first place.

We advocated price salience as an underlying mechanism. Certain types of discounts (e.g., these posted by higher quality brands and those encountered by initial nonchoosers of the promoted brand) make the price dimension more salient, causing an immediate increase in the amount of attention paid to price information and, ultimately, an increase in the weight accorded to the price attribute in subsequent choices. This mechanism was isolated through (1) process measures (experiment 2) and (2) a demonstration of its most peculiar behavioral implications (experiment 3).

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[2] A replication of experiment 3 in which 257 graduate business students made choices among music compact disks is available from the authors.

We believe that this research resolves a number of ambiguities found in earlier empirical work in this area. Early findings (e.g., Dodson et al. 1978; Shoemaker and Shoaf 1977) did show repurchase of a brand to be less likely after a promotional purchase than after a purchase at the regular price, but Neslin and Shoemaker (1989) convincingly pointed out that this apparent impact on preference resulted from an aggregation bias: discounts temporarily attract consumers who would not buy the brand at the regular price in the first place (see also Davis, Inman, and McAlister 1992). To tackle this bias, this research tracked choices before and after promotions and hypothesized disaggregated effects. Additionally, existing empirical research on the impact of promotions has been challenged on the basis of potential endogeneity biases (Villas-Boas and Winer 1999). For instance, promotions in the field might seemingly hurt a brand when in fact the decision to promote was taken in anticipation of even greater hardship. There was no such endogeneity concern in the present experimental approach.

Beyond highlighting the detrimental effects of promotions on higher quality brands, this research (perhaps more interestingly) suggests that temporary discounts can be used by cheaper brands to divert consumers permanently away from high-end competitors. Our findings also suggest that an attempt by a cheaper brand to reinforce the price sensitivity of its current customer base through promotions is likely to be in vain. An implication of these findings is that retailers who seek to create an enduring advantage for their store brands might be best advised to encourage in-store discounting by national brands.

[*Dawn Iacobucci served as editor and Barbara Kahn served as associate editor for this article.*]

REFERENCES

Baron, Reuben M. and David A. Kenny (1986), “The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations,” *Journal of Personality and Social Psychology,* 51 (December), 1173–82.

Bem, Daryl J. (1972), “Self-Perception Theory,” in *Advances in Experimental Social Psychology,* Vol. 6, ed. Leonard Berkowitz, 1–62. San Diego: Academic.

Berlyne, Daniel E. (1974), “Attention,” in *Handbook of Perception,* Vol. 1, ed. Edward Carterette and Morton Friedman, San Diego: Academic, 123–47.

Blattberg, Robert C., Richard Briesch, and Edward J. Fox (1995), “How Promotions Work,” in “Empirical Generalizations in Marketing,” ed. Frank M. Bass and Jerry Wind, special issue, *Marketing Science,* 14 (No. 3, Part 2), G122–G132.

Blattberg, Robert C. and Kenneth J. Wisniewski (1989), “Price-Induced Patterns of Competition,” *Marketing Science,* 8 (Fall), 291–309.

Boulding, William, Eunkyu Lee, and Richard Staelin (1994), “Mastering the Mix: Do Advertising, Promotion, and Sales Force Activities Lead to Differentiation?” *Journal of Marketing Research,* 31 (May), 159–72.

Bronnenberg, Bart J. and Luc Wathieu (1996), “Asymmetric Promotion Effects and Brand Positioning,” *Marketing Science,* 15 (Fall), 379–94.

Davis, Scott, J. Jeffrey Inman, and Leigh McAlister (1992), “Promotion Has a Negative Effect on Brand Evaluations—or Does It? Additional Disconfirming Evidence,” *Journal of Marketing Research,* 29 (February), 143–48.

Dodson, Joe A., Alice M. Tybout, and Brian Sternthal (1978), “Impact of Deals and Deal Retraction on Brand Switching,” *Journal of Marketing Research,* 15 (February), 72–81.

Doob, Anthony N., J. Merrill Carlsmith, Jonathan L. Freeman, Thomas K. Landauer, and Saleng Tom, Jr. (1969), “Effect of Initial Selling Price on Subsequent Sales,” *Journal of Personality and Social Psychology,* 11 (4), 345–50.

Fiske, Susan T. and Shelley E. Taylor (1991), *Social Cognition,* 2d ed., New York: McGraw-Hill, 245–93.

Huber, Joel, John W. Payne, and Christopher Puto (1982), “Adding Asymmetrically Dominated Alternatives: Violations of Regularity and the Similarity Hypothesis,” *Journal of Consumer Research,* 9 (June), 90–98.

Kalwani, Manohar and Chi Kin Yim (1992), “Consumer Price and Promotion Expectations: An Experimental Study,” *Journal of Marketing Research,* 29 (February), 90–100.

McArthur, Leslie Z. (1981), “What Grabs You? The Role of Attention in Impression Formation and Causal Attribution,” in *Social Cognition: The Ontario Symposium,* Vol. 1, ed. E. Tory Higgins, C. Peter Herman, and Mark P. Zanna, Hillsdale, NJ: Erlbaum, 201–46.

Neslin, Scott A. and Robert W. Shoemaker (1989), “An Alternative Explanation for Lower Repeat Rates after Promotional Purchases,” *Journal of Marketing Research,* 26 (May), 205–13.

Raghubir, Priya and Kim P. Corfman (1999), “When Do Price Promotions Affect Brand Evaluations?” *Journal of Marketing Research,* 36 (May), 211–22.

Rothschild, Michael L. and William C. Gaidis (1981), “Behavioral Learning Theory: Its Relevance to Marketing and Promotions,” *Journal of Marketing,* 45 (Spring), 70–78.

Shoemaker, Robert W. and F. Robert Shoaf (1977), “Repeat Rates of Deal Purchases,” *Journal of Advertising Research,* 17 (2), 47–53.

Simonson, Itamar and Amos Tversky (1992), “Choice in Context: Tradeoff Contrast and Extremeness Aversion,” *Journal of Marketing Research,* 29 (August), 281–95.

Taylor, Shelley E. and Suzanne C. Thompson (1982), “Stalking the Elusive Vividness Effect,” *Psychological Review,* 89 (2), 155–81.

Villas-Boas, Miguel J. and Russell S. Winer (1999), “Endogeneity in Brand Choice Models,” *Management Science,* 45 (October), 1324–38.

Winer, Russell S. (1986), “A Reference Price Model of Brand Choice for Frequently Purchased Products,” *Journal of Consumer Research,* 13 (September), 250–56.

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