

Full Length Research Paper

Effects of discount retraction on consumers' subsequent brand choice: Moderating role of discount size

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This article extends existing research on the effect of discount retraction on consumers' subsequent brand choices by also including a new key moderator variable: discount size. The results indicate that as far as moderate discounts are concerned, the phenomenon of price salience is apparent. When high- or low-level discounts are introduced, the phenomenon of price salience is not significant and discount retraction does not induce a brand preference shift in a consumers' post promotional choice. Retracting a moderate discount on the low- or high-end (in terms of quality and price) brand reduces high-end brand preference of a consumer whose initial preference is high-end brand. However, for consumers whose initial choices are low-end brands, the effect of retracting a moderate discount on subsequent choices depends on the promoted brand. These results therefore suggest that discount size must be taken into account when designing a temporary discount promotion program.

Key words: Discount size, discount retraction, price salience, brand preference, brand positioning.

INTRODUCTION

As the most common form of sales promotion (Darke and Chung, 2005; Hardesty and Bearden, 2003), price discount is used extensively by marketers throughout the world. It is well documented that price discounts have both an immediate and a positive effect on both sales volume and profit on sales. This is why stores generally adopt price discount as one of their principal, promotional policies. However, few discounts last forever. Thus, it is also very important, but not as obvious, for vendors to consider the effects of discounts retraction on consumers' subsequent brand choice, which, despite being discussed widely in academic circles, has not been a matter in which real consensus has been reached.

While some researchers propose that price discount has a positive, post-promotional effect (Cotton and Babb, 1978; Rothschild and Gaidis, 1981), others assert that, although price discounts increase current sales, they

have a negative effect on the promoted brands when the promotions are retracted (Dodson et al., 1978; Grewal et al., 1998; Guadagni and Little, 1983; Kalwani and Yim, 1992; Shoemaker and Shoaf, 1977; Simonson and Tversky, 1992; Thaler, 1985; Winer, 1986).

In subsequent in-depth studies, brand positioning (in terms of price-quality trade-off) has been identified as a major factor in determining the effects of direct promotion. The asymmetric, cross promotion effects between the brands of different positioning are found (Allenby and Rossi, 1991; Blattberg and Wisniewski, 1989; Bronnenberg and Wathien, 1996; Grover and Srinivasa, 1992; Hardie et al., 1993). The results of those studies suggest that brand positioning needs to be taken into account when evaluating the asymmetry of promotion effects. Given the asymmetry, much attention was paid to the promoted brand's relative positioning and consumers' initial preference in studying the long-term effect of promotions.

Boulding et al. (1994) found empirical evidence to show that the long-term effect of promotions on consumer brand preference was directly correlated with the

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promoted brand's regular price level in the product category. Wathieu et al. (2004) carried out more in-depth research on the effect of discount retraction on subsequent choice. By applying a price-quality trade-off, as a method of brand relative positioning, and by positioning the brands as high-end or low-end (in terms of quality and price), they developed research hypotheses on the effects of retracting a discount, based on the theory of price salience. From their results, they concluded that discount retraction did not always damage the promoted brand. This was inconsistent with most other existing theories of post-promotional effect. They also suggested that the direction of effect was decided by both consumer preference for the pre-promotional brand and the relative positioning of the promoted brand in the product category. These asymmetric, post-promotional effects were due to the mechanism of price salience which made the consumer increase the weight of price dimension in post-promotional brand choices.

While the study by Wathieu et al. (2004) provided a deeper framework and important insights into post-promotional effects, it only used moderate discounts to test consumers' subsequent choice when a discount was retracted. However, the consumer usually faces promotional situations consisting of different benefit levels (low, moderate, high). Therefore, a comprehensive framework of how discount retraction affects consumers' subsequent brand choice must also study the effects of high- and low-level discounts retraction on their subsequent brand choice. In short, to better understand the effects of discount retraction on consumers' brand preference, the discount size should be further examined.

This research extended existing related research by considering discount size. The hypotheses regarding the interactions between consumers' initial brand preference, promoted brand's positioning and discount size were posited. In addition, this research contributes to the theory of price salience by identifying that discount size in price promotion is an important factor affecting the salient degree of price dimension in consumers' post-promotional choice.

DISCOUNT SIZE AND HYPOTHESES

This research examined the effect of consumers' initial preference (that is, high- and low-end) and promoted brand's positioning (that is, high- and low-end) across discount sizes (that is, low, moderate and high) on consumers' postpromotional brand preference.

Discount size is a key factor in determining consumer reaction to price promotions. It is directly related to the extent to which consumers' process information contained in a promotion. It may also affect consumers' motivation to process information with greater care (Gotlieb and Swan, 1990; Ozanne et al., 1992). Gotlieb and Swan (1990) found that consumers responded more

readily and with a greater number of cognitive responses to an advertisement mentioning a 30% discount than to an advertisement without any mention of price reduction. Lichtenstein et al. (1991) found that semantic cues were more effective when the discount was approximately 33% than when it was about 10%. Bitta et al. (1981) reported significant differences in responses between 20 and 50% discounts, in terms of perceived savings.

According to extant researches, the relationship between the promotional level of benefit and consumers' processing of information produced an inverted-U-shaped curve (Hardesty and Bearden, 2003; Lichtenstein et al., 1991; Ozanne et al., 1992). The impact on consumers' perception and cognition was shown to differ between moderate and high (or low) price discounts; whereas there was no significant difference between high and low price discounts. When price discounts are low, it is not difficult for consumers to process the promotional information and understand the merits of the deal. As there is less uncertainty about a discount value (that is, little monetary value), the degree of consumers' effort motivated by the discount to extensively process the promotional information is low. In the context of high-level discounts, consumers consequently find it easy to process promotional information and understand the value of the benefit in deal evaluations. This is because there is less uncertainty as to the perceived value of the deal and consumers are not motivated to process any additional information involved in a price promotion.

In short, in the context of high and low price discounts, consumers are expected to derive little benefit from processing additional information. Consumers are not motivated to process extra information in detail; that is, the exact value of the offer, the reasons for sale, differences in quality etc. The lower the need to think when processing discount information, the lower the consumer involvement and cognitive performance (Grewa, et al., 1996; Ozanne et al., 1992; Sternthal et al., 1987). Hence, consumers will not be impressed with such price promotions. The stimulation intensity resulting from the price promotion is weak. More importantly, since price salience relies on a relative intensity (Fiske and Taylor, 1991), insufficient stimulation will mean that the phenomenon will not occur (i.e., relative to quality, consumers will mostly focus their attention on price dimension) and there is little effect imposed on consumers' postpromotional brand preferences. Bearing this in mind, the following predictions can be established:

H₁: For consumers who initially prefer high- or low-end brands, a high (or low) discount on either a high- or low-end brand will, when it is retracted, have no significant effect on their brand preferences.

In the context of moderate discounts, the perceived value of the offer is less clear than it would be for high or low discounts. Consumers are willing to process the greatest

amount of information to clarify moderately discounted offers. Furthermore, by thorough analysis, it is possible for consumers to question the quality of the promoted brand or to analyze the reason for the sale, etc. However, more effort will be required in order to process the additional information, leading to active consumer involvement and cognitive performance. A lasting impression of price discount is forged in the minds of consumers by the intense stimulation. Therefore, price salience is stimulated by active involvement of consumers and, in post-promotional brand choices, consumers will pay more attention to the price attribute, and its weight will be both emphasized and increased.

For the consumers who initially prefer high-end brands, price salience activated by a moderate discount drives their attention further towards the price attribute. After the discount posted by their preferred high-end brand is retracted, they will think that the price of high-end brand is increased. Thus, the likelihood of their repurchases at the regular price decreases. This is consistent with the notion of cognitive dissonance (Doob et al., 1969) or self-perception (Dodson et al., 1978). In contrast, when a low-end brand is discounted, consumers may reevaluate price fairness for their preferred brand and consider it to be overpriced, in contrast to the discounted low-end brand (Thaler, 1985). As the success of high-end brands depends on focusing consumers' attention on quality, price salience will undermine high-end consumers' postpromotional preferences for their usual brand.

Regarding consumers whose original preferences are for the low-end brand, the retraction of discount on high-end brand signals the increase of its price. Moreover, as the price of their preferred brand does not change, it seems as if their preferred brand became much cheaper. So, a discount on a high-end brand has the effect of positive reinforcement on the post-promotional preferences for consumers' "usual" brand. Since consumers whose original preferences are low-end brands value thrift, they prefer selecting a cheaper brand from alternatives every time. Therefore, they are unlikely to change their preferences significantly when the discount on their usual brand is retracted. To this end, the following predictions can be made:

H₂: For consumers who initially prefer a high-end brand, a moderate discount on either a high- or low-end brand will, when it is retracted, reduce their preferences for a high-end brand.

H₃: For consumers who initially prefer a low-end brand, a moderate discount on a high-end brand will, when it is retracted, increase their preferences for a low-end brand; conversely when a low-end brand is discounted, retracting the discount has no significant effect on brand preferences.

METHODOLOGY

We tested the four stated hypotheses in two separate studies. The

contents of two studies were the same except for the stimuli. The inclusion of multiple stimuli belonging to the different product categories increases the generalizability of the research results. The stimulus was coded as high-end or low-end, depending on the price-quality trade-off. If the stimulus was of higher quality and higher price, it was high-end; on the contrary, it was low-end.

Pretest

The reason for carrying out a pretest was three-fold:

1. To decide which stimuli would be selected under the product categories for both of the studies
2. To measure the quantitative values of different discount levels for the chosen stimuli
3. To confirm whether a stimulus was recognized as being at the high- or low-end

In the pretest, four different product categories were selected as stimuli: USB flash drive, toothpaste, computer monitor and orange juice. For each product category, two brands were selected as stimuli. These were initially compared and classified in terms of high and low quality by the experimenter and the assistant. To ensure that consumers identified brands in terms of quality factors, such as appearance and volume, they were kept as similar as possible. Information about the price and quality of the products was supplied along with a product description. The current market price for each product was used as the "regular" price.

Two hundred and fifty-eight undergraduate and graduate students in Tsinghua University participated in the pretest. All the participants were asked to choose their preferred brands between the products in each category. The results for the computer monitor and orange juice choices were skewed toward particular brands, (computer monitor: 73.3 against 26.7%; orange juice 76.7 against 23.3%). Since, the difference in the percentage of participants who chose between the two brands of USB flash drive and toothpaste was smaller (with 63.2 against 36.8%, 64.7 against 35.3% respectively), these product categories were selected as stimuli for the purposes of this research. AIAO and AIGO (Appendix A) were selected as the brands of USB flash drive for study 1; and ZHONGHUA and CREST (Appendix B) were selected as toothpaste brands for study 2.

Each participant was asked to judge whether stimuli, presented as paired similar products, were high- or low-end, based on information about the product's quality provided in the product descriptions. The results indicated that approximately 92% of participants rated AIGO USB flash drives more highly than the brand AIAO; and approximately 90% of participants rated CREST toothpaste more highly than ZHONGHUA.

Then, 58 participants were selected at random to give the quantitative values of three discount sizes (low, moderate, high) for both of the product categories. They were presented 20 offers of continuous discount ranges for each category. Each discount range covered 5%, (that is, the first discount range was equivalent to or less than 5%; the second was larger than 5% but less than or equivalent to 10%; and the final range was larger than 95% but less than or equivalent to 100%). Both ascending and descending sequences were used to present the offers. Each participant was asked to choose three discounted offers, which they considered best matched the three discount sizes respectively, for each product category.

The means were calculated for each of the three medians corresponding to the three offers chosen by the 58 participants. The three means were then used as the values for the three discount sizes respectively. The results (Table 1) were consistent with those in previous studies (Hardesty and Bearden, 2003; Grewal et al., 1996).

Table 1. Means and standard deviations of three discount size for two product categories.

Discount size	USB flash drive (%)	Toothpaste (%)
High	46.6 (12.8)	42.0 (12.0)
Moderate	28.0 (10.0)	22.2 (7.5)
Low	11.3 (6.4)	8.0 (5.0)

Table 2. Post-promotional choice ratios for AIAO USB flash drive.

Discount size	Group (Condition)	High-end brand initially preferred (AIGO)	Low-end brand initially preferred (AIAO)
Control		0.14 (29)	0.62 (26)
High	Discount on high-end brand	0.14 (28)	0.64 (25)
	Discount on low-end brand	0.17 (30)	0.63 (27)
Moderate	Discount on high-end brand	0.40 (30)	0.89 (27)
	Discount on low-end brand	0.41 (29)	0.63 (27)
Low	Discount on high-end brand	0.17 (30)	0.63 (27)
	Discount on low-end brand	0.16 (31)	0.61 (28)

The figures in parentheses refer to the number of participants in each group.

Design

394 participants in Tsinghua University took part in study 1, which used the USB flash drives as stimuli; a further 385 participants attended in study 2 which considered the two brands of toothpaste.

The participants were divided at random into seven groups based on their initial brand preferences (displayed at the regular prices), and each group had approximately equal participants between high- and low-end preferences. Groups ranged in size from 51 to 59 participants. A 3 × 2 between-subjects factorial design was adopted in each study. The three discount sizes (low, moderate, high) and two promoted brands (high- and low-end) were combined factorially, together with a no-discount control condition, producing 7 different conditions for each study. Each group was randomly assigned to one condition according to a between-subjects design. We framed the discount sizes of high, moderate and low levels in dollar terms for either a high- or low-end brand for both studies.

Procedure

Both studies followed the same procedure. First, participants were told that the purpose of the study was to measure their brand preferences for the stimuli in specific situations. They were then given questionnaires, with information about the quality and price of stimuli in a product category. They were asked to state their preference for the brands in two different scenarios in sequence and they were asked to role-play consumers purchasing the stimuli according to the scenarios described in the questions. Two specific questions were used to elicit information about the two choice scenarios respectively. The participants in the control group were given the same questions in their two choice scenarios and they

were only given the regular prices for both brands in a product category. For the participants in other groups, the first choice scenario involved a price discount and the second involved a retraction of the discount. The same questions were used with each group and the only variables were discount levels and promoted brand names.

The first question measured the participants' brand preferences where prices were discounted; and the second measured preferences when the discount had been retracted. For example, the group in study 1 was presented with a high-level discount on a high-end USB flash drive brand, and was first asked: "Brand AIGO USB flash drives currently have a price discount of 82 (2.9) Chinese RMBs, while the brand AIAO has not been discounted. Based on the price and quality presented in the product description, which brand do you prefer?" In the second choice occasion, they were then asked a second question: "One week later, you find that the price discount of promoted brand AIGO has been retracted and its price is returned to normal (the regular price), which brand do you now prefer?" Similarly, the group in study 2 was asked the same questions to consider the two brands of toothpaste, by replacing AIGO with CREST and AIAO with ZHONGHUA.

RESULTS

The post-promotional choice ratios of low-end brands are listed in Tables 2 and 3, respectively. The seven conditions and two participants' initial preferences were factorially combined, producing fourteen different condition-preference groups for every product category.

Table 3. Post-promotional choice ratios for ZHONGHUA toothpaste.

Discount size	Group (Condition)	High-end brand initially preferred (CREST)	Low-end brand initially preferred (ZHONGHUA)
Control		0.26 (31)	0.61 (28)
High	Discount on high-end brand	0.28 (29)	0.60 (25)
	Discount on low-end brand	0.24 (29)	0.59 (27)
Moderate	Discount on high-end brand	0.57 (30)	0.88 (26)
	Discount on low-end brand	0.52 (27)	0.65 (26)
Low	Discount on high-end brand	0.27 (30)	0.62 (26)
	Discount on low-end brand	0.27 (26)	0.60 (25)

The figures in parentheses are same as those in Table 2.

The analytical results of post-promotional choice share of low-end brands revealed significant differences among these groups ($\chi^2=46.59$, $p<0.001$, for USB flash drive; $\chi^2=23.79$, $p<0.05$, for toothpaste). However, the differences in final choice ratios between two product categories of USB flash drive and toothpaste showed no significant stimulus effect ($t=1.049$, $p>0.05$).

As shown in Table 2, when participants (whose initial preferences were for high-end brands) were presented with moderate discounts on USB flash drives, it was unimportant whether the promoted brand was high or low-end; the final ratios of participants who chose AIAO, in contrast to that in the control group (0.14), indicated that the discount retractions resulted in a greater proportion of participants choosing low-end (for discount retraction of high-end brand, 0.40; for discount retraction of low-end brand, 0.41). H_2 was supported as these differences were significant ($Z=2.38$, $p<0.05$; $Z=2.42$, $p<0.05$).

However, for the participants whose initial preferences were low-end brands, the effect of retracting the moderate discount on their subsequent choices depended on the promoted brand. Comparing the proportion of participants whose initial choices were low-end in the control group (0.62), the effect of retracting the moderate discount on the high-end brand which encouraged more participants to stick to their original choices (0.89) was significant ($Z=2.47$, $p<0.05$), while the effect of retracting the discount on the low-end brand (0.63) was not significant ($Z=0.11$, $p>0.1$), providing support for H_3 . These results relating to the moderate discount retractions were consistent with those found by Wathieu et al. (2004).

As for the high-level and low-level discounts, regardless of the promoted brands and participants' initial preferences, relative to the postpromotional choice ratios

of participants in the control group, the effects of discount retractions on participants' subsequent choices in other groups were not significant ($ps>0.1$). These results supported H_1 . The data from study 2 (toothpaste) was used in Table 3 to replicate the above analysis; similar results were achieved.

In order to further analyze the effects of promotional discount sizes on inducing a brand preference shift in postpromotional purchase, (according to the initial preferences and promoted brands) we divided participants in non-control groups into four groups. Those groups are of high-end-participant (participant whose initial preference was a high-end brand) against discount on high-end brand (H-H); high-end-participant against discount on low-end brand (H-L); low-end-participant (participant whose initial preference was low-end brand) against discount on high-end brand (L-H) and low-end-participant against discount on low-end brand (L-L), respectively. We compared numbers of participants, whose postpromotional choices were low-end brands in two product categories, in each of these four groups across discount sizes with the counterpart in the control group and calculated their differences. The final choice ratio of H-L group in the condition of moderate discount in Table 2 (41%) minus the counterpart of control group (14%), for example, produced the proportional variation of 27%. The differences among the four groups across discount sizes are illustrated in Figures 1 and 2, respectively.

As shown in Figure 1, participant numbers in the three groups (H-H, H-L and L-H) displayed a significantly greater proportional variation in the condition of moderate discount than in the high and low discount. For moderate promotional benefit levels, the average variation in participant numbers in all four groups is approximately 20%. In contrast, for high and low promotional benefit levels, the variations reported approximate means of 1.75

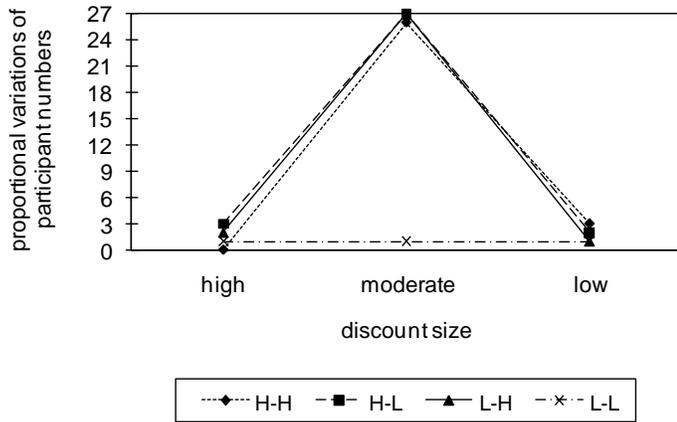


Figure 1. Proportional variations of participant numbers across discount size in four groups for USB flash drives.

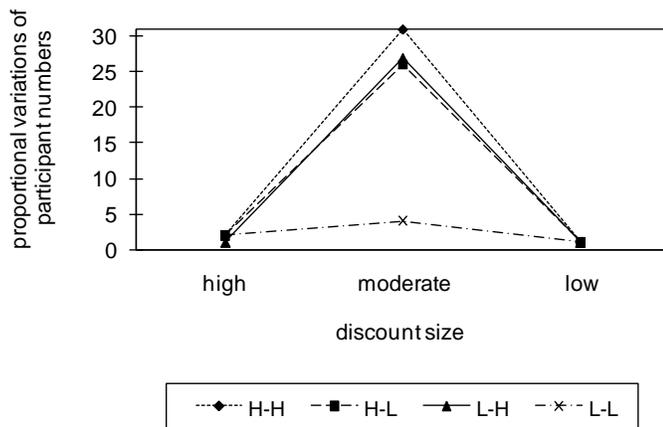


Figure 2. Proportional variations of participant numbers across discount size in four groups for toothpaste.

and 1.5% respectively. When comparing the proportional variation means across the discount sizes, as predicted, the inverted-U-shaped relationships developed in H-H, H-L and L-H groups. In the L-L group, as the effects of retracting a discount on a low-end brand on participants' (who initially preferred the low-end brand) subsequent choices were not significant at any of the promotional price levels and there was no inverted-U-shaped relationship among discount sizes. Regarding the analysis for the toothpaste data in Table 3, as shown in Figure 2, corresponding results were found.

DISCUSSION

In this study, the moderating role of discount size involved in promotion on consumers' post-promotional brand preferences has been examined. The findings indicate

that discount retraction does not always have a significant effect on consumers' preferences for their initial brands. Only in the case of moderate discounts, were the effects significant (except for consumers who initially preferred low-end brand experienced a discount on their usual brand). However, when high or low-level discounts were employed, the effect of discount retraction on consumers' preferences for their initial brands in subsequent purchases was not significant. Moreover, an inverted-U-shaped relationship between the variations of consumers' brand preferences and discount sizes was shown. The current results suggest that the discount sizes must also be included as a key factor when evaluating the effect of discount retraction on consumers' postpromotional brand preferences.

In situations of low-level and high-level discounts, the phenomenon of price salience affecting consumers' subsequent purchasing decisions was not significant and therefore had little effect on a consumer's brand preference shift in the postpromotional choice scenarios. Presumably, this was the reason the low-level or high-level discounts had less effect in activating price salience during periods of price discounts and consequently did not have such a large effect on a consumer's original preferences after the discounts were retracted. In contrast, price salience activated by moderate discount reinforced the price attribute of brands in consumers' subsequent purchase decisions and increased the probability of consumers' postpromotional purchase of low-end brands.

According to the explanation by Grewal et al. (1996), processing information of moderate price promotions needs more efforts than that of low-level or high-level price promotions. It is very easy for consumers to identify the benefit resulting from low-level or high-level price discount. However in situations of moderate discount, consumers are expected to process information more elaborately to understand the greater uncertainty regarding the discount. Thus, consumers become highly involved in promotional information and are influenced more deeply by price promotion. So, price salience is activated by the intense stimulation, resulting from the high involvement and deep impression. That is to say, in the postpromotional purchase, the importance of price in a consumer's decisions is increased and the price attribute is emphasized. Having analyzed the variations in participant numbers caused by the price salience in Figures 1 and 2, these studies' results are able to support the findings of Wathieu et al. (2004). Retracting a moderate discount posted by a high-end brand undermines repeat purchasing by high-end consumers after the promotion. However, it tends to strengthen low-end consumers' preference for their initial brand. In contrast, where the discount was on a low-end brand, a high-end consumer is less likely to repurchase their usual brands following a discount retraction. It is interesting to note that there was no significant impact on low-end

consumers' subsequent choices.

CONCLUSION AND IMPLICATION

Whether vendors sell high- or low-end branded products, the results from the current research suggest that both should select well-designed temporary promotional discounts. During the period of temporary price discounts, both vendors can benefit from a marked increase in sales. However, discounts are also likely to undermine consumers' original (usual) brand preferences. So, vendors must choose favorable discount sizes according to the usual brand positioning. High- or low-level temporary discounts seem to be an attractive alternative for vendors of high-end brand positioning, as neither activates price salience. Thus, after a discount is retracted, high-end consumers' brand preferences will not be significantly changed. Therefore, vendors can benefit from a temporary discount, rather than suffer from losing the post-promotional market share.

As far as vendors who sell low-end brand products are concerned, they can benefit from a price discount at any promotional level. Specifically, moderate discounts should be used in transactions and are a method of "killing two birds with one stone". By using moderate discounts, not only are the preferences of loyal consumers (for their usual brands) unaffected, but also high-end consumers can be diverted away from competitors whose brands are high-end because of the emergence of price salience. However, these suggestions based on the current results depend implicitly on the assumption that only one brand is being promoted at a time. Therefore, it is recommended that future research should explore the effects of discount retracting on consumers' subsequent choices for multiple brands promoted simultaneously.

One limitation of this research is that participants rated items out of context; as items were not placed in a real-life context. However, the findings may serve as a useful, instructive guide to price discount design for retailers and manufacturers. Like Wathieu et al. (2004), we found the effects of price salience on consumers' brand preferences after the moderate-level discount were retracted. However, these effects were not significant when high- or low-level discounts are employed. The present study has provided support for the view that different levels of price discounts may be more or less effective in influencing consumer brand choices in postpromotional purchases, depending upon a person's involvement with the process. Under conditions of moderate discount, the greater uncertainty leads consumers to become increasingly engaged in careful consideration of information presented to them about the moderate discount in order to understand the truth and process information in a more considered manner. As salience relies on a sufficient degree of relative intensity (Fiske and Taylor, 1991), price salience will occur under

the condition of high involvement. But under low-level and high-level discount, the opposite is true.

REFERENCES

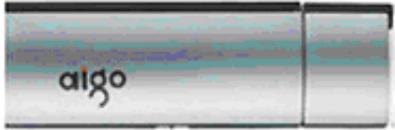
- Allenby GM, Rossi PE (1991). Quality perceptions and asymmetric switching between brands. *Mark. Sci.*, 10(3): 185-204.
- Blattberg RC, Wisniewski KJ (1989). Price-induced patterns of competition. *Mark. Sci.*, 8(4): 291-309.
- Boulding W, Lee E, Staelin R (1994). Mastering the mix: do advertising, promotion, and sales force activities lead to differentiation? *J. Market. Res.*, 31(2): 159-172.
- Bronnenberg BJ, Wathieu L (1996). Asymmetric promotion effects and brand positioning. *Mark. Sci.*, 15(4): 379-394.
- Cotton BC, Emerson BM (1978). Consumer response to promotional deals. *J. Mark.*, 42(3): 109-113.
- Darke PR, Chung CMY (2005). Effects of pricing and promotion on consumer perceptions: It depends on how you frame it. *J. Retail.*, 81(1): 35-47.
- Della B, Albert J, Monroe KB, McGinnis JM (1981). Consumer perceptions of comparative price advertisements. *J. Mark. Res.*, 18(4): 416-427.
- Dodson JA, Tybout AM, Sternthal B (1978). Impact of deals and deal retraction on brand switching. *J. Mark. Res.*, 15(1): 72-81.
- Doob AN, Carlsmith JM, Freeman JL, Landauer TK, Saleng T (1969). Effect of initial selling price on subsequent sales. *J. Pers. Soc. Psychol.*, 11(4): 345-350.
- Fiske ST, Taylor SE (1991). *Social Cognition*, 2nd ed., New York: McGraw-Hill, pp. 245-293.
- Gedenk K, Neslin SA (1999). The role of retailing promotion in determining future brand loyalty: Its effect on purchase event feedback. *J. Retail.*, 75(4): 433-459.
- Gotlieb JB, Swan JE (1990). An investigation of the effects of price, source credibility and product experience on attitudes: an application of the elaboration likelihood model. *J. Acad. Mark. Sci.*, 18(3): 221-228.
- Grewal D, Marmorstein H, Sharma A (1996). Communicating price information through semantic cues: The moderating effects of situation and discount size. *J. Consum. Res.*, 23(2): 148-155.
- Grewal D, Krishnan R, Baker J, Borin N (1998). The effect of store name, brand name, and price discount on consumers' evaluations and purchase intentions. *J. Retail.*, 74(3): 331-352.
- Grover R, Srinivasan V (1992). Evaluating the multiple effects of retail promotions on brand loyal and brand switching segments. *J. Market. Res.*, 29(1): 76-89.
- Guadagni PM, Little JDC (1983). A logit model of brand choice calibrated on scanner data. *Mark. Sci.*, 2(3): 203-238.
- Hardesty DM, Bearden WO (2003). Consumer evaluations of different types and price presentations: The moderating role of promotional benefit level. *J. Retail.*, 79(1): 17-25.
- Hardie BGS, Johnson EJ, Fader PS (1993). Modeling loss aversion and reference dependence effects on brand choice. *Mark. Sci.*, 12(4): 378-394.
- Kalwani M, Yim CK (1992). Consumer price and promotion expectations: An experimental study. *J. Mark. Res.*, 29(1): 90-100.
- Lichtenstein DR, Burton S, Karson EJ (1991). The effect of semantic cues on consumer perceptions of reference price ads. *J. Consum. Res.*, 18(1): 155-173.
- Ozanne JL, Brucks ML, Grewal D (1992). A study of information search behavior during the categorization of new products. *J. Consum. Res.*, 18(4): 452-463.
- Rothschild ML, Gaidis WC (1981). Behavioral learning theory: its relevance to marketing and promotions. *J. Mark.*, 45(2): 70-78.
- Shoemaker RW, Shoaf FR (1977). Repeat rates of deal purchases. *J. Advert. Res.*, 17(2): 47-53.
- Simonson I, Tversky A (1992). Choice in context: tradeoff contrast and extremeness aversion. *J. Mark. Res.*, 29(3): 281-295.
- Sternthal B, Tybout AM, Calder BJ (1987). Confirmatory versus comparative approaches to judging theory tests. *J. Consum. Res.*, 14(1): 114-125.

Thaler R (1985). Mental accounting and consumer choice. *Mark. Sci.* 4(3): 199-214
Wathieu L, Muthukrishnan AV, Bronnenberg BJ (2004). The asymmetric effect of discount retraction on subsequent choice. *J. Consum. Res.*, 31(3): 652-657.

Winer RS (1986). A reference price model of brand choice for frequently purchased products. *J. Consum. Res.*, 13(2): 250-256.

APPENDIX A

Information on brand quality and prices of stimuli used in Study 1.

	<p>Product name AIGO USB flash drive</p> <p>Capacity 128 Mb</p> <p>Features</p> <ul style="list-style-type: none"> i. Super-stable flash chip ii. Fits standard USB connection, plug and play iii. Embedded seamless structure iv. Support USB-HDD and USB-ZIP v. Withstands being dropped in a 3-metre fall vi. Wear-resistant alloy tip of USB, data storage for over 10 years vii. Electronic writing-protection switch viii. No need for drivers in Windows Me/2000/XP ix. Thumb-size, light and convenient x. Can be returned within one year, lifetime maintenance
<p>Price: 176 Chinese RMBs</p>	
	<p>Product name AIAO USB flash drive</p> <p>Capacity 128 Mb</p> <p>Features</p> <ul style="list-style-type: none"> i. Uses flash media ii. General connection, plug and play iii. Encryption function iv. Support USB-HDD and USB-ZIP v. Data preservation over 8 years vi. Electronic writing-protection switch vii. No need for drivers in Windows Me/2000/XP viii. Small, light and convenient
<p>Price: 122 Chinese RMBs</p>	

APPENDIX B

Information on brand quality and prices of stimuli used in Study 2.

	<p>Product name CREST toothpaste</p> <p>Content 100 g</p> <p>Features</p> <ul style="list-style-type: none"> i. Fluoride enriched, peace-of-mind formula, makes teeth white and beautiful ii. Contains the breakthrough formula, - instant efficient, whitening crystals, which efficiently and effectively protect against tooth decay, in addition to forming a smooth protective film. iii. Protecting the next generation from tooth erosion. iv. Cavity protection v. Minty fresh breath
<p>Price: 6.9 Chinese RMBs</p>	
	<p>Product name ZHONGHUA toothpaste</p> <p>Content 100 g</p> <p>Features</p> <ul style="list-style-type: none"> i. Makes teeth strong ii. Freshens breath iii. Cavity protection
<p>Price: 4.6 Chinese RMBs</p>	