

“30% Off” or “7 Zhe” (paying 70%)? A Regulatory Fit Explanation of the Discount Framing Effect

PENG LULUO¹

PENG SIQING²

SUN LUPING³

ABSTRACT

This paper studies the differential impact of two discount frames, “Off” and “Zhe”, on price perceptions, perceived value, and purchase intention. Based on the rationale that “Off” (interpreted as savings or gains) fits more with promotion focus and “Zhe” (interpreted as reduction of losses) fits more with prevention focus, we adopt the regulatory fit theory to elucidate the discount framing effect. In study 1, regulatory focus is manipulated and “Off” is found more effective for subjects with a promotion focus while “Zhe” is more effective for those with a prevention focus. In study 2, subjects are primed with different regulatory goals. Under a high-depth promotion, “Off” is perceived more valuable for subjects with a “save more” goal and “Zhe” is more effective for those with a “spend less” goal. However, the frame and goal interaction is not found under a low-depth promotion. Finally, marketing implications, limitations, and future studies are discussed.

Key words: discount frame, “Off”, “Zhe”, regulatory focus, regulatory fit, promotion focus, prevention focus

“BestBuy Merry Christmas—for any product, an instant 18% off is gained!”

¹ Peng Luluo, Ph.D. Candidate, Department of Marketing, Guanghua School of Management, Peking University, Email: pengluluo@gsm.pku.edu.cn

² Peng Siqing, Professor, Department of Marketing, Guanghua School of Management, Peking University, Email: pengsq@gsm.pku.edu.cn

³ Sun Luping, Ph.D. Candidate, Department of Marketing, Guanghua School of Management, Peking University, Email: sunluping@gsm.pku.edu.cn

“ONLY, VERO_MODA, JACK&JONES ...6 ZHE promotion, three days left!”

“YONG AN Shopping Mall: Winter promotion, every 200 Yuan, 100 Yuan off!”

Introduction

Price discount is widely applied as an efficient sales promotion technique, resulting in a sharp sales spike (Gendall et al., 2006). Accordingly, substantive research has been devoted to study the effectiveness of various forms of price discounts (See, for example, Chen, Monroe, and Lou, 1998). A flourishing research stream is about the effects of price framing on perceived savings (Monroe, 1973). By price framing, we broadly mean how the offered price is communicated to the consumer. For example, is the offered price given along with a reference price? Is the reference price plausible? Is a price deal communicated in dollars or percentage terms? The three announcements above are all illustrations of different price frames.

Among different frames of discounts, we observe an interesting pattern in the market: while “Off” frame is popular in western countries, the same discount is usually framed in “Zhe” in China (as the open example shows). For example, “6 Zhe” means the price is only 60% of the original offer. Hence, “6 Zhe” equals “40% Off”. Are the two types of promotion frame perceived differently by consumers? Under what circumstances is one more effective than the other? To our best knowledge, this question remains much unexplored in previous literature. To this end, this paper dedicates to investigate the efficacy of the different discount frames (“Off” vs. “Zhe”).

Theoretical Background and the Main Proposition

Price Framing Effect

The notion that similar objective information can be presented in various ways and consumers may form different perceptions depending on how a message is framed has been well documented (Kahneman and Tversky, 1979). A substantial body of literature on sales promotions uses an information-processing framework to examine how consumers value and respond to different promotion frames (for a review, see Raghurir, 2004). For example,

promotional actions can be framed as monetary or nonmonetary, price discount or volume discount, percent off vs. cents off, etc. Different promotion frames convey different types of information, which in turn affects both the information processing and the quantity of cognitive resources needed to process it (Nunes and Park, 2003). For instance, among the earliest papers in price promotion framing, Chen, Monroe and Lou (1998) found that for the high-price product, a price reduction framed in dollar terms seemed more significant than the same price reduction framed in percentage terms, and the opposite was true for the low-price product. Actually, even for the same dollar or percent discount, such as a reduction of 2 Yuan for 10 Yuan, it can be framed either as “20% Off” or “8 Zhe”. However, little research has examined the efficacy of these two frames, which is the focus of the current paper.

Gain Vs. Loss and Regulatory Fit Theory

In the domain of price promotions, special attention is paid to the difference between gain and loss. Identical price promotions could be framed as either additional gains or reduction of losses. For example, framing a coupon as “getting a 20 percent discount” focuses on the positive outcome of obtaining a gain, while “not paying 20 percent of the bill” focuses on the equivalent positive outcome of avoiding a loss.

The effectiveness of these two appeals can be largely explained by the regulatory focus theory (Higgins et al., 1994). This school of research suggests that consumers’ evaluation of products and brand choice decisions are influenced by their regulatory focus. Some people are more sensitive to scenarios associated with “gains” and “nongains”, yet others may be more driven toward approaching “no loss” or avoiding “losses”. The first type of people is called “promotion focus”, and the latter is “prevention focus”. According to regulatory fit theory, when people engage in decisions or choices with strategies that sustain their regulatory focus (in this sense, regulatory fit is high), they “feel right” about what they are doing, and therefore they value their decisions more (Avnet and Higgins, 2003).

As the goal of price promotion framing is to stimulate consumers’ sensitivity to various forms of gains or nonlosses, regulatory fit is especially relevant for marketers. However, there is a surprising dearth of research focusing on the effect of regulatory focus in driving potential framing effects in discount evaluations. One exception is the research by Kramer and Kim

(2007), who found that participants had more favorable deal perceptions and greater usage intentions of coupons that highlight their value as a discount to be obtained versus a loss to be avoided. The rationale is that consumers generally view coupons as potential gains, so when the frame fits with their perceptions, processing fluency would be higher, which in turn enhances evaluations of gain-framed coupons.

Main Proposition

In this paper, we draw on the regulatory fit theory to argue that the two types of price discount frames, “Off” versus “Zhe”, imply different regulatory focus even if they have the same actual promotion depth. Therefore, different frames may lead to different information processes. For example, “30% Off” means consumers can save 30% from the current purchase, which highlights the notion of “save more” or “get higher discount”.

Meanwhile, “7 Zhe” means consumers only need to pay 70% of the original price, which highlights “spend less money”. Generally, saving is construed as a gain and spending is construed as a loss. Accordingly, “spend less” may induce consumers to process the sacrifice aspect of the purchase while “save more” lead them to focus on gains from the promotion (Xia and Monroe, 2009). Thereby, we make the following overall proposition.

P: “Off” frame is more effective under promotion focus, while the “Zhe” frame is more effective under prevention focus.

In the current paper, “effective” is measured by a composite of several dependent variables. By reviewing a couple of papers in price promotion, three dependent variables are selected, including price perception, perceived value and purchase intention (See Chen, Monroe, and Lou, 1998).

To test the main proposition, we conducted several pretests to select proper stimuli. Then two studies are designed to explore the efficacy of “Off” versus “Zhe” frame from a regulatory fit perspective. Specifically, we examine how people primed with different regulatory focus (Study 1) or with different regulatory goals (Study 2) respond to the two discount frames.

Studies

Pretests

Before checking the effect of regulatory fit on the efficacy of the discount frames, a necessary step is to establish the logical link between “Off-Zhe” frame and regulatory focus, in particular, to ascertain that “Off” is construed as a gain (promotion focus) and “Zhe” as a loss (prevention focus) in consumers’ mind. Moreover, appropriate stimuli and promotion depth also need to be selected.

Pretest 1 recruited 82 students from the same subject pool as in the main studies. Subjects were compensated by money and were randomly assigned to one of two discount frame conditions and asked to write down any thoughts they have. A thought protocol test was conducted to categorize the thoughts that subjects listed. Two raters who were knowledgeable about regulatory fit theory but unknown of the research purpose categorized respondents’ thoughts independently into three groups: (1) gain-nongain (promotion focus); (2) loss-nonloss (prevention focus); (3) others. The inter-rater reliability was 80.9%, and discrepancies were resolved through discussions. The results showed that 44.8% subjects in the “Off” group listed gain-nongain thoughts, while only 10.4% listed loss-nonloss thoughts. For subjects in the “Zhe” group, 38.5% listed loss-nonloss thoughts while only 32.3% listed gain-nongain thoughts. A Chi-square test indicated that frame significantly influences subjects’ type of thoughts (Chi-square=14.156, $p=.001$). Hence, initial evidence is provided that “Off” is construed as a gain while “Zhe” is construed as a non-loss in consumers’ mind. Pretest 2 selected 10 types of products from the market and test consumers’ familiarity, interest, proneness to discount, as well as the hedonic and utilitarian nature of the products. These products were selected to represent typical fast-consumption products for which price discounts were common, including chips, toothpaste, toothbrush, coffee, shampoo, soft drink, pancakes, soap, tissue and ball pen. The final selected product should satisfy the following criteria (Palazon and Delgado-Balleste, 2009): (1) it is of special relevance for the sample used in this study (2) it is commonly purchased by the general population (3) the companies often use promotional schemes (4) males and females tend to have equal levels of involvement and consumption; (5) it is a product that does not rely on high prices to portray an exclusive image; (6) it is a product of wide enough interest to arouse the interest of consumers; and, finally, (7) it is a product where the amount purchased by consumers can vary, and this allows us to manipulate the quantity of the product to design different promotional

benefit levels. (8) it is not a purely hedonic or utilitarian product as that may interact with the prevention/promotion focus manipulation. We finally selected shampoo as the target product.

Pretest is designed to find the appropriate discount depth for the target product. Previous literature shows that apart from discount frame, discount depth is important in determining the evaluation of a specific promotion. For example, Grewal et al.'s study (1996) suggested an inverted U explanation of consumer information processing regarding consumer reactions to price promotions (Palazon and Delgado-Ballester, 2009). Similarly, it's found that consumers may not respond to a promotion until the discount reaches a certain level (e.g. 15 per cent), and the positive influence of additional discount percentages reaches a saturation point (e.g., 30 or 40 per cent) beyond which a higher discount level has little incremental effect on purchase intentions (Gupta and Cooper, 1992). Thereby, it seems that our hypothesized effect may be moderated by discount depth. Hence, we select two discount levels to detect the possible effect of discount depth. In this pretest, first, a review of price discounts in the marketplace finds that the common discount level of shampoo is 10%-50% off. Then we ask 20 subjects to select the discount depth they consider as low, moderate, and high. The specific discount depth is established by selecting the 18% as representative of low discount and 32% as representative of a moderate to high discount level.

Study 1

Overview

Study 1 aims to provide an initial test of promotion/prevention focus on the effectiveness of the two discount frames. Previous research shows that a persuasive appeal is more effective when the content of the appeal fits participants' regulatory focus (e.g., Aaker and Lee, 2001). Hence, we use a classical way of priming regulatory focus as proposed by Higgins and colleagues (1994), which has been found robust in a set of subsequent studies (e.g. Wang and Lee, 2006). We make the following hypothesis:

H1: Consumers primed with a promotional focus (versus prevention focus) are more attracted to discount message that is framed as “Off” (versus “Zhe”) than framed as “Zhe” (versus “Off”). Specifically, their price perception is more positive, perceived value is higher, and purchase intention is higher.

Method

Study 1 was a 2 (regulatory focus: promotion vs. prevention)×2 (discount frame: “Off” vs. “Zhe”)×2 (discount depth: high vs. low) between subjects design. Subjects were randomly assigned to the eight conditions. We recruited 203 subjects through advertisement into a laboratory with computers and primed participants with either “promotion focus” or “prevention focus”. In the promotion-focus condition, subjects were asked to rate the importance of eight items describing "hopes", while those in the prevention-focus condition to rate the importance of eight items describing "duties and responsibilities". Further, in order to strengthen the effect of regulatory focus manipulation, we asked subjects to imagine a lesson that they may get a good result (vs. bad result) and how they would promote the good result (vs. prevent the bad result), to manipulate promotion focus (vs. prevention focus). Then subjects were asked to indicate to what extent they were to strive for the good result and avoid the bad result on seven-point scales.

Then, subjects read a scenario of shopping in a supermarket on a computer monitor: Suppose you want to buy some shampoo and on the shelf, you find that Brand UPLACE (suppose it is one of the frequently purchased brands) is on sale. Some subjects (in the high-depth, “Off” condition) saw an eye-drawing announcement attached on the shelf as follows:

[Insert Figure 1 about here]

For the other 1/4 subjects, the scenario is the same. However, the discount frame is 6.8 Zhe, which is equivalent to 32% off (see Figure 2).

[Insert Figure 2 about here]

Another manipulation is the promotion depth. Above figure shows the cases of high depth, while for the low depth condition, the discount is 18% off in the “Off” condition and 8.2 Zhe in the “Zhe” condition.

After reading the scenario, participants respond to a series of measures for control and dependent variables. The dependent variables consist of three multi-item scales that measure consumers’ price perception, perceived value and purchase intention, adapted from previous literature (Munger and Grewal, 2001). For price perception, two items are used: (1) proper price; (2) attractive price. The two items were averaged into the price perception index

(correlation=0.783). For perceived value, three items were adopted (Chandon, Wansink, and Laurent, 2000): (1) This promotion offer is attractive; (2) This promotion offer is of great value; (3) Buying this shampoo now is a good bargain. The three items were averaged into the perceived value index (cronbach's alpha=0.761). For purchase intention, two items were used: (1) I would buy this shampoo; (2) I would not consider buying/would consider buying (correlation=0.880). The two items were averaged into the purchase intention index. All the above items were measured on a seven-point scale. After completing the measures, subjects were debriefed, thanked and dismissed.

Results

As a manipulation check for regulatory focus, the discrepant score of the extent of avoiding the bad result and striving for the good result was calculated, which was significantly higher for those who were manipulated with a prevention focus than a promotion focus ($F = 3.781, p = .053$). Therefore, the regulatory focus manipulation was successful. For the manipulation of discount depth, subjects in the high discount condition did think that the discount is higher than those in the low discount condition ($F=43.176, M_{\text{high}} = 4.765, M_{\text{low}} = 3.477, p < .001$).

We conducted several $2 \times 2 \times 2$ ANOVA to test the main hypothesis. The results indicated that neither the main effect of regulatory focus nor the main effect of discount frame was significant ($F_s < 1$). The main effect of discount depth is significant for price perception ($F(1,190) = 20.818, p < 0.001$) and perceived value ($F(1,190)=3.754, p=0.054$). This is understandable as higher discount level is perceived as more attractive and conveys higher value for consumers. However, such a main effect is not found for purchase intention ($F(1,190) = 0.290, p > 0.1$).

More importantly, central to our hypothesis, the two-way interaction of regulatory focus and frame is significant for price perception ($F(1, 190) = 3.390, p < .005$) and perceived value ($F(1, 190) = 4.446, p < .004$). As is shown in Figure 3, prevention-focused participants consider the price to be more favorable when the discount is framed as “Zhe” ($M = 4.665, SD = .185$) than “Off” ($M = 4.072, SD = .174$), whereas participants primed with a promotion focus exhibited more favorable price perceptions for “Off” ($M = 4.244, SD = .166$) than “Zhe” ($M = 4.146, SD = .165$). Figure 4 shows similar results for perceived value. Again,

results for purchase intention, however, show no significant interaction effect ($F(1, 190) = 0.660, p > 0.1$). Since the main effect of depth on purchase intention is insignificant, it seems that purchase intention follows a different pattern from the other dependent variables. One possible explanation is that when consumers decide whether to buy a product, they consider many more factors besides price promotion (i.e., quality). Hence, only price discount can not lure them to make the purchase decision.

[Insert Figure 3 about here]

[Insert Figure 4 about here]

Study 2

Overview

In Study 1, we provide support for the impact of promotion/prevention focus on the effectiveness of the two discount frames. However, we use a classical way of priming regulatory focus proposed by Higgins and colleagues (1994), which is somewhat artificial. Hence, in this study, we use a different way of manipulating regulatory focus: to set a prior purchasing goal for the consumers.

Goal is one of the major determinants of consumer behavior in marketing. Since the same promotion information may lead to different perceptions as consumers' goals vary (Shavitt et al., 1994), understanding how consumers with different purchase goals react to various promotion frames can help sellers design effective promotion programs. Although the importance of consumer goals has been recognized in previous research, it has not been explicitly incorporated into research on consumers' perceptions of price promotions. Xia and Monroe (2009) examined the effect of consumers' pre-purchase goals on their responses to price promotions. However, although they found that whether consumers have a pre-purchase goal may affect their attitude to promotion, they didn't specify what kind of goal consumers may bear on mind. Actually, different kinds of goals may also make a big difference.

In this study, we use "save more" and "spend less" as different regulatory goals. These two goals are widely seen in real market. For example, Wal-Mart's slogan is "We Sell for Less" while Meijer's is "Why Pay More?" According to the logic we have articulated above, "save more" induces consumers to focus on the gain, and "spend less" leads them to pay

attention to reduced loss. Hence, these two goals have particular relevance to regulatory fit. Hence, we predict an interaction between consumers' pre-purchase regulatory goals and discount framing:

H2: If consumers bear a “save more” goal (versus a “spend less” goal) to purchase a product, they will be more attracted to discount message framed as “Off” (versus “Zhe”) than that framed as “Zhe” (versus “Off”). Specifically, their price perception is more positive, perceived value is higher, and purchase intention is higher.

Method

180 undergraduates participated in the experiment for class credit. They were randomly assigned to one of the eight cells of the 2(discount frame: Off vs. Zhe)×2(goal: save vs. spend)×2(discount depth: high vs. low) between subjects design. And they were handed the questionnaire after a class break. Everyone who finished the questionnaire was given a fluorescence pen (about 2.6 RMB each) as a reward. The stimuli consisted of simulated store shelves containing hypothetical brands of shampoo. As a manipulation of the regulatory goal, we highlighted that the participants' shopping goal was either "save more" or “spend less”.

Then each participant read a similar shopping scenario as in Study 1. The discount information for a hypothetical shampoo brand which was either “Zhe” framed or “Off” framed and either was high discount (6.2 Zhe or 38% Off) or low discount (8.5 Zhe or 15% Off). And then subjects completed a set of measures in a response booklet. After completing all the measures, the subjects were debriefed, thanked and dismissed.

Results

As a manipulation check for discount depth, subjects in the high discount condition did think that the discount is higher than those in the low discount condition ($M_{\text{high}} = 4.68$, $M_{\text{low}} = 3.34$, $p < .001$). For goal manipulation, we asked subjects to recall their goals after the dependent measures. In the “save more” goal group, 74.6% subjects correctly recalled the goal. In the “spend less” goal group, 84.6% subjects correctly recalled that their goal is spending less money. This indicates that our goal manipulation is successful. Further statistical test reveal that more subjects in the “save more” goal group recalled that their goal is to save more rather than spend less ($M = 9.643$, $p < .0001$), and more subjects in the “spend less” goal group recalled that their goal is to spend less rather than save more ($M = 14.165$, p

< .0001).

By three-way ANOVA, we found a main effect of discount depth on price perceptions ($F(1, 157)=12.661, p<.01$), perceived value ($F(1,158) = 31.063, p < 0.001$), as well as purchase intention ($F(1,159) = 13.709, p < 0.001$). Indeed, discount with high-depth is perceived as more valuable and more likely to induce consumers to purchase, irrespective of consumers' goals and the discount frames. Further, we also found a main effect of frame on perceived value ($F(1,158) = 2.772, p < 0.1$) and purchase intention ($F(1,159) = 3.188, p < 0.1$). This finding is interesting and counterintuitive, which suggests “Off” frame is more effective. We find no main effect of goals.

[Insert Table 1 about here]

Besides, we found no two-way interaction for perceived value between the goal and frame as hypothesized, though the mean is in predicted direction (See Table 1 for means and standard errors). However, we did find a three-way interaction between goal, frame, and discount depth ($F(3,158) = 2.382, p < 0.1$). When the discount depth is high (e.g., 38%), there is a two-way interaction between the goal and frame, indicating that when primed with the “spend less” goal, “Zhe” frame is more effective and when primed with the “save more” goal, “Off” frame is more effective. However, when discount depth is low (e.g., 15%), the hypothesized effect is dominated by the main effect of frame, which suggests that “Off” frame is more effective, no matter consumers embrace a “spend less” or “save more” goal. Therefore, H2 is partially supported.

[Insert Figure 5 about here]

Moreover, we also use thought protocol to corroborate the results of H2. As we hypothesize that “Off” (vs. “Zhe”) frame is more efficient under “save more” (vs. “spend less”) goal, it's easy to hypothesize in turn that the “Off” frame is likely to induce more thoughts concerned "save more" than "spend less". In contrast, the “Zhe” frame induces more thoughts concerned “spend less” than “save more”.

To test this deducted hypothesis, we asked the participants to indicate the extent to which they agree with the following statement: “this promotion offer helps me spend less money” (prevention focus) and “this promotion offer helps me save more money” (promotion focus) on a seven-point scale. Then we use the difference of the two scores (save-spend) as a

measure for their thought protocol. It's expected that subjects should score significantly higher on this measure when they see a promotion framed as “Off” versus “Zhe”.

The results show a marginal significant effect of frame on the difference score ($F = 2.650$, $p = 0.106$). Specifically, the score under “Off” frame ($M = -0.466$) is higher than that of “Zhe” frame ($M = -0.802$). The results to some degree indicate that the subjects indeed perceive the “Off” more as “save more” instead of “spend less” compared with “Zhe”. Hence, it provides some further evidence in support of H2.

To a large extent, the results of Study 2 corroborate the effects of regulatory fit reported in Study 1. Participants with a “save more” goal perceive the “Off” frame to be of greater value than the “Zhe” frame, although this is only significant under high discount depth, and the reverse occurred for participants with a “spend less” goal.

General Discussion

For a long time, price discount has been among the most traditional yet popular marketing promotions for consumer products, even in the recent decades. However, it devours huge amounts of profits and could be rather costly. Therefore, though price discount is effective to induce sales spike in most cases, firms should be cautious enough to design effective price discount programs. In previous research, the design of price discounts usually involves discount depth and the framing of discount. To the extent that increasing discount depth directly reduces firms' profits, this paper focuses on the framing of discount, investigating how to enhance the effectiveness of price discount without harming the firms' objective profits.

Related to discount framing effects, previous literature mainly focuses on the effect of cents-off and percentage-off framing on consumers' price perceptions and purchase intentions, or even future price expectations (DelVecchio, Krishnan, and Smith, 2007). However, little attention is paid to the more general frames like “Off” and “Zhe”, both of which are frequently adopted by firms. This paper is the first to apply regulatory focus theory to account for the effects of the two promotion frames. Based on the logic that “Off” is interpreted as savings or gains and “Zhe” is interpreted as reduction of losses, we designed two studies to investigate the effectiveness of the two discount frames in terms of price perceptions, perceived value and purchase intention. We either primed consumers' regulatory focus (Study

1) or manipulated consumers' regulatory goal (Study 2), and found that when consumers are primed with promotion focus or a "save more" goal, the "Off" frame is more effective in terms of the price perceptions and perceived value, while when consumers are primed with prevention focus or a "spend less" goal, the "Zhe" frame is more effective. Moreover, Study 2 found an interesting main effect of frame that "Off" is perceived more favorable than "Zhe" among Chinese consumers.

Above findings have meaningful marketing implications. In particular, managers could design more effective discounts by properly framing the discount (e.g., "Off" vs. "Zhe") without sacrificing profits. More importantly, firms could have some control of both consumers' goal or regulatory focus and discount frames toward their own benefits. For example, firms could use slogans like Wal-Mart's "We Sell for Less" (to induce the "spend less" goal) and meanwhile adopt the "Zhe" frame to enhance the discounts' attractiveness. Still, firms could also use slogans like Meijer's "Why Pay More?" (to induce the "save more" goal) and adopt the "Off" frame for their offered discounts. To relieve the worry that slogan is not strong enough to activate consumers' regulatory focus or goals, firms could use other cues in the shopping mall like point-of-sale advertisements or even the background color (Mehta and Zhu, 2009).

Moreover, our results may shed light to the cross-culture comparison of price promotion. As we mentioned in the first section, "Off" frame is widely used in western countries, while "Zhe" frame is more prevalent in China. A relevant finding from the literature is that individuals with accessible independent self-view are more persuaded by promotion versus prevention framed information, and those with accessible interdependent self-view are more persuaded by prevention versus promotion-framed information (Aaker and Lee, 2001). Combined with the classical national culture conclusion that suggests Chinese are on the whole more collectivist than people in western countries (Hofstede, 1983), the phenomenon that "Zhe" frame is more prevalent in China can be explained. That is, it is likely that "Zhe" frame fits more with Chinese consumers' prevention focus self construal, rendering it popular in China. Although in Study 2, the results show a main effect that "Off" frame is more effective, it does not contradict with this possibility because the undergraduate subjects may not represent typical Chinese consumers. A cross-culture study may be useful to test the

differential effects across countries.

In sum, this paper investigates the interesting discount framing effect and incorporates the regulatory fit explanation to help firms design more effective discount programs. Better understanding of these questions will make the findings even more managerially important, because firms have multiple ways to influence the discount framing effect once the boundaries and mechanism are clearer.

Future Study

The current two studies provide coherent support for the hypothesized interaction between regulatory focus (regulatory goals) and discount frames. The next step is to investigate the underlying mechanism. Some researchers found that novelty mediates the effectiveness of the discount frames. For example, Kim and Kramer (2006) conducted a series of study in the US, and found that the frame of “Pay 60% of the regular price” results in higher perceived savings and higher purchase likelihood than the frame of “Get 40% off the regular price”. They explain this effect by increased systematic processing induced by novelty of the first frame, which improves calculation accuracy and hence decreases the underestimation of discounts. Yet, the novelty can not explain the interaction between regulatory focus and discount frame found here. In study 1, controlling novelty of the discount frame does not eliminate or even influence the interaction between discount frame and regulatory focus.

Therefore, novelty does not mediate the discount framing effect here and future study should investigate other possible underlying mechanism as well as boundary conditions. For example, if the regulatory explanation is further established, processing fluency may mediate the above effect (Lee and Aaker, 2003), and involvement may has a boundary effect (Wang and Lee, 2006). Previous literature suggests that enhanced processing fluency leading to more favorable evaluations in conditions of compatibility appears to underlie the “regulatory fit” effects (Lee and Aaker, 2003). That is, consumers experience greater processing fluency when message frame is compatible with their regulatory focus, and this experience of fluency further enhances customers’ evaluations. Similar mechanism may underlie the fit between regulatory goals and frames. Hence, future study is needed to test these possibilities.

In addition, besides the “Zhe” and “Off” frame, discount may also be framed in absolute

values such as “Save X dollars” or “Only need X dollars”, which is also popularly adopted in marketing practice. To the extent that customers may have different perceptions for the same amount of money depending on whether the money is described in percentage or absolute values, the discount framing effect may differ across the percentage and dollar descriptions. For example, when the discount is described in absolute values (e.g., “Save X dollars” or “Only need X dollars”), “Save X dollars” is so easily to be coded as “Spend X dollars less” while “Only need X dollars” is easily coded as “Save some dollars”, therefore, “spend less” goal may promote the effectiveness of the frame “Save X dollars” while “save more” goal may promote the effectiveness of the frame “Only need X dollars”. This is contrary to the discount framing effect when the discount is framed in percentages. Future studies should provide more insights for this interesting possibility.

REFERENCES

- Aaker, Jennifer L. and Angela Y. Lee (2001), “‘I’ Seek Pleasures and ‘We’ Avoid Pains: The Role of Self-Regulatory Goals in Information Processing and Persuasion,” *Journal of Consumer Research*, 28 (June), 33–49.
- Avnet, Tamar and Higgins E. T. (2003), “Locomotion, Assessment, and Regulatory Fit: Value Transfer from ‘How’ to ‘What’”, *Journal of Experimental Social Psychology*, 39 (September), 525–530.
- Chandon, P., Wansink, B., and Laurent, G. (2000), “A benefit congruency framework of sales promotion effectiveness,” *Journal of Marketing*, 64, 65–81.
- Chen, S., Monroe, K.B. and Lou, Y. (1998), “The Effects of Framing Price Promotion Messages on Consumer’ Perception and Choice Decisions,” *Journal of Retailing*, 74 (3), 353-372.
- DelVecchio, Devon, H. Shanker Krishnan, and Daniel C. Smith (2007), “Cents or Percent? The Effects of Promotion Framing on Price Expectations and Choice,” *Journal of Marketing*, 71 (July), 158–170.
- Gendall, P., J. Hoek, T. Pope and K. Young (2006), “Message framing effects on price discounting,” *Journal of Product & Brand Management*, 15(7), 458-465.
- Higgins, E.T., Christopher J. Roney, Ellen Crowe, and Charles Hymes (1994), “Ideal Versus Ought Predictions for Approach and Avoidance: Distinct Self-Regulatory Systems,” *Journal of Personality and Social Psychology*, 66 (2), 276–86.

- Kahneman, D. and Tversky, A. (1979), "Prospect theory: an analysis of decision under risk," *Econometrica*, 47(2), 263-291.
- Kim, H.M. and Kramer, T. (2006), "'Pay 80%' versus 'get 20% off': The effect of novel discount presentation on consumers' deal perceptions," *Marketing Letters*, 17, 311-321.
- Kramer, T., Kim, H.M. (2007), "Processing Fluency versus Novelty Effects in Deal Perceptions," *Journal of Product & Brand Management*, 16(2), 142-147.
- Lee, A. Y. and Aaker J. L. (2003), "Bringing the Game into Focus: The Influence of Regulatory Fit on Processing Fluency and Persuasion," *Journal of Personality and Social Psychology*, unpublished script
- Mthta, Ravi P. and Rui Zhu (2009), "Blue or Red? Exploring the Effect of Color on Cognitive Task Performances," *Science*, 323(Feb), 1226-1229.
- Monroe, K.B. (1973), "Buyers' subjective perceptions of price," *Journal of Marketing Research*, 10(1), 70-80.
- Munger, J.L. and Dhruv Grewal (2001), "The effects of alternative price promotional methods on consumers' product evaluations and purchase intentions," *Journal of Product & Brand Management*, 10(3), 185-197.
- Nunes, J. C., and Park, C.W. (2003), "Incommensurate resource: Not just more of the same," *Journal of Marketing Research*, 40, 26-38.
- Raghubir, P. (2004), "Free gift with purchase: promoting or discounting the brand?," *Journal of Consumer Psychology*, 14(1 and 2), 181-185.
- Shavitt, S., Swan, S., Lowrey, T.M. and Wanke, M. (1994), "The interaction of endorser attractiveness and involvement in persuasion depends on the goal that guides message processing," *Journal of Consumer Psychology*, 3(2), 137-162.
- Wang, J. and Angela Y. Lee (2006), "The Role of Regulatory Focus in Preference Construction," *Journal of Marketing research*, Vol(XLIII), 28-38.
- Xia, Lan and Kent B. Monroe (2009), "The influence of pre-purchase goals on consumers' perceptions of price promotions," *International Journal of Retail & Distribution Management*, 37(8), 680-694.

Tables

Table 1 Effect of Discount Frame and Goal on Perceived Value in Study 2

	High Discount		Low Discount	
(Goal)	Off	Zhe	Off	Zhe
Save	4.881 (.276)	4.69 (.276)	3.75 (.269)	2.886 (.269)
Spend	4.188 (.316)	4.523 (.269)	3.921 (.290)	3.326 (.263)

Note: SDs are in the parentheses.

Figures



Figure 1: Off Frame for Study 1



Figure 2: Zhe Frame for Study 1

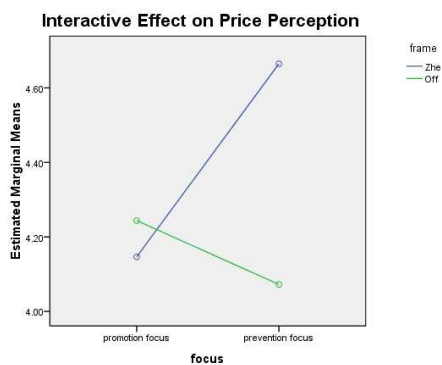


Figure 3: Two-way Interaction for Price Perception in Study 1

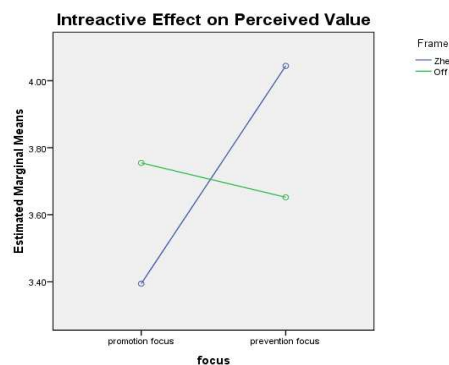


Figure 4: Two-way Interaction for Perceived Value in Study 1

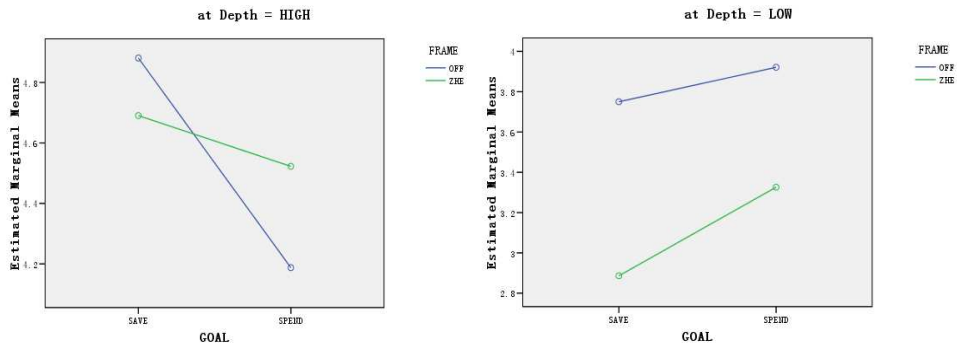


Figure 5: Three-way Interaction for Perceived Value in Study 2