The Effects of Price Discount Promotions on Consumer Responses

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ABSTRACT

This thesis investigates how price discount promotion affects consumers' purchase decision making process with emphasis on the role of consumers' anticipated regret. Specifically, this thesis examines how the three important characteristics of price discount promotion (i.e., discount framing, promotion depth, and promotion frequency) affect consumers' behavioral response. First, this thesis provides a comprehensive review for the research literature regarding how price promotion affects consumers' response, making an in-depth discussion of the concept of anticipated regret, and then empirically identifying the effects of promotion framing, promotion depth, and promotion frequency on consumers' behavioral response.

Second, this thesis examines the effect of price discount framing on consumers' response, and proposes a price-value model to account for the effect of price discount framing on consumers' purchase intention. Results of two experiments indicate that price discount framing affects consumers' purchase intention through the full mediation of perceived value. The framing of dollar-based discount leads to higher perceived value and higher purchase

intention than the framing of percentage-based discount; however, these effects are moderated by the degree of discount calculation difficulty and the price level of the promotional products.

Third, the thesis investigates the effect of price discount depths on consumers' behavioral response. Under the means-end framework, this thesis extends the price-value model by including anticipated regret and proposes an integrated model to account for the mechanism that underlies consumers' behavioral response towards price discount promotion. The results of a survey study indicate that the proposed integrated model fits the data well, and that consumers' purchase intention is better explained and predicted by including consumers' anticipated regret in the model.

Fourth, this thesis then studies the effect of price discount frequency on consumers' behavioral response with focusing on the affective stage of consumers' response and proposes a model that simultaneously considers consumers' attitude and anticipated regret. The results of an experimental study demonstrate that price promotion frequency negatively affects consumers' anticipated regret and purchase intention, and that the effect of promotion frequency on consumers' purchase intention is fully mediated by consumers' attitude towards the purchasing behavior together with consumers' anticipated regret.

Finally, this thesis also identifies the antecedents, moderators and mediators that affect the role of anticipated regret on purchase intention. The results of the experimental study indicate the gender effect that female consumers generate more anticipated regret than males when confronting with price discount promotions. The results of comparison analysis demonstrate the sequence effect

that, the effect of anticipated regret on purchase intention is larger if consumers are asked to anticipate regret of not purchasing the promotional item before their final purchase decision rather than if they are asked in the reverse sequence. The analysis results on the relationship between perceived value and anticipated regret indicate that anticipated regret is the mediator in the effect of perceived value on purchase intention.

The findings of this thesis have both potentially important theoretical significance for a better understanding of price discount promotion and practical implications for directing marketers to more effectively design their price discount promotion schemes. The research limitations of this thesis and future research directions are also discussed.

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CHAPTER 1: INTRODUCTION

The present thesis intends to examine how price discount promotion influences consumers' decision-making process. Apart from the traditional research that emphasizes the central role of perceived value, the present thesis introduces anticipated regret as another key concept for explaining and predicting consumers' behavioral responses to price discount promotion. The boundary conditions for anticipated regret affecting consumers' purchase intention are investigated, and their results are discussed.

1.1 Research Backgrounds

Sales promotion has taken an increasingly important role in the aspect of promotional mix. According to Yeshin (2006), there seems to be a major business trend in the US where firms' promotional budget moves from advertising to sales promotion. For example, sales promotion expenditure uses up an annual growth rate of 12 percent, whereas advertising expenditure accounts for 7.6 percent. As the most popular sales promotion tool, discount price promotion takes 60–70 percent of the overall promotional budget. In retailing, price promotions can change consumers' purchase decisions; thus, retailers use price promotions frequently to increase store sales. To improve promotional effectiveness among firms, how price promotion affects the consumer decision-making process and behavioral response is worth investigating.

Price promotions can take the form of money-off, percentage-off, or a combination of the two; they can also be presented as a bundling tactic or unbundling tactic. Among the various forms of price promotions, short-term price discount promotions have been used by retailers to stimulate short-term demand for their products and services (Madan and Suri, 2001). Compared with other forms of price promotions, such as coupons and rebates, price discounts are more popular with both retailers and consumers because they are easy to avail and provide the incentive of an immediate price reduction or savings to consumers (Yeshin, 2006).

Theoretically, a variety of studies have discussed the effects of promotion framing, promotion frequency, and promotion depth of price discounts on consumer perception, evaluation and purchase intention (Barnes, 1975; Della Bitta & Monroe, 1980; Gupta & Cooper, 1992; Chen et al., 1998; Krishna et al., 2002; Kim & Kramer, 2006; DelVecchio et al., 2007; Barone and Roy, 2010). These studies extensively took perceived value as the mediator between consumer perception of price discount promotion and purchase intention, which can be considered the way consumers evaluate price promotion in a "if I buy, then how much discount would I get" thinking style. Human behaviors can be categorized into two types, i.e., to approach a beneficial result or to avoid a harmful result. The thinking style "if buy, then can get how much" can be seen as directing at approaching a gain of saving money. Then there should exist another thinking style "if not buy, then may lose what" that directing at avoiding a loss of missing a good saving money opportunity. We propose anticipated regret (AR) as the focal concept to describe the decision-making process of the second thinking style mentioned. We further propose that consumers' purchase intention in relation to

price discount promotion can be better predicted by including anticipated regret. The overall underlying mechanism, through which price discount promotion affects consumers' perception, evaluation, and purchase intention, has not been well documented in the current literature.

According to the practical as well as the theoretical background described above, the current thesis attempts to fill in the research gap in price promotion studies to meet the marketers' demand for knowledge on how consumers respond to price promotion. The findings of the present study can direct price promotion design and implementation in the current market. Therefore, the current thesis research has both theoretical and practical significance.

1.2 Research Questions and Objectives

The present thesis emphasizes on the role of anticipated regret in the consumer decision-making process when confronted with price discount promotions. Specifically, the key research questions addressed in the present thesis include the following: 1) How do characteristics of price discount promotions influence consumers' response? 2) Aside from perceived value under price promotion conditions, does anticipated regret provide significantly incremental information for predicting consumer purchase intention? 3) What are the antecedents and consequences of anticipated regret under price discount promotion settings? 4) What are the boundary conditions for the effects of anticipated regret on consumers' purchase intention under price promotion settings?

Accordingly, the overall objective of this thesis is to identify and test empirically how price discount promotion affects consumers' behavioral response by considering the effects of anticipated regret on consumers' purchase intention. Specifically, the objectives of the present thesis include the following: 1) to identify the effects of the three important characteristics of price discount promotions (i.e., promotion framing, promotion depth, and promotion frequency) on consumers' decision-making process; 2) to derive a whole model that incorporates cognitive, affective, and behavioral stage of consumers' response to price promotion by considering both consumers' attitude and anticipated regret as well as hypotheses based on the literature review and logical deduction from well-established theories; 3) to test empirically the whole model using experimental survey data and the Structural Equation Modeling (SEM) technique; and 4) to identify and test empirically the moderators and mediators in the relationship among price discount promotion dimensions, perceived value, anticipated regret, and purchase intention.

1.3 Structure of the Thesis

The present thesis comprises eight parts. Chapter 1 provides the introduction and discussion on the practical and theoretical backgrounds as well as the research questions and objectives. Chapter 2 presents the literature review, which aims at comprehensively reviewing current relevant theories and research. Specifically, this part documents the studies on the effect of price discount promotion on consumers' cognitive, affective, and behavioral response. Chapter 3

aims at discussing the central concept of anticipated regret with respect to its definitions, measurements, antecedents, consequences, and boundary conditions.

Chapter 4 investigates how price discount framing affects consumers' behavioral responses. It compares the effects of the dollar-off based discount promotion with the effects of percentage-off based price-discount promotion on consumers' behavioral response. The boundary conditions for the main effects of the two kinds of promotion are also examined.

Chapter 5 examines the effects of price discount depths on consumers' behavioral responses. The present study develops an integrative model based on the means-end model, the theory of planned behavior (TPB), and the regret minimization theory to account for how consumers respond to price discount promotion depths. The moderating effect of consumers' gender is also identified in this chapter.

Chapter 6 presents the effects of price discount frequency on consumers' AR and purchase intention. This chapter proposes price discount promotion frequency as one antecedent variable of consumers' anticipated regret and validates the proposition using experimental design. This chapter also identifies the moderating effect of consumers' gender.

Chapter 7 further investigates the cognitive-affective-behavioral link between consumers' response process and price discount promotions to validate the important role of anticipated regret further. This chapter also identifies the moderating effect of the sequence of asking questions on consumers' anticipated regret on the relationship between anticipated regret and consumers' purchase intention.

Chapter 8 concludes the overall findings of the present thesis, discusses the theoretical and practical implications, and proposes future research directions to overcome the limitations and continue the research on price discount promotions, perceived value, consumers' attitude, and anticipated regret.

CHAPTER 2: LITERATURE REVIEW

The issues on price discount promotion and its effect on consumers' price perceptions and purchase intentions in the retail industry have been widely researched (Kalwani and Yim, 1992; Raju and Hastak, 1983; Shoemaker, 1979). Under the cognitive-affective-behavioural response framework, we divide the consumers' decision-making process when confronting price discount promotions into three steps: consumers' perceptions and evaluations, affective response, and purchase intention and behaviour. We document the current literature on the effects of price discount promotions on consumers into three parts as discussed in the following section.

2.1 The Effects of Price Discount Promotion on Consumers' Perceptions and Judgments

Perceived discount (PD) is defined as the encoded discount through the process of subjective interpretation and assignment of meaning to objective price discounts to describe and explain consumers' perceptions of price promotions (Monroe, 1984; Olson and Jacoby, 1977; Zeithaml, 1984). In the process of price discount promotion perception, researchers found evidence for the discounting of discount. Blair and Landon (1981) found that reference price claims were consistently discounted by about 25 percent. Mobley, Bearden and Teel (1988) found that 25 percent and 50 percent discount claims elicited 21 percent and 45 percent perceived price reductions, respectively. Discounting of discounts occurs when consumers doubt the credibility of the advertised savings and reduce it to a

level that seems more reasonable (Urbany, Bearden and Weilbaker, 1988; Gupta and Cooper, 1992). Gupta and Cooper (1992) investigated consumers' response to price discount promotions with different promotion depths and found that the following: 1)consumers discount the price discounts, i.e., consumers' perceptions of discounts (PD) are typically less than the advertised discounts (AD), and the discounting of discounts increases with the increase in AD; 2) discounting of discounts is higher for store brands than for name brands; and 3) there exist the promotion threshold and saturation points, confirming consumers' S-shaped response to promotions (Grewal, Marmorstein and Sharma, 1996).

Della Bitta, Monroe, and McGinnis (1981) found that consumers' perceptions of savings for price discounts do not differ significantly among 30 percent, 40 percent, and 50 percent discounts; however, there are significant differences between the 10 percent and the 30 percent, 40 percent, and 50 percent, and between the 20 percent and the 50 percent discount levels. The authors also argued that if the price discount is too large, consumers may perceive that the offer is not realistic. Kalwani and Yim (1992) confirmed that a concave relationship exists between the expected price and the depth of price discounts. For price discounts with a moderate promotion depth, previous research has not found significant differences in the effectiveness of different promotional tools (Hardesty and Bearden, 2003; Nunes and Park, 2003).

A number of studies have also examined the effects of price discount framing on consumers' perceptions of price-discount promotion, e.g., price perception, quality perception, and deal perception. The framing effect refers to consumers' response to different descriptions of the same decision question (Frisch, 1993). Framing of decision problems can affect consumers' judgments

and preferences (Kahneman and Tversky, 1979). Accordingly, Krishna, Briesch, Lehmann, and Yuan (2002) defined price promotion framing as "how the offer is communicated to the consumers –is the offered price given along with a reference price, is the reference price plausible, is a price deal communicated in dollar or percentage terms".

Some researchers have revealed that framing price promotion in different forms affects consumers' perceptions of price and quality. Folkes and Wheat (1995) suggested that framing price discounts in different forms significantly affects consumers' price perception. Furthermore, consumers' price perception affects their quality perception. Consumers tend to equate higher prices with higher quality and relatively low prices with inferior quality (Rao and Monroe, 1988; Olson, 1977).

Researchers have also investigated consumers' evaluation and judgement of the deal. Chen, Monroe and Lou (1998) found that, for high-price products consumers perceive a more significant price reduction when the deal is framed in dollars form than when framed in percentage form, while for low-price products consumers perceive a more significant price reduction when the deal is framed in percentage form more positively than when framed in dollars form. Krishna, Briesch, Lehmann, and Yuan (2002) examined the effect of price promotion framing on perceived savings through a meta-analysis of the extensive related literature, and found the following: 1) the percentage-based deal has a more positive effect on perceived savings than amount-based deal and 2) presenting a regular price as an external reference price enhances the offer value of large plausible deals and implausible deals rather than the offer value of small plausible deals. Callow and Lerman (2003) examined consumer's evaluation of price

discounts in foreign currencies and found that currency denomination significantly affects consumer's attitudinal reaction to price discounts. Hu, Parsa, and Khan (2006) investigated how price discount presentation framing and price discount depth interact to affect consumers' value perception and purchase intention, and found that for high-end service, price discounts framed in dollar format produce higher consumer perceived value and higher purchase intention, whereas for low-end service, price discounts framed in percentage format produce higher consumer perceived value and higher purchase intention.

For joint price discount promotion, Sheng, Parker, and Nakamoto (2007) examined the effects of joint price discounts on consumer evaluations of the discounted products and found that joint price discounts affect consumer evaluations of the discounted bundled products, leading to a higher perceived regular price and lower perceived quality. The effect is moderated by the complementarity of the bundled products in a way that under the condition of high complementariness of bundled products, the negative effects of bundled price discount on the discounted products are attenuated.

2.2 The Effects of Price Discount Promotion on Consumers' Affective Responses

Although previous studies have given much research attention to price discount promotion, only a few of them have investigated consumers' affective reaction to price discount promotions. Among the very few most relevant literature, Moore and Olshavsky (1989) examined consumers' response to price discounts of small, moderate, and large levels (i.e., 5 percent off, 30 percent off, and 75 percent off, respectively). They found that the desirability of a discounted

unfamiliar brand does not continue to increase as the size of the price discount increases. There is a quadratic relationship between the size of a price discount and the proportion of choices for unfamiliar brands. Grewal, Marmorstein, and Sharma (1996) proposed a U-inverted function to account for consumers' reactions to price discounts with multi-level promotion depths. According to this function, at a moderate level of price discount depth, consumers are expected to process information more elaborately or thoughtfully, thus decreasing the potential for miscomprehension and skepticism as well as resulting in a similar evaluation of equivalent price discounts and premiums.

Barone and Roy (2010) examined how the exclusivity of price discount promotion influences consumers' response. They found that exclusive price promotion is favored over inclusive price promotion for consumers adopting independent self-construal and male consumers with a history of purchasing from the marketer providing the offer. They also found that the effect of price promotion exclusivity, which affects consumers' response, is mediated by the ability of the price promotion offer to make consumers engage in self-enhancement.

2.3 The Effects of Price Discount Promotions on Consumers' Behavioural Intentions

The major purpose of price discount promotion is to induce consumers' immediate behavioral reactions to the products or services under promotion. Hence, the effects of price discount promotions on consumers' behavioral intentions have also received much research attention. Palazon and Delgado-Ballester (2009) compared the relative effectiveness of price discount

promotion versus premium promotion and found that price discount promotion is more effective than premium promotion when the promotional benefit level is high, whereas the reverse occurs for price discount promotion when the promotional benefit level is low. For joint price discount promotions, Harlam et al. (1995) found that price discounts presented in "together" format produce higher purchase intention than those that are presented in "separate" format.

Some researchers have examined the effects of price discount depth on consumer purchase intention. Della Bitta and Monroe (1980) suggested that a price reduction of about 15 percent is required to attract consumers to purchase an item. Gupta and Cooper (1992) defined promotion threshold as the minimum value of price promotion required to change consumers' purchase intentions. A promotion threshold is related to the psychological process of discrimination, where a consumer will not react to a stimulus unless the perceived change is above a just noticeable difference (Luce and Edwards, 1958). Eastlack and Rao (1986) demonstrated that a minimum level of advertising is required before advertising can make any significant effect on sales. Gupta and Cooper (1992) also investigated the existence of a discount threshold level and found that consumers do not change their intentions to buy the main product under study unless the advertised discount meets or exceeds the 20 percent deal. Harlam, Krishna, Lehman, and Mela (1995) also confirmed that a 20 percent price reductions has a significant effect on consumers' purchase intentions.

In contrast to many related studies, which mainly focus on how people will behave if they can obtain price discount promotion, Chen, Tsai and Chuang (2010) investigated consumers' emotional and behavioral response to missing a price promotion. The authors found that when consumers attribute missing the

price promotion to the seller's actions, they produce greater perceived price unfairness, which induces anger and regret rather than disappointment, and in turn lead consumers to a higher level of complaint and spread negative word of mouth.

2.4 Contextual Variables as Moderators

Some studies have sought the boundary conditions for the effects of price discount promotions on consumers' reactions (i.e., perception, evaluation, and purchase intention). They examined the moderating effects of brand characteristics, retailer policy, exclusivity of price-discount promotion, and consumer budget constraints on consumers' response to price discount promotions. Gupta and Cooper (1992) suggested brand name and store image as important contextual variables affecting consumers' responses to price discount promotion. Karande and Kumar (1995) studied the effect of brand characteristics and retailer policies on consumers' response to retail price promotions using scanner data and found that brand characteristics (i.e., high price vs. low price) and retailer policies (e.g., promotion frequency, promotion framing, type of feature activity, etc.) significantly affect the promotional price elasticity and promotional cross-price elasticity across brands.

To determine the boundary conditions of discount in consumers' perception process of price discount promotion, Biswas and Blair (1991) suggested that reference price claims of discount stores are discounted more than those of non-discount stores. Lichtenstein and Bearden (1989) proposed that the consistency and distinctiveness of price promotions are important contextual variables in the formation of consumers' internal price standards. Specifically, they suggested that consumers' internal price standards, perceived value of the

deal, and source credibility perceptions are likely to be higher when they encounter an advertisement from a store that does not consistently make reference price claims and is highly distinctive in its price promotion activities.

Researchers have also identified the contextual variables moderating the relationship between price perception and quality perception. Olson (1977) suggested that the effects of price–quality inference are moderated by other informational cues available to consumers under the behavioral situation. These contextual informational cues include brand name, store image, brand familiarity, and so on. Della Bitta, Monroe, and McGinnis (1981) found that brand name is an important moderating variable that helps control or stabilize the quality perceptions on a branded product even when its price is reduced. Kumar and Pereira (1995) examined the short-term sales response to price promotions using retail grocery stores' scanner data, with a focus on the effects of price promotion frequency and the consecutive scheduling of price promotions. The authors found that price promotion frequency could positively or negatively affect short-term sales response, depending on the extent of consecutive scheduling.

Some researchers have investigated the boundary conditions for the effects of price discount presentation forms on consumers' behavioral response. Scheer, Shehryar, and Wood (2010) investigated the effect of budget constraints on consumers' response to price discount presentation formats, that is, dollar-based versus percentage-based formats. The authors found that budget constraint moderates the relationship between price discount presentation formats and evaluation of the price discounts promotion.

2.5 Comments on the Current Literature

Price-discount promotion has received extensive research attention. However, knowledge on the effects of price discount promotion on consumers is still fragmented and suggestive of the need for further investigations and integration. The research gaps are as follows:

First, most of the current studies emphasize how people would respond (i.e., perception, evaluation, behavioral intention, etc.) to a price discount. However, only a few have dealt with the consequences of consumers missing a price discount. Put it in another way, there is a lack of research on the two possible thinking ways (i.e., "what if I get a price discount" and "what if I miss a price discount") in examining consumers' purchase decision-making process when confronting price discount promotions.

Second, although many researchers have investigated the effects of price discount presentation forms on consumers' behavioral responses, few of them examined the potential moderators (e.g., the degree of calculation, difficulty of price discount, price of product under promotion, etc.) that may affect consumers' behavioral response to the price discount promotion.

Third, although Barone and Roy (2010) researched the moderating effects of consumers' self-construal, consumer gender, and consumer-purchasing experience in examining the effects of price promotion exclusivity, few of them investigated how consumers' personal characteristics affect the effectiveness of price discount promotions in general.

Last but not the least, current relevant studies have investigated one or two of the three phases of consumers' responses to price discount promotions. However, there is a need to integrate the three phases (i.e., perception, evaluation, behavioral intention) into a whole study to determine the overall mechanism

underlying how price discount promotion affects consumers' purchase decision-making process.

The major theoretical contribution of this thesis is to fill the research gaps listed above in order to gain a cumulative knowledge on how customers respond to price discount promotions. The current study also provides guidance for marketing practitioners in the design and implementation of their price discount promotion.

CHAPTER 3: ANTICIPATED REGRET IN CONSUMER STUDIES

Since anticipated regret (AR) is the focal concept under examination in this thesis, an in-depth discussion of this concept is therefore required before any further investigation takes place. Among the pioneering works regarding anticipated regret in consumer decision making, Janis and Mann (1977) argued that the anticipation of regret makes people consider more deliberately the alternative options before making a final decision, thus making people's decision making more rational. According to Bell (1982), decision makers may be affected by knowing the relevant outcome of an alternative to their act. Knowing that an alternative exists, they will try to avoid regret. Therefore, Bell proposed expected utility theory to be incorporated with anticipated regret to describe decision makers' behaviors better. Looms and Sugden (1982) suggested the capacity to anticipate feelings of regret and rejoicing to be an important factor affecting people's choice. The proposed regret theory explains why people behave in violation of rationality. Other researchers have also demonstrated anticipated regret to play a role in human decision-making process (Zeelenberg, 1999; Zeelenberg, Beattie, Plight, and Vries, 1996; Hoelzl and Loewenstein, 2005). Inman, Dyer, and Jia (1997) simultaneously considered anticipated regret and realized regret, and proposed a piecewise-linear model for measuring regret to develop the generalized utility model for describing and predicting consumers' decision-making process. The current chapter discusses the definitions, measurements, antecedents, and consequences of anticipated regret based on the current literature.

3.1 Definitions and Measurements of Anticipated Regret

Researchers have defined and measured anticipated regret from various perspectives. The current thesis uses some of the most popular studies conducted. Zeelenberg (1999) defined anticipated regret as that "we experience when realizing or imagining that our present situation would have been better, had we decided differently." Zeelenberg and Pieters (2004) measured anticipated regret by asking subjects to indicate how much regret they would feel in a certain situation using a 9-point scale anchored by "1=not at all, and 9=very much." Abraham and Sheeran (2003) defined anticipated regret as the "beliefs about whether or not feelings of regret or upset will follow from inaction," and measured it using two items, that is, "If I did not exercise at least six times in the next two weeks, I would feel regret" and "If I did not exercise at least six times in the next two weeks, I would feel upset" with an 11-point scale anchored by "1=definitely yes, and 11=definitely no." Cooke, Sniehotta, and SchÜz (2006) defined anticipated regret as "perceiving that one will feel regret at not performing a behavior" and borrowed measurement scales from Abraham and Sheeran (2003). McConnell et al. (2000) defined anticipated regret as "the painful sensation of recognizing that 'what is' compares unfavorably with 'what might have been'" and measured it using a single item "whether it would induce feelings of regret" with a 5-point scale anchored by "1=very much inhibits regret, and 5=high regret." Wong and Kwong (2007) defined anticipated regret as "regret that one anticipates experiencing in the future" and measured it by asking subjects to indicate their levels of regret if they lost some money or missed a chance to gain some money with an 11-point scale anchored by "no regret" (-5) and "very much

regret"(+5). Conner, Sandberg, McMillan, and Higgins (2006) measured anticipated regret using the mean of five semantic differentials, namely, "If I had..., I would ..." (definitely not regret it/definitely regret it, not be really worried/be really worried, be very happy/be very sad, be very proud of myself/be very ashamed of myself, not be sorry/be sorry) with a 5-point scale, where higher scores indicate more regret. Nordgren, van der Plight, and van Harreveld (2007) measured anticipated regret by asking subjects to rate a single item "how much regret you would feel if ...." on a 9-point scale anchored by "1=No regret , 9=Extreme regret."

3.2 Antecedents of Anticipated Regret

Crawford, McConnell, Lewis and Sherman (2001) found that people do not spontaneously anticipate the regret that they may experience in an influence situation, and that people anticipate greater regret for negative outcomes that would be experienced after reacting against rather than complying with the influence attempt when they are explicitly asked to anticipate the regret.

Zeelenberg (1999) proposed feedback to be the central issue in regret theory, and suggested that a decision-maker cannot compare "what is" with "what would have been" if there is no explicit feedback on forgone outcomes. Zeelenberg and Pieters (2004) suggested that anticipated feedback of forgone options induces anticipated regret. In their research, they demonstrated that people anticipate more regret when imagining that their neighbors have won in the Dutch Postcode lottery than in a regular state lottery, since the former has a specific feedback structure--payoffs are determined by postal code rather than by chance. This prediction was also confirmed by Hoelzl and Loewenstein (2005),

who also proposed another antecedent of anticipated regret, i.e. social takeover, a new concept defined as "the expectation that another person might take over one's position". Hoelzl and Loewenstein (2005) suggested that anticipated feedback and social takeover affect anticipated regret in a similar way.

Moreover, personal responsibility may affect anticipated regret. Some researchers have suggested that being responsible for decision outcomes results in either stronger regret or rejoicing (Hoelzl and Loewenstein, 2005; Kahneman and Tversky, 1982; Thaler, 1980). Thus, if people are aware of their responsibility for certain outcomes of the decisions they make, they will anticipate regret for alternative options and make more deliberate considerations before making final decisions. The underlying reasons for stronger regret based on responsibility may be due to the concern not only about the outcomes of the decision but also about maintaining and protecting a positive self-image (Larrick, 1993). Therefore, highlighting decision makers' responsibility may likewise underpin the feeling of anticipated regret.

McConnell et al. (2000) proposed the uncertainty of outcomes as one antecedent of anticipated regret. They suggested that anticipated regret could only exist in situations where outcomes of decisions are unknown.

Janis and Man (1977) and Zeelanberg (1999) identified five conditions under which anticipated regret plays a role: (1) the most preferred alternative is not necessarily superior to another alternative; (2) the negative consequences that might ensue from the decision could start to materialize immediately after the decision is made; (3) significant persons in the decision maker's social network view the decision as important and will expect him/her to adhere to it; (4) new information about potential gains and losses can be obtained; and (5) significant

persons in the decision maker's social network interested in this particular decision are not impatient about his/her current state of indecision and expect him/her to delay action until he/she has evaluated the alternatives more carefully. Although these conditions are not empirically tested well (Zeelenberg 1999), they can provide us with insights when identifying the antecedents of anticipated regret and when finding contextual variables moderating the relationship between anticipated regret and behavioral intentions.

3.3 Consequents of Anticipated Regret

Many researchers have found evidence demonstrating anticipated regret to be an important indicator of behavioral intentions, such as condom use intentions (Richard, Pligt and Vries, 1996; Pligt, Zeelenberg, Dijk, Vries, and Richard, 1997), driving violation intentions (Parker, Reason, Manstead and Stradling, 1995), lottery playing intentions (Zeelenberg and Pieters 2004; Li, Zhou, Sun, Rao, Zheng and Liang, 2010), adolescents' smoking behavioral intentions (McMillan and Higgins, 2006), insurance purchase intentions (Boninger, Gleicher, Hetts, Armor and Moore, 1994), selling intentions (Miller and Taylor, 1995), and exercise intentions (Abraham and Sheeran, 2004).

Sheeran et al. (1999) proposed that anticipated regret binds people to their intentions by associating inaction with aversive affect. Thus, it not only increases people's behavioral intentions but also strengthens the consistency between participants' intentions and their behaviors. Wong and Kwong (2007) indicated that anticipated regret increases people's escalation of commitment.

Hoelzl and Loewenstein (2005) investigated the effects of anticipated regret and social takeover in the counterfactual thinking framework. They

categorized social counterfactuals into two groups, i.e. social and non-social counterfactuals, and argued that both anticipated regret and social takeover increase people's tendency to stick to an investment.

Anticipated regret also affects people's risk-taking behaviors. Some researchers have proposed and empirically proven anticipated regret to lead to relatively risk-seeking behavior (Larrick and Boles, 1995; Ritov, 1996; Zeelenberg, Beattie, van der Plight, and de Vries, 1996; Hoelzl and Loewenstein, 2005). However, other researchers have made different claims. Kardes (1994) suggested that anticipated regret leads to risk-averse behavior. Nordgren, van der Plight, and van Harreveld (2007) found that anticipated regret increases perceived risk when they make decisions on potentially hazardous behaviors. Zeelenberg (1999) found that anticipated regret could result in risk-avoiding as well as risk-seeking tendencies. Hence, the relationship between anticipated regret and decision maker's risk tendencies has not yet been determined and still requires further investigation.

3.4 Anticipated Regret under Price Promotions

Some researchers have examined how anticipated regret is affected by different marketing strategies. McConnell et al. (2000) investigated the effects of price guarantee on prefactuals, anticipated regret, upward thinking versus downward thinking, and satisfaction. They found that price guarantees reduces upward prefactual thinking and reduces anticipated regret. They also found that price guarantees increases long-term satisfaction and happiness even when they are not exercised.

Simonson (1992) found that when consumers are confronted with a chance to buy a product that is currently under price discount promotion and know that the sale price for the product will be different in the future, they prefer to buy the currently available item on sale rather than wait for a better sale. Moreover, they also prefer a higher-priced, well-known brand over a less expensive, lesser-known brand to avoid the anticipated regret.

3.5 Conclusive Discussion of the Concept of Anticipated Regret

As discussed above, the concept of anticipated regret has received extensive research attention and efforts. Consistent with Zeelenberg (1999), we define anticipated regret (AR) as a type of emotion rather than as a type of belief (e.g., Abraham and Sheeran, 2003). We also adopt the definition "the feelings we experience when realizing or imagining that our present situation would have been better, had we decided differently" given by Zeelenberg (1999). We list the antecedents and consequents of anticipated regret discussed above in Tables 3.1 and 3.2.

Table 3.1 Antecedents of Anticipate Regret

Antecedents	Reference
Anticipated feedback on Forgone outcomes	Zeelenberg (1999) ; Zeelenberg and Pieters (2004); Hoelzl and Loewenstein (2005)
Social takeover	Hoelzl and Loewenstein (2005)
Personal responsibility	Hoelzl and Loewenstein (2005)
Uncertainty of outcomes	McConnell et al. (2000)
Price guarantee	McConnell et al. 2000

Based on the findings of the previous studies, anticipated regret is an important concept in human decision-making process in that people are regret averse and want to maintain a stable self-image. Current studies on anticipated regret mainly appear in the fields of psychology and sociology, and only a few are

relevant to marketing issues. Anticipated regret is an important concept in consumers' decision-making process; thus, there is obviously a need to put up efforts and resources to identify how anticipated regret affects consumer behaviors.

Table 3.2 Consequents of Anticipate Regret

Consequents	Reference
Condom use intentions	Richard, Pligt and Vries, 1995; Pligt, Zeelenberg, Dijk, Vries, and Richard, 1997; Empelen, Kok, Jansen and Hoebe, 2001
Driving violation intentions	Parker, Manstead and Stradling, 1995
Lottery playing intentions	Sheeran and Orbell, 1999; Zeelenberg and Pieters 2004; Li, Zhou, Sun, Rao, Zheng and Liang, 2010
Adolescents' smoking behavioral intentions	McMillan and Higgins, 2006
Insurance purchase intentions	Boninger, Gleicher, Hetts, Armor and Moore, 1994
Selling intentions	Miller and Taylor, 1995
Exercise intentions	Abraham and Sheeran, 2004
Intentions-behaviors relationship	Sheeran and Orbell,1999
Escalation of commitment	Wong and Kwong, 2007
Tendency to stick to an investment	Hoelzl and Loewenstein, 2005
Risk-seeking behavior	Larrick and Boles, 1995; Ritov, 1996; Zeelenberg, Beattie, van der Plight, and de Vries, 1996; Hoelzl and Loewenstein, 2005; Zeelenberg 1999
Risk-averse behavior	Kardes, 1994; Zeelenberg, 1999
Perceived risk	Nordgren, van der Plight and van Harreveld, 2007

Under the circumstance of price discount promotions, consumers are given short-term incentives to decide on their demands and purchase intentions. However, due to the temporary characteristic of sales promotions, price discount promotions also make consumers vulnerable to experiencing negative emotions of regret if they do not take the purchase chance and find later that the price discount

has been reduced or withdrawn by marketers. Therefore, anticipated regret should be an important factor in consumers' confrontation of price discount promotions. In the price discount promotion situation, the major regret that consumers may anticipate when they decide whether or not to buy an item comes from the possibility of thinking "if I do not buy now, then I lose something." Investigating how anticipated regret plays a role in consumers' purchase decision-making process under price discount promotions is one important research issue addressed in the present thesis.

CHAPTER 4: THE FRAMING EFFECT OF PRICE DISCOUNT PROMOTIONS ON CONSUMER BEHAVIORAL INTENTION

Discount presentation form, promotion depth, and promotion frequency are the three most important characteristics of price discount promotion. This chapter addresses how price discount presentation form affects consumer's behavioral response.

4.1 Introduction

While shopping in a department store, one may see different discount information such as "Original Price of 180 yuan, save 45 yuan if you buy immediately" and "Original price of 180 yuan, save a 25 percent of the original price if you buy immediately." Seeing such information leads one to ask, which price discount information will stimulate consumers' purchase intentions more? Is there any difference in processing these two types of price discount promotions in the brain? These two options remind us of a very famous piece of Chinese history. During the Qing Dynasty, in a general's letter to the Emperor, Mr. Zeng Guofan changed the content from "repeatedly fought and lost" to "to face repeated war after being repeatedly defeated" to mean the same information. He changed the order of the words, suddenly turning a defeated and awkward image into one that is epic, persevering, and determinedly heroic. As such, using different versions to mean the same information can make the information receivers have different cognitions, which in turn leads information receivers to form different attitudes and behavioral intentions. This is the famous framing effect.

In the market, there are normally two ways to present the price discount: one is based on dollars (e.g., 45 yuan off), and the other is based on percentage (e.g., 25 percent off). In the framing effect, how do different price discount presentations influence the process of consumers' cognitions? How do consumers deal with the price discount information with different price discount presentations? Which price discount presentation is more effective in product promotion? What is the mechanism of the effect of the price discount presentation on consumer purchase intention? These are the issues we will address in this empirical study.

First, we review and summarize the related academic studies on price promotion. Second, we introduce the corresponding hypotheses on the effects of price discount presentations on consumers' response and test these hypotheses using two experiments. Finally, we summarize all the research findings.

4.2 Literature Review of Price Discount Presentations

Price discount is one of the most common types of consumer sales promotion. However, previous studies have found that consumers often discount price discounts (Gupta and Cooper, 1992). Therefore, to enhance the promotional effectiveness of price discount promotions and make the price discount promotion play a more effective role in consumers' value perception and purchase intention, studying the factors affecting the price-discount promotion in depth is necessary.

Krishna et al. (2002) made a quantitative analysis on the factors affecting the relationship between price discount presentations and consumer-perceived savings using a meta-analysis. The authors found that there are three categories of the affecting factors: price discount characteristics, situational factors, and price

presentation forms. The effect of the characteristics of price discounts on consumer perceived savings is as follows. The variation range of the price discount has a negative effect on consumers' perceived saving, that is, the more the variation range changes, the less the consumers' perceived saving is. The effects of situational factors on consumers' perceived savings include the following: consumers generate more perceived savings when confronting price discount promotion on products with a national brand than that with a private brand; compared with that on durable goods, the same price discounts on packaged goods produce higher consumers' perceived saving; compared with that in department stores and exclusive stores, the price discount promotion in discount stores generates lower consumers' perceived savings. The effects of price presentations on consumers' perceived savings include the following: presenting the original price (before the discounted price) as the reference price leads to higher consumers' perceived savings; the non-tensile claim leads to higher consumers' perceived savings than the minimum tensile claim; small and reasonable price discounts produce higher consumers' perceived savings; consistent low-price discount produces higher consumers' perceived savings; and more distinctive deals lead to higher consumers' perceived savings.

Aside from the factors influencing the effectiveness of price discount promotion, the price discount depth is another important factor considered in the present study. Della Bitta and Monroe (1980) found that only the discounts that go beyond 15 percent can attract consumers' attention; when price discounts are between 30 and 50 percent, consumers' perceived savings have no significant change. To explain this phenomenon, Gupta and Cooper (1992) suggested that the main reason is the consumers' discounting of discounts; that is, the price discount

that consumers perceive is lower than that claimed by the marketers. This discounting increases as the claimed price discount increases. Gupta and Cooper (1992) also found that there are certain corresponding threshold values and saturation points that consumers respond to the promotion depth of the price discount. When price discount is below the threshold value and above the discount saturation point, consumers' purchase intention does not significantly change while the price discount varies. Therefore, consumers respond to price discount promotions with different discount depths in an S-curve manner.

The research results above are of help to predict the effects of price discount promotions. However, they fail to provide a good explanation on why consumers underestimate price discounts. Some researchers have discussed the process through which consumers perceive price discounts from the information processing perspective and attempted to explain the reasons for consumers to discount the price discounts. Consumers' perceptions on sales promotion are determined by the degree of difficulty for consumers to calculate the promotion scheme and the accuracy of the calculation of the final purchase price. The inaccuracies in the consumers' calculations often result in their underestimation of the price discounts (Kim and Kramer, 2006; Estelami, 2003; Morwitz etc., 1998). Therefore, studies on how marketers design the price discount promotion schemes and by which means marketers can increase the consumers' perceived value towards sales promotion are of significance. Kim and Kramer (2006) found that, for percentage-based price-discount promotion, the novelty of price discount promotion presentations positively influences consumers' perceived savings and purchase intentions; that is, the more novel the price discount promotion presentations are, the more accurately can consumers calculate the price discounts,

resulting in higher consumers' perceived savings and purchase intentions. Another study by Kim and Kramer (2006) found that the higher the consumer need for cognition is, the deeper the degree of processing the percentage-based price discount information, which leads to the higher accuracy of the calculation, which in turn results in higher purchase intentions.

Most of the existing literature on price discount promotions mainly focuses on investigating percentage-based price discounts. However, studies on dollar-based deals and the comparison between percentage-based price-discount promotion and dollar-based price-discount promotion are very few. Under the information processing framework, the existing studies agree that inaccurate calculation is the main cause leading to consumers' discounting of discounts for percentage-based price discount promotions. Moreover, studies have introduced two important variables, namely, the novelty of price discount presentations and the consumers' need for cognition, which influence the degree of consumers' price discount information processing and the accuracy of calculation as well as provide guidance for marketers to enhance the effectiveness of price-discount promotions. However, these existing relevant studies did not consider the ease of calculation of the price discount itself and the effects of the price level of the promotional products on the cognition of price discount. To fill the research gaps of the existing related literature, under the theoretical framework of information processing, this chapter considers two factors, that is, the ease of calculation of price discounts itself and the price level of promotional items, and examine the influences of the dollar-based versus percentage-based price-discount promotions on consumers' perceptions, evaluations, and purchase intention.

4.3 Development of Research Hypotheses

As mentioned earlier, under the framework of information processing, the current study assumes that the price discount presentation has an effect on the ease of price discount information processing, thus influencing the cognition of consumers' perceived savings and final purchasing price and eventually consumers' perceived value and purchasing intentions. According to Thaler (1985), consumers' perceived value consists of two parts, namely, acquisition and transaction value. As Thaler (1985) defined, acquisition value is the utility of the good received compared to the outlay, while transaction value is the perceived merits of the "deal". Acquisition value is determined by the consumers' comparison between the benefits carried by the obtained products and the paid cost; thus, it is directly influenced by the final purchasing price. Transaction value is determined by the comparison between the paid cost and the reference point; thus, it is directly influenced by the perceived savings. Accordingly, the current research on this chapter is based on the following framework: when the product quality is controlled at a certain level, consumers' purchase intentions depend on their perceived value, including both acquisition value and transaction value as determined by the consumers' perceived price, which in turn is determined by the degree of calculation difficulty of the price discount.

4. 3. 1 Price Discount Presentation Forms

Estelami (2003) demonstrated that among the four operation modes that consumers use for dealing with price information, the sequence of calculation difficulty from low to high is addition, subtraction, multiplication, and division; and the sequence of calculation accuracy from low to high is division,

multiplication, subtraction, and addition. As mentioned before, researchers indicated that the inaccuracies in the consumers' calculations often result in their underestimation of the price discounts (Kim and Kramer, 2006; Estelami, 2003; Morwitz etc., 1998).Given that consumers use multiplication calculation when dealing with the percentage-based discount and subtraction to deal with the dollar-based discount information, percentage-based deals are easier to be calculated and are thus more likely preferred by consumers (Estelami, 2003). Therefore, we argue here that consumers can acquire higher perceived savings and higher perceived acquisition values from dollar-based price-discount promotion, thus generating higher purchase intentions. Hence, we propose the following hypotheses:

H_1: Consumers generate higher purchase intentions when the price discount promotion is framed in dollars than when it is framed in percentage.

H_{2a}: Consumers obtain higher perceived transaction value when the price discount promotion is framed in dollars than when it is framed in percentage.

H_{2b}: Consumers obtain higher perceived acquisition value when the price discount promotion is framed in dollars than when it is framed in percentage.

4. 3. 2 Price Discount Presentations, Perceived Value and Purchase Intentions

Dodds, Monroe, and Grewal (1991) found that consumers' perception of the price would have an indirect effect on their purchase intensions through the mediating effect of perceived value. Grewal, Monroe, and Krishnan (1998) further divided consumers' perceived value into perceived acquisition value and perceived transaction value (Thaler, 1985), studied the influence of the

price-comparison advertisement on consumers' perceived acquisition value, perceived transaction value, and purchase intentions. They also validated that consumers' price perception influences their purchase intentions through the mediating effects of perceived acquisition value and perceived transaction value. Therefore, we deduce that, under price discount promotions, the effect of price discount presentation forms on purchase intentions is realized through the mediating effects of perceived transaction value and perceived acquisition value. Thus, we propose the following hypotheses:

H_{3a}: Consumers' perceived acquisition value positively affects their purchase intention.

H_{3b}: Consumers' perceived transaction value positively affects their purchase intention.

H_{3c}: Consumers' perceived transaction value and acquisition value are the two mediators between price discount presentation forms and consumers' purchase intention.

4. 3. 3 The Degree of Difficulty in Price Discount Calculation

Estelami (2003) found that conducting price discount calculation when the labeling price ends with an even number than with an odd number is easier and more accurate. Accordingly, we derive that calculating the percentage-based price deals if the price discount ends with an even number is easier and more accurate. Hence, the difference between percentage-based price discount promotion and dollar-based price discount promotion in influencing consumers' perceived value and purchase intentions will become smaller. Specifically, when the price discount is very easy to calculate, the difference between the influence of the

percentage-based deals and that of the dollar-based deals on consumers' perceptions and behavioral responses will completely disappear. Thus, we propose the following research hypotheses:

H_{4a}: The effects that the price discount presentation forms on consumers' perceived transaction value are influenced by the moderating effects of the degree of price discount calculation difficulty.

H_{4b}: The effects that the price discount presentation forms on consumers' perceived acquisition value are influenced by the moderating effects of the degree of price discount calculation difficulty.

H_{4c}: The effects that the price discount presentation forms on consumers' purchase intentions are influenced by the moderating effects of the degree of price discount calculation difficulty.

In the above hypotheses, specifically with regard to the price discount that is difficult to calculate (e.g., 25 percent off), the dollar-based price discount promotion will lead consumers to generate higher perceived transaction value, higher perceived acquisition value, and higher purchase intentions than the percentage-based price discount form. As for the price discount that is easy to calculate (e.g., 50 percent off), the differences that these two price-discount presentation forms on consumers' perceived transaction value, perceived acquisition value, and purchase intentions will disappear.

4. 3. 4 **Price Level of the Promotional Products**

The discussion above shows that the percentage-based price discounts and the dollar-based price discounts affect consumers' perceived acquisition value and perceived transaction value by influencing the accuracy of the price discount

calculations (Kim and Kramer, 2006; Estelami, 2003; Morwitz et al, 1998), and later affecting consumers' purchase intentions. The difficulty of the calculation leads consumers to discount the price discounts when dealing with the calculation of the percentage-based price discounts, which in turn leads to that consumers' perceived acquisition value and perceived transaction value are lower than that when dealing with the dollar-based price discounts. There is an implied premise that the final perceived savings consumers feel towards the price discount is based on dollars rather than percentage. Therefore, the discounting towards percentage-based price discounts and the original price of the promotional products are necessarily positive correlated. The higher the original price of the promotional products are, the larger the discounting towards the percentage-based deals, which in turn leads to the lower consumers' perceived value elicited by the percentage-based deals compared to that elicited by the dollar-based deals. Therefore, we derive that the influencing difference of price discount presentation forms towards consumers' perceived value is affected by the moderating effects of the promotional products' price level. As with the high-priced promotional products, the perceived value elicited by the percentage-based deals is lower than that elicited by the dollar-based deals. As to the low-priced promotional products, the difference of the perceived value between these two price discount presentations forms will become smaller, or even become insignificant. Thus, we propose the following research hypotheses:

H_{5a}: The effect of price discount presentation forms on consumers' perceived transaction value is influenced by the moderating effects of the price level of promotional products.

H_{5b}: The effect of price discount presentation forms on consumers' perceived acquisition value is influenced by the moderating effects of the price level of promotional products.

H_{5c}: The effect of price discount presentation forms on consumers' purchase intentions is influenced by the moderating effects of the price level of promotional products.

Specifically, for high-priced promotional products, the dollar-based price discount presentation forms will elicit higher perceived transaction value, higher perceived acquisition value, and higher purchase intentions than the percentage-based price discount presentation forms. As for low-priced promotional products, the differences between these two price discount presentation forms with regard to consumers' perceived transaction value, perceived acquisition value and the purchase intentions will disappear.

To synthesize the hypotheses proposed earlier in this chapter, the theoretical model of this paper is illustrated in Figure4.1.

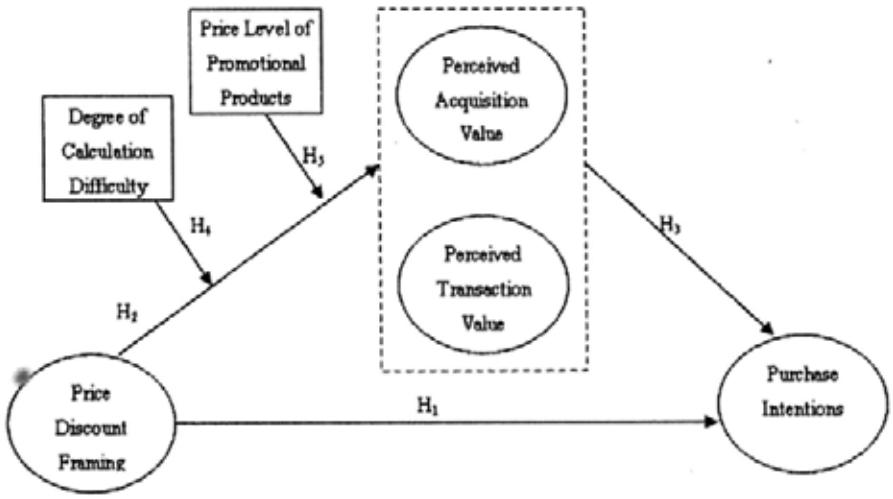


Figure 4.1 The Model of Price Discount Framing Effects

4.4 Study1

The main purpose of this study is to validate all the hypotheses made (i.e., H_1, H_{2a}, H_{2b}, H_{3a}, H_{3b}, H_{3c}, H_{4a}, H_{4b}, and H_{4c}) by experimentally manipulating the price discount presentation forms (percentage-based vs. dollar-based) and the degrees of difficulty in calculating the price discounts (difficult to calculate and easy to calculate) and investigating the changes in perceived value and purchase intentions.

4. 4. 1 Research Methodology and Experimental Design

This experiment used the two by two factorial design: 2 (price discount presentations forms: percentage-based and dollar-based) × 2 [degree of calculation difficulty of price discounts: difficult (25 percent) and easy (50 percent)], obtaining a total of four experimental groups. The subjects were 145 undergraduate students of a business school of a major university in Hong Kong, who were enrolled in the course of marketing management. The participants were randomly assigned to one of the four experimental groups. They were asked to read a specific experimental scenario and then answer the questions based on the experimental scenario. The scenarios used in the experiment are as follows.

Imagine that you are buying a coat at a department store. You find a coat that meets your quality requirement (including materials, style, etc.). The price tag of this coat indicates the following: Original price RMB476, now 25% off [now RMB119 off].

Imagine that you are buying a coat at a department store. You find a coat that meets your quality requirement (including materials, style, etc.). The price

tag of this coat indicates the following: Original price RMB476, now 50% off [now RMB238 off].

The main reason for selecting the coat at the same price level as our experimental stimulus is that undergraduates in Hong Kong are more familiar with these products, and they have enough shopping experience. Considering that the price and the quality satisfaction will also affect the consumers' purchase intentions, the experimental scenarios specifically control the consumer satisfaction for the quality at a certain level. The manipulation check proved to be successful in controlling the quality satisfaction: experimental groups of different discount forms showed no significant difference in quality satisfaction (percentage-based discount group $M_1 = 4.79$; dollar-based discount group $M_2 = 4.82$, $p > 0.10$); experimental groups of different degrees of calculation difficulty also showed no significant difference in quality satisfaction (difficult calculation group $M_1 = 4.87$; easy calculation group $M_2 = 4.75$, $p > 0.10$).

Measures of the dependent variables involve the following: to measure the *purchase intentions* using the item "I would consider buying this coat," to measure *perceived acquisition value* using the item" for this price-offer, this coat is of a good value for money," to measure *perceived transaction value* using the item "people who purchase this coat using this price-offer would save a lot of money," to measure *quality satisfaction* using the item "I feel satisfied with the quality of this coat." Subjects were asked to rate these measures on the 7-point Likert-scale based on their true feelings, where "1=Strongly Disagree and 7=Strongly Agree."

4. 4. 2 Analysis of Variance towards Main Effects of Price Discount Framing

We first analyzed the effects of the price discount presentation forms on consumers' perceived value and their purchase intentions. We chose two groups with a 25 percent price discount rate for our analysis, comparing both of the effects that the percentage-based price discount and the dollar-based discount form on the perceived value and the purchase intentions. ANOVA analysis was conducted, considering perceived acquisition value, perceived transaction value, and purchase intentions as the three dependent variables and discount presentation form as the independent variable. The results shown in Table 4.1 indicate that price discount presentation forms significantly affect all the three dependent variables.

Table 4.1 Results of ANOVA Analysis towards the Main Effects of Price Discount Presentation Forms

Dependent Variable	Source	Type III Sum of Squares	df	Mean Square	F	Sig
Purchase Intentions	Discount Framing	11.53	1	11.53	6.89	.01
	Error	110.53	66	1.68		
Perceived Acquisition Value	Discount Framing	19.06	1	19.06	13.50	.00
	Error	93.18	66	1.41		
Perceived Transaction Value	Discount Framing	21.24	1	21.24	8.88	.00
	Error	157.88	66	2.39		

According to the statistical analysis results, the differences in consumers' perceived value and purchase intentions are significantly different across the different price discount presentation forms. Specifically:

As for the purchase intentions, the dollar-based presentation form (M_1 = 6.03) generated higher purchase intentions than the percentage-based presentation form (M_2 = 5.21) ($P<0.05$), thus confirming hypothesis H_1.

As for the perceived transaction value, the dollar-based presentation form (M_1 = 4.77) generated higher perceived transaction value than the percentage-based form (M_2 = 3.65) ($P<0.01$), thus confirming hypothesis H_{2a}.

As for the perceived acquisition value, the dollar-based presentation form (M_1 = 5.29) generated higher perceived acquisition value than the percentage-based presentation form (M_2 = 4.24) ($P<0.01$), thus confirming hypothesis H_{2b}.

4. 4. 3 **Regression Analysis of Mediation**

To further investigate the effects of price discount presentation forms on the perceived transaction value, and to examine the mediating effects of perceived value (including perceived acquisition value and perceived transaction value) in the relationship between price discount presentation forms and consumers' purchase intentions, according to Baron and Kenny (1986)'s procedure, we transformed the classified variable "price discount presentation forms" into the dummy variables, where "0" represents the percentage-based discount form, and "1" represents the dollar-based discount form, and then we conducted the following regression analyses.

First, separate regression analyses were run by setting the perceived acquisition value and the perceived transaction value as the dependent variables, and the dummy variable of price discount presentation form as the independent variable. Second, regression analysis was run by taking purchase intentions as the

dependent variable and taking price discount presentation forms as the independent variables. Finally, regression analysis was run by taking purchase intentions as the dependent variable, and taking price discount presentation forms, perceived acquisition value and perceived transaction value as the independent variables. All the regression results are shown in Table 4.2.

Table 4.2 Testing the Mediating Effects of Perceived Value

Dependent Variable	Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	p-value
Perceived Acquisition Value ($R^2 = 0.17$)	1	(Constant)	4.24	.20		20.79	.000
		Discount Presentations	1.06	.29	.41	3.67	.000
Perceived Transaction Value ($R^2 = 0.12$)	1	(Constant)	3.65	.27		13.75	.000
		Discount Presentations	1.12	.38	.34	2.98	.004
Purchase Intentions (R^2 = 0.09 for model 1; R^2 = 0.50 for model 2)	1	(Constant)	5.21	.22		23.46	.000
		Discount Presentations	.82	.31	.31	2.62	.011
	2	(Constant)	2.21	.46		4.78	.000
		Discount Presentations	.03	.26	.01	.11	.914
		Perceived Acquisition Value	.51	.13	.49	4.06	.000
		Perceived Transaction Value	.23	.10	.27	2.34	.023

The results shown in Table 4.2 indicated that the price discount presentation forms positively affected the perceived acquisition value ($R^2 = 0.17$, $F_{1,66} = 13.50$, $p < 0.001$), perceived transaction value ($R^2 = 0.12$, $F_{1,66} = 8.88$, $p < 0.01$), and purchase intentions ($R^2 = 0.09$, $F_{1,66} = 6.898$, $p < 0.05$). The variance explained of purchase intentions increases significantly after including the perceived acquisition value and perceived transaction value in the regression model 2 ($\Delta R^2 = 0.40$, $F_{2,64} = 25.73$, $p < 0.01$). Both perceived acquisition value and

perceived transaction value positively affected purchasing intentions. The effect of perceived acquisition value on the purchase intentions (β=.49, t=4.06, p<.001) nearly doubles the effect of perceived transaction value on purchase intentions (β=.27, t=2.34, p<.05). Furthermore, as we expected, the price discount presentation forms have no significant effect on purchase intentions after including perceived transaction value and perceived acquisition value in the regression analysis as independent variables (β=.01, t=.11, p>.10).

To conclude results of the regression analyses above, we found: (1) perceived acquisition value positively affects consumers' purchase intentions, the hypothesis H_{3a} was confirmed; (2) perceived transaction value positively affects consumers' purchase intentions, the hypothesis H3b is confirmed; (3) perceived acquisition value and perceived transaction value are the full mediators in the effects of price discount presentation forms affecting consumers' purchase intentions, which confirmed the hypothesis H3c; and (4) the effect of perceived acquisition value on consumers' purchase intentions is stronger than that of perceived transaction value on consumers' purchase intentions, indicating that consumers make their purchase decisions by not only considering the perceived savings obtained from the price discount. Nevertheless, the effect of perceived acquisition value determined by the final price after price discount has a stronger influence on consumers' decision making.

4. 4. 4 Analyzing the Moderating Effects of the Degree of Price Discount Calculation Difficulty

Previous analyses on the two experimental groups at the 25 percent discount level compared and analyzed the main effects of the price discount

framing on consumers' purchase intentions and their underlying mechanisms. The following analyses, including the four experimental groups, identify the moderators affecting the effects of price discount framing on consumers' perceived value and purchase intentions to verify hypotheses H_{4a}, H_{4b}, and H_{4c}.

Taking perceived acquisition value, perceived transaction value, and purchase intentions as the dependent variables and price discount presentation forms as the independent variable, the results of the variance analyses indicate the interaction effect between price discount presentation forms and the calculation difficulty of the discount in affecting the three dependent variables above: for affecting purchase intentions ($F_{1,141}=6.17$, $p<0.05$); for affecting perceived acquisition value ($F_{1,141}=11.38$, $p<0.01$); and for perceived transaction value ($F_{1,140}=10.39$, $p<0.01$). Based on the degree of discount calculation difficulty, we further divided the samples into the difficult calculation group and the easy calculation group, and analyzed the effects of price discount presentation forms on purchase intentions, perceived acquisition value, and perceived transaction value within each group. The results of the statistical analysis show the following:

(1) As regards consumers' purchase intentions, in the difficult calculation group, the price discount presentation forms have a significant effect on consumers' purchase intentions. Specifically, consumers' purchase intentions ($M_1=6.03$) under the dollar-based deals are higher than those under the percentage-based deals ($M_2=5.21$), with the difference reaching the statistically significant level ($F_{1,66}=6.89$, $p<0.05$). However, in the easy calculation group, the price-discount forms have no significant effect on consumers' purchase intentions. Consumers' purchase intentions ($M_1=5.43$) under the dollar-based deals are the

same as those under the percentage-based deals (M_2=5.60), with the difference not reaching the statistically significant level ($F_{1,75}$=0.45, p>0.10).

(2) As regards consumers' perceived acquisition value, in the difficult calculation group, the price discount presentation forms significantly affect the perceived acquisition value. Specifically, consumers generate higher perceived acquisition value in the dollar-based deals (M_1=5.29) than that in the percentage-based deals (M_2=4.24), with the difference reaching the statistically significant level ($F_{1,66}$=13.50, p<0.001). However, in the easy calculation group, the price discount presentation forms have no significant effects on the perceived acquisition value. Specifically, consumers generate almost the same perceived acquisition value across the dollar-based deals (M_1=4.73) and percentage-based deals (M_2=4.95), with the difference not reaching the statistically significant level ($F_{1,75}$=0.78, p>0.10).

(3) As regards perceived transaction value, in the difficult calculation group, the price discount presentation forms have significant effects on the perceived transaction value. Specifically, consumers generate higher perceived transaction value under the dollar-based deals (M_1=4.77) than that under the percentage-based deals (M_2=3.65), with the difference reaching the statistically significant level ($F_{1,66}$=8.88, p<0.001). However, in the easy calculation group, price discount presentation forms have no significant effects on the perceived transaction value. Specifically, consumers generate almost the same perceived transaction value across the dollar-based deals (M_1=4.33) and percentage-based deals (M_2=4.75), with the difference not reaching the statistically significant level ($F_{1,75}$=1.96, p>0.10).

The results of the statistical analyses show that the effects of price discount presentation forms on consumers' perceived acquisition value, perceived transaction value, and purchase intentions are affected by the moderating effect of the degree of discount calculation difficulty. When dealing with the difficult calculation price discount, consumers generate higher perceived acquisition value, higher perceived transaction value, and higher purchase intentions under dollar-based deals than under percentage-based deals. When dealing with the easy calculation price discount, consumers' perceive that acquisition value, perceived transaction value, and purchase intentions are almost the same under dollar-based deals and percentage-based deals. These results confirm the research hypotheses H_{4a}, H_{4b}, and H_{4c}.

4.5 Study 2

The main purpose of this experiment is to manipulate experimentally the price level of the promotional items (low-priced vs. high-priced) and the price discount presentation forms (percentage-based discount vs. dollar-based discount) to investigate the effects of these two variables on perceived acquisition value, perceived transaction value, and purchase intentions to test hypotheses H_{5a}, H_{5b}, and H_{5c}.

4. 5. 1 Research Methodology and Experimental Design

This experiment employed the two by two factorial design: 2 (price discount presentations forms: percentage-based and dollar-based) × 2 (price of the promotional items: high-priced and low-priced). To save the sample size, a

between-subjects design was adopted for the price discount presentation forms, whereas a within-subjects design was adopted for the price level of promotional items. The experiment subjects were 54 undergraduate students of a business school of a major university in Beijing, who were enrolled in the course of marketing management. The participants were randomly assigned to the percentage-based group and the dollar-based group, with 27 subjects in each group. The participants experienced two specific experimental scenarios (high priced and low priced) and were asked to answer questions on the questionnaires after reading each scenario based on their feelings, respectively. As the experiment adopted a within-subjects design for the price level of promotional items, participants would be affected by the order of putting the scenarios in the questionnaire, confounding the experiment results. In this experiment, there were two (i.e., 2! =2) experimental orders. Having taken this factor into account, we adopted the counterbalancing design. Specifically, in the percentage-based group and the dollar-based group, respectively, the participants were further divided into two smaller groups. Each small group received only one of the experimental orders as the stimuli, as shown in Table 4.3.

Table 4.3 Counterbalancing of Scenario Orders in Study 2

		Experimental Sequence		
		Sequence 1 (High→Low)	Sequence2 (Low→High)	Total
Price Discount Framing	Percentage-based	14	13	27
	Dollar-based	14	13	27
	Total	28	26	54

The experimental scenarios used in the current study are illustrated below. To manipulate the price discount presentation forms and the price levels, the followings scenarios were employed, where the contents in the square brackets are the forms of the corresponding dollar-based discounts.

For the high-priced group:

Imagine that you are buying a coat at a department store. You find a coat that meets your quality requirement (including materials, style, etc.). The price tag of this coat indicates the following: Original price RMB476, now 25% off [Original price RMB 476, now RMB 119 off].

For the low-priced group:

Imagine that you are buying a coat at a department store. You find a coat that meets your quality requirement (including materials, style, etc.). The price tag of this coat indicates the following: Original price RMB76, now 25% off [Original price RMB 76, now RMB 19 off].

The main reason for selecting the coat as our experimental stimulus is that undergraduates are familiar with the products under this category, and they have enough shopping experience. Similar to the first experiment, the measures of the dependent variables also include the following: *purchase intention* was measured using the item "I would consider buying this coat," *perceived acquisition value* was measured using the item "For this price-offer, this coat is good value for money," *perceived transaction value* was measured using the item "People who purchase this coat using this price offer would save a lot of money," and *quality satisfaction* was measured using the item "I feel satisfied with the quality of this coat." With regard to all the measurement items, subjects were asked to assign scores using the 7-point Likert scale based on their true feelings after reading the scenario, where "1" means "strongly disagree" and "7" represents "strongly agree." Based on the first experiment, to check the manipulation of the price level, we added an item testing how consumers feel about the price, that is, "I feel the original price

of this coat is" using the 7-point Likert scale, where "1" represents "very low" and "7" represents "very high."

4. 5. 2 Manipulation Check

Considering that consumers' satisfaction in price and quality may affect their purchase intentions, the current experiment especially controlled the consumers' satisfaction in quality at a satisfactory level in the experimental scenarios. The manipulation check shows the successful control over quality satisfaction. There was no significant difference across different price discount forms as regards quality satisfaction (percentage-based discount group $M_1 = 4.70$; dollar-based discount group $M_2 = 4.46$, $p > 0.10$). The results of the manipulation check over the perceived price levels show the perceived price level for the high-priced group $M_1 = 4.50$ and the perceived price level for the low-priced group $M_2 = 2.56$, with the mean difference reaching the statistically significant level ($p < .001$). Therefore, the manipulation check results indicate that the experimental manipulations for participants' perceived price levels towards promotional items are successful.

4. 5. 3 Examine the Interaction Effects between Price Discount Presentation Forms and Price levels of Promotional Products

To verify the moderating effects of the price level of price discount presentation forms on perceived value, we conducted variance analyses on the interaction effects with focus on two variables, i.e., price discount presentation forms and price levels of the promotional products, by taking the discount presentation forms and the price levels of promotional products as the two

independent variables and perceived acquisition value, perceived transaction value, and purchase intentions as the three dependent variables. As the price level manipulation adopted a within-group design, we used the ANOVA with repeated measures. The ANOVA results show that the interaction effects of price discount presentation forms and price levels of the promotional products on the three dependent variables reached statistically significant levels: for purchase intentions ($F_{1,52}$=4.01, p=0.05); for perceived acquisition value ($F_{1,52}$=4.93, p<.05); and for perceived transaction value ($F_{1,52}$=3.10, p<.10). Comparing further the effects of price discount presentation forms on consumers' purchase intentions, perceived transaction value, and perceived acquisition value under the context of a high-priced situation and a low-priced situation, the statistical analyses results obtained are as follows:

(1) Under the high-priced condition, consumers' purchase intentions are higher for dollar-based deals (M_1 = 5.30) than those for percentage-based deals (M_2 = 4.41), with the difference reaching the statistically significant level ($F_{1,52}$=4.70, p<0.05). However, under the low-priced condition, price discount presentation forms have no significant effects on consumers' purchase intentions. Consumers' purchase intentions for the dollar-based deals (M_1 = 5.04) are slightly lower than those for the percentage-based deals (M_2= 5.44), with the difference not reaching the statistically significant level ($F_{1,52}$=0.56, p>.10).

(2) Under the high-priced condition, perceived acquisition value is higher for dollar-based deals (M_1 = 5.07) than that for percentage-based deals (M_2 = 4.30), with the difference reaching the statistically significant level ($F_{1,52}$=4.03, p=.05). However, under the low-priced condition, the price discount presentation forms do not have a significant effect on perceived acquisition value. Perceived

acquisition value for dollar-based deals (M_1 = 5.07) is lower than that for percentage-based deals (M_2= 5.48), with the difference not reaching the statistically significant level ($F_{1,52}$=0.65, p>.10).

(3) Under the high-priced condition, perceived transaction value is higher for dollar-based deals (M_1 = 4.33) than that for percentage-based deals (M_2 = 3.82), with the difference not reaching the statistically significant level ($F_{1,52}$=1.55, p>.10). Under the low-priced condition, perceived transaction value for dollar-based deals (M_1 = 3.82) is lower than that for percentage-based deals (M_2= 4.33), with the difference not reaching the statistically significant level as well ($F_{1,52}$=.84, p>.10).

The statistical analysis results show that the effects of price discount presentation forms on the perceived acquisition value, perceived transaction value, and purchase intentions are indeed influenced by the moderating effects of the price level of promotional products. When the promotional products are high-priced items, the dollar-based price discounts produce higher perceived acquisition value and higher purchase intentions than do percentage-based price discounts. However, when the promotional products are low-priced items, there is no significant difference between the dollar-based price discounts and the percentage-based price discounts with regard to the generated perceived acquisition value and purchase intentions. Accordingly, these results confirm the research hypotheses H_{5b} and H_{5c}.

As for the perceived transaction value, the interaction effect of discount presentation forms and price level of promotional products on the perceived transaction value is significant, verifying hypothesis H_{5a} in that the effect of price discount presentation forms on consumers' perceived transaction value is

moderated by the price level of the promotional products. We further identified the effects of price discount presentation forms on the perceived transaction value under the high-priced situation and the low-priced situation, respectively. Although we found that the dollar-based discount forms generated higher perceived transaction value than the percentage-based discount forms under the high-priced situation, the difference did not reach the statistically significant level. The reason may be due to the small number of experimental subjects or the adoption of the within-group design for the price levels, leading consumers to receive the disordered internal reference price (IRP). Future research can make some improvements on the experiments in terms of these respects, thus providing stronger empirical support for hypothesis H_{5a}.

As the stimuli for manipulating the high price used in this experiment is the same as in the first study, both experiments used the coats with the same original price of RMB476. Moreover, both experiments made the same control over the quality level, enabling us to make the comparison analysis between the two related experimental results directly. The comparison analysis results show that the conclusions for both the Hong Kong undergraduates and the Beijing undergraduates are the same: for the coat whose original price is RMB476, the dollar-based price-discount form "now RMB119 off" generates higher perceived value and higher purchase intentions than the percentage-based price-discount form "now 25 percent off." This comparison result indicates that the experimental research results claimed in this chapter show good external validation.

The analysis results also indicate another trend: "dollar-based deals have better sales promotion effects than percentage-based discount in promoting high-priced items," However, another trend "percentage-based deals have better

sales promotion effects than dollar-based discount in promoting low-priced items" is also worthy of our attention, although its effect did not reach the statistically significant level. Especially this trend may be manifested when the price level of the promotional item is sufficiently low. Whether this trend is only a random error without statistical significance or reflects the specific effects and trends can be further verified or denied by future relevant examinations.

4.6 Conclusion and Discussion

This chapter examined the effects of dollar-based versus percentage-based price-discount form on consumers' purchase intentions and their underlying mechanisms. It also discussed two boundary conditions for these effects: the degree of price discount calculation difficulty and the price level of the promotional products. The research results suggest that in general, the dollar-based price discount generates higher purchase intentions and perceived value than the percentage-based price discount. However, this relationship is affected by the moderating effects of the degree of price discount calculation difficulty and the price level of promotional products. Especially for easy-to-calculate price discounts or low-priced promotional products, the difference between the two discount presentation forms in affecting the sales promotional effectiveness will disappear. The perceived value is the full mediator in the effects of price discount presentation forms on consumers' purchase intentions. That is, consumers will base their decisions on purchase intentions and behaviors on their own cognitions of the perceived transaction value and the perceived acquisition value elicited by the price discounts. These research findings can fill the research gap in the current research literature.

The research findings in this chapter can guide marketers in designing price discount promotion schemes. In facilitating consumers' information processing for the price discount information that is difficult to calculate (including the original prices and the discount levels that are relatively difficult to calculate), using the dollar-based price discount forms can produce higher consumers' perceived value and purchase intentions, thus generating better promotional effects and more sales. For the price discount promotion of high-priced products, the dollar-based price discount forms can produce better sales promotional effectiveness than do the percentage-based price discount forms. The adage "simplicity is the gold" is the insightful inspiration that this chapter's conclusion can give marketers. When designing sales promotion schemes, marketers should follow the principle and facilitate consumers' cognition and information processing in the promotional information rather than make the schemes too complex that consumers find handling the promotional information difficult.

Under the information processing framework, this chapter focused on the effects of the different calculation algorithms used in processing price discount information on the accuracy of consumers' information processing. The present study derived the related research hypotheses and verified them through experiments.

As regards consumers' daily purchase behaviors, the purchase environment (e.g., is there a time limit on the sales promotion), the novelty of price discount framing and other relevant factors affect the depth of consumers' processing of the price discount promotion information, thus influencing the accuracy of the price discount information processing as well as the relative

promotional effectiveness of different price discount forms. Taking the consumers in the practical purchase environment as the research subjects, future research can further investigate the relative promotional effectiveness of the different price discount presentation forms by comprehensively considering the price discount presentation forms, the difficulty of price discount calculation, the novelty of the price discount framing, and the purchase environment. Such research efforts as those exerted in the present study can provide a more theoretical guidance for directing marketing practitioners in designing better price discount promotion schemes for consumers.

CHAPTER 5: PRICE DISCOUNT DEPTH AND IT'S EFFECT ON CONSUMER RESPONSES

There is a stream of models that accounts for how consumers respond to price discount promotions. These models mainly focus on the central role of consumers' perceived value in their response to price discount promotions, thus providing a good basis for us to build an integrated model to explain and predict how consumers respond to price discounts promotions. Our research on the effects of price discount framing in the previous chapter is under the framework of these models. In the present chapter, we review the relevant representative models and develop an integrated model that considers both perceived value and anticipated regret.

5.1 Theoretical Models Depicting Consumers' Response to Price Discounts

As price discount promotions directly reduce the final price consumers have to pay for the promotional product as well as affect consumers' quality perception of the promotional product, models that establish a relationship among price, quality, perceived value, purchase intention, and post-purchase behaviors are relevant in building a theoretical model that accounts for consumers' response to price discount promotions.

In their pioneering work, Monroe and Krishnan (1985) investigated the relationships among objective price, perception of price, perceived quality, perceived sacrifice, perceived value, and willingness to pay. They proposed that perception of price rather than objective price positively affects consumers' perceived quality and perceived sacrifice through the mediator of price perception. They also posited that perceived quality positively affects perceived value,

whereas perceived sacrifice negatively affects perceived value. Consumers' willingness to buy a product is directly determined by their perceived value of the product. Their model is presented in Figure 5.1.

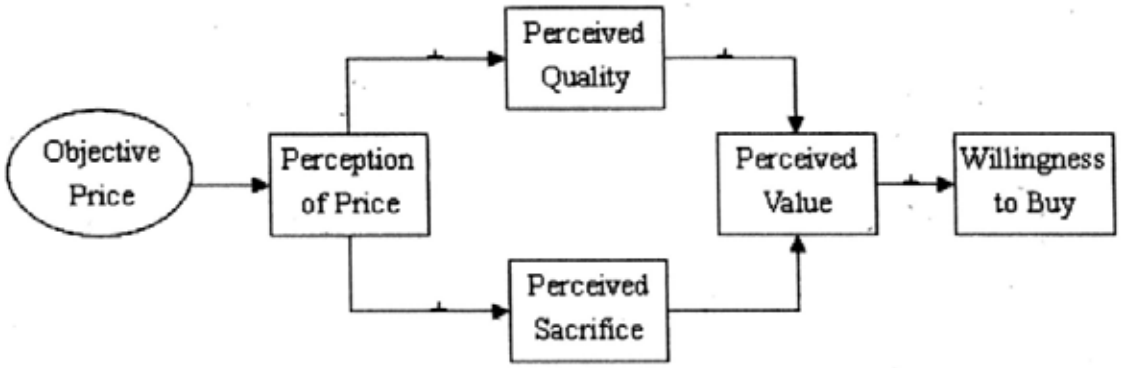


Figure 5.1 Price-value Model Proposed by Monroe and Krishnan (1985)

Based on the model proposed by Monroe and Krishnan (1985), Zeithaml (1988) defined the concepts of price, quality, and value from the consumers' perspective and proposed a model that relates these concepts from the means-end perspective, as shown in Figure 5.2. The means-end perspective holds that consumer knowledge is hierarchically organized and spans different levels of abstraction (Kerin, Jain and Howard, 1992). Levels of abstraction refer to the extent of inclusion of possible meanings about an object. For example, consumers may notice the price discounts (the lower level of abstraction) and then infer the perceived quality and perceived value (the higher level of abstraction). Price discounts are considered the "means" through which consumers are able to achieve a desired "end," such as a higher perceived value.

Dodds, Monroe, and Grewal (1991) extended the basic conceptualization of the price–product evaluation relationship by including the extrinsic attributes of products in a retail store, that is, brand name and store name. The authors empirically tested the effects of these extrinsic cues on perceptions of quality, value, and consumers' willingness to buy. They also built a product evaluation

model, as shown in Figure 5.3. They argued that price, brand name, and store name are three extrinsic attributes that influence consumers' perceptions of product quality and value. In turn, these extrinsic attributes influence willingness to buy in retail store settings. Their findings confirmed and extended the means-end model proposed by Zeithaml (1988).

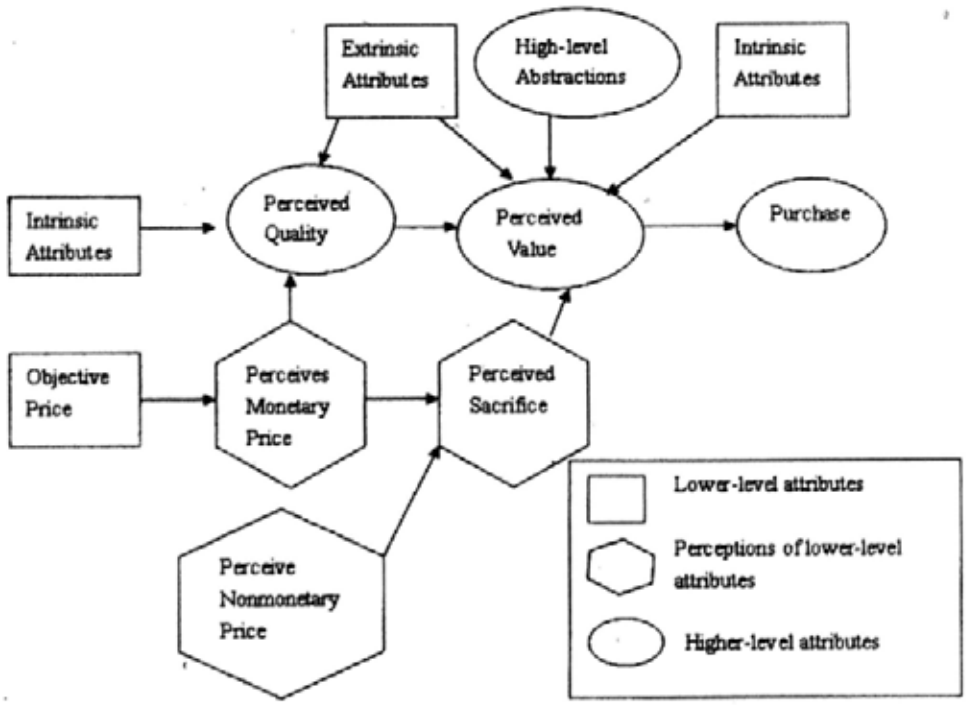


Figure 5.2 Means-end Model Proposed by Zeithaml (1988)

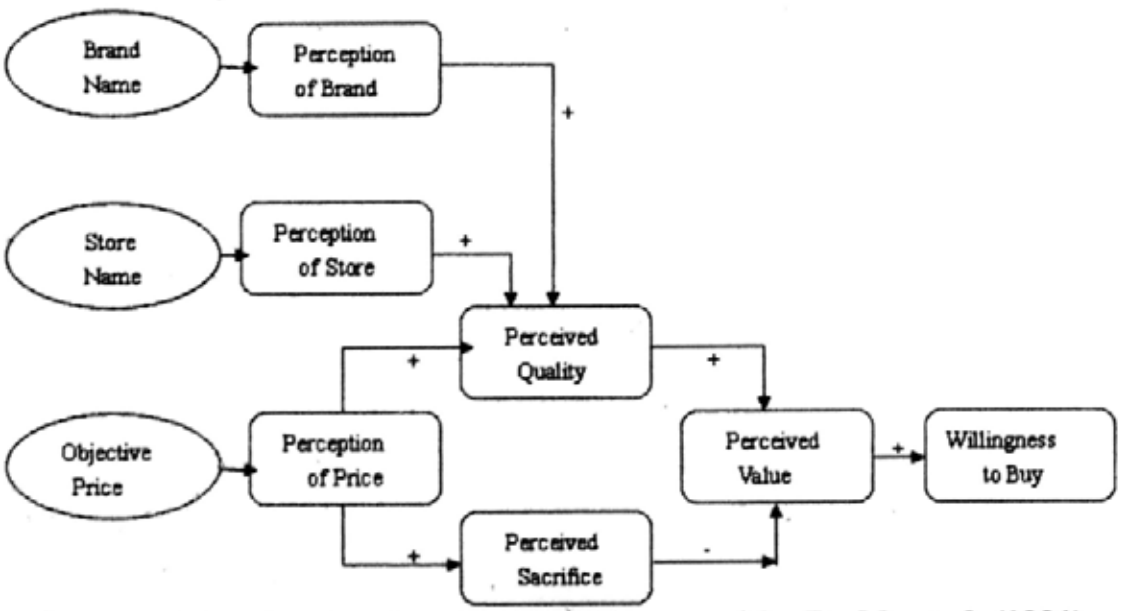


Figure 5.3 Product Evaluation Model Proposed by Dodds et al. (1991)

Kerin, Jain, and Howard (1992) examined the effect of store shopping experience on consumer price, quality, and value perceptions in retail settings. They also developed a model, as shown in Figure 5.4, by employing the means-end model proposed by Zeithaml (1988). The authors conducted a field study to test the model and found that perceived store shopping experience is relatively more important than merchandise price or quality perceptions in explaining consumers' value perceptions of a retail store. Their findings confirmed the existence of non-product-related intrinsic attributes (e.g., consumers' perceived store shopping experience), which may affect perceived value (e.g., consumers' perceptions of store value).

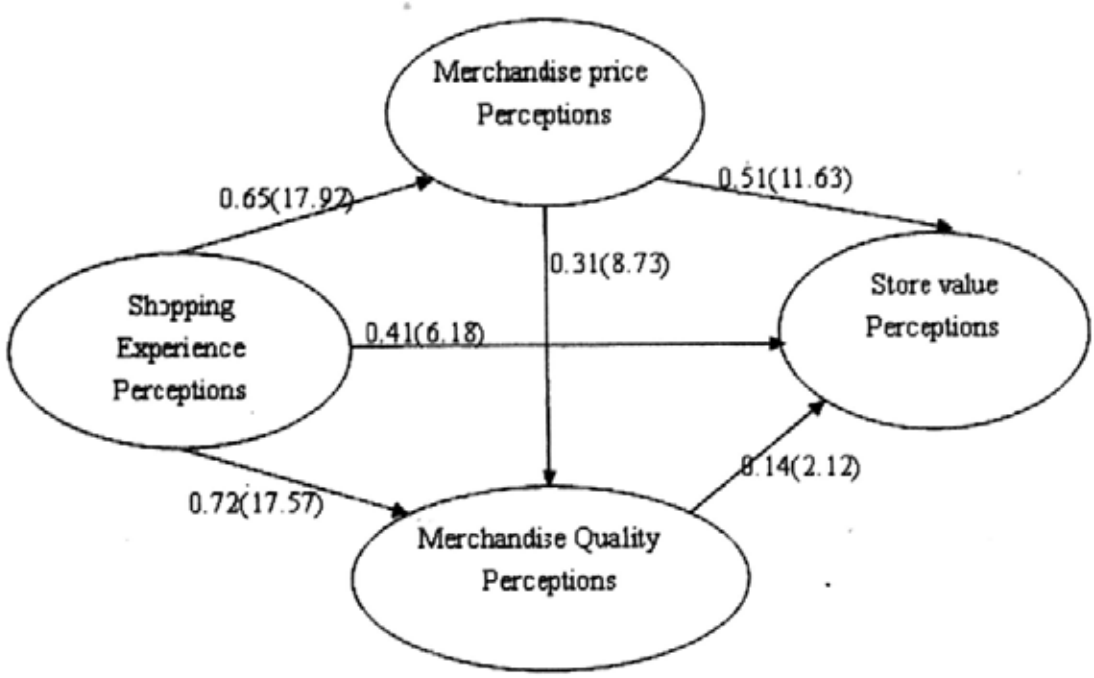


Figure 5.4 Model Developed by Kerin, Jain, and Howard (1992)

Based on the product evaluation model proposed by Dodds, Monroe, and Grewal (1991), Grewal, Krishnan, Baker, and Borin (1998) developed and empirically tested a conceptual model of the effects of store name, brand names,

and price discounts on consumers' evaluation process and purchase intentions, as shown in Figure 5.5. The authors found the following results: store name affects perceived store image; brand name affects perceived brand quality and consumers' internal reference price (IRP); price discounts affect IRP and perceived value; perceived brand quality directly affects perceived value and indirectly affects perceived value through the mediator of IRP; and consumers' perceived value and perceived store image directly affect their purchase intentions. They also found that high-knowledge consumers are mainly influenced by brand name, whereas low-knowledge consumers are more influenced by price discount promotions.

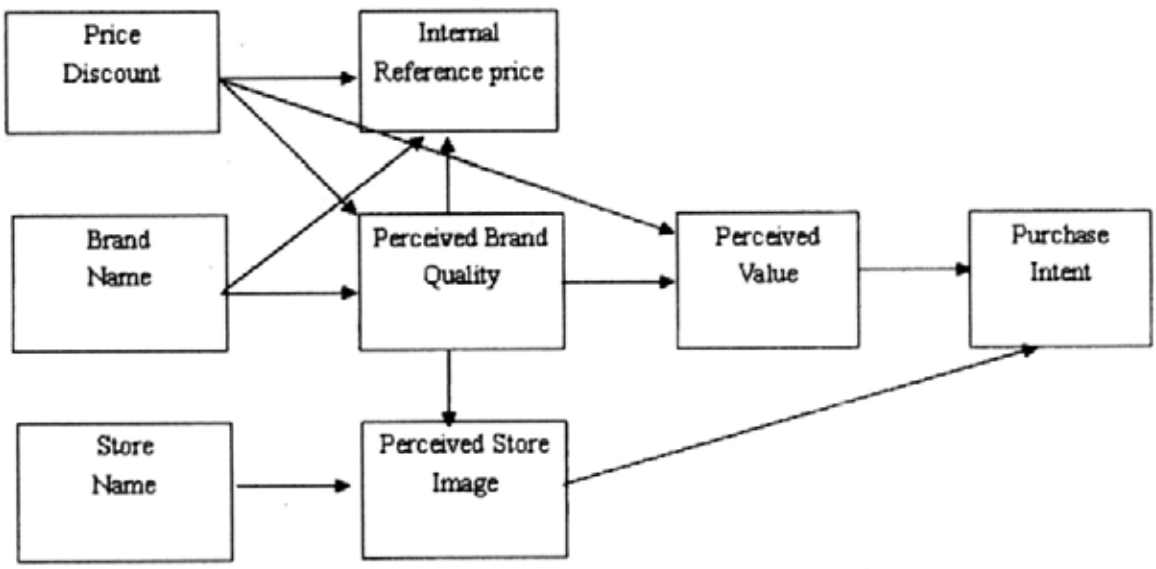


Figure 5.5 Theoretical Model Proposed by Grewal, Krishnan, et al. (1998)

Grewal, Monroe, and Krishnan (1998) extended the prior price-value models within the context of price comparison advertising by examining the effects of advertised selling price and reference price on consumers' IRPs, perceived quality, acquisition value, transaction value, and purchase and search intentions. The authors developed and empirically confirmed a model as shown in

Figure 5.6. The buyers' IRPs are influenced by both advertised selling and reference prices as well as the buyers' perception of the product's quality. The effect of advertised selling price on buyers' acquisition value is mediated by their perceptions of transaction value. The effect of perceived transaction value on buyers' behavioral intentions is mediated by their acquisition value perceptions.

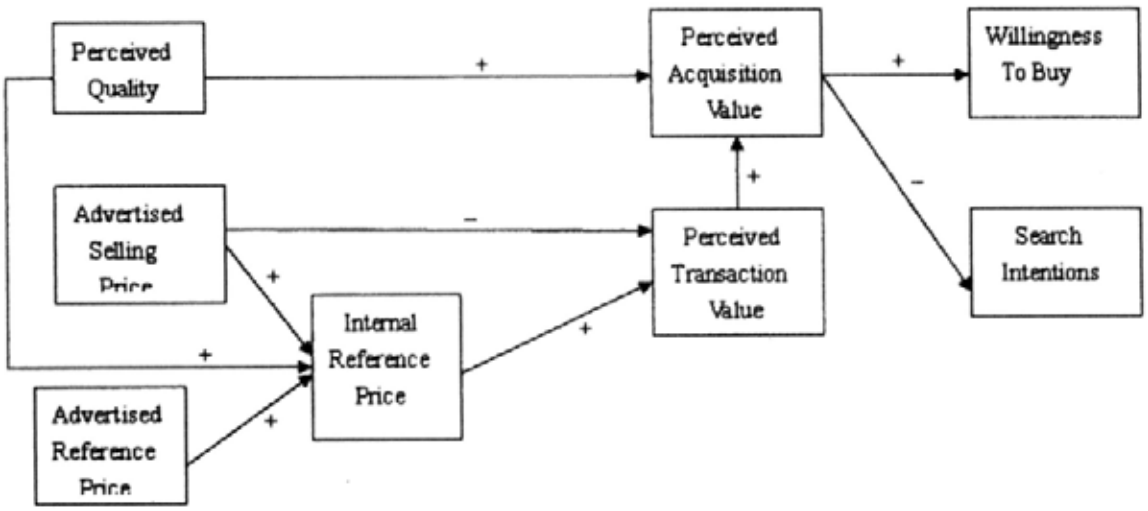


Figure 5.6 Model Suggested by Grewal, Monroe and Krishnan (1998)

Based on the previous means-end models, Campo and Yagüe (2007) built a model to explain the effects of price discounts on tourists' satisfaction and loyalty, as shown in Figure 5.7. They empirically tested this model and found that price discount negatively affects perceived price, whereas the latter positively affects perceived quality, which in turn positively affects tourists' satisfaction and loyalty.

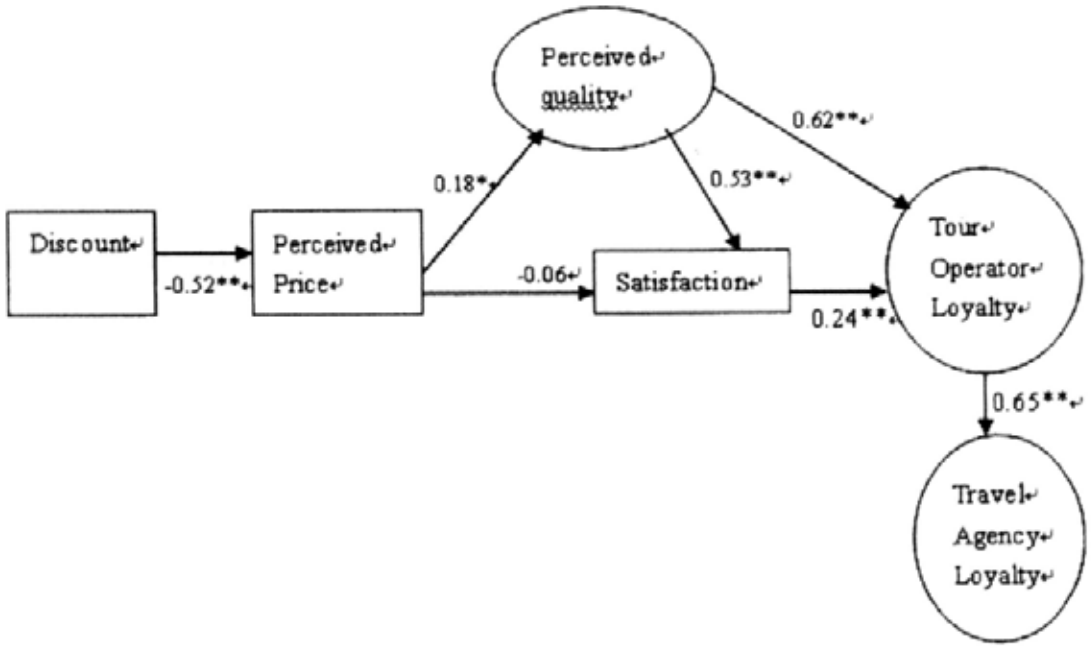


Figure 5.7 Model Suggested by Campo and Yagüe (2007)

5.2 Development of a Joint Model Depicting Consumers' Response to Price Discounts

Based on previous means-end models that account for how extrinsic and intrinsic cues affect consumers' perceptions, evaluations, purchase intentions, and other behavioral responses under marketing settings, we can develop an integrative model to account for how consumers respond to price-discount promotions. In this chapter, we focus on the effects of price discount depth. Without any specific notification, the term "price discount" and "perceived discount" in the following contents of this chapter denote "price discount depth" and "perceived price discount depth" respectively.

Jacoby and Olson (1977) described the response process of consumers to price as an S-O-R process, where S stands for stimulus variables denoting the true price and other input variables, O stands for organismic variables denote the information processing of consumers, and R stands for response variables

denoting consumers' behavioral response. Beeri and Martin Santana (1999) suggested that the best way to appraise how individuals respond to advertising or sales promotions is under the Cognition-Affection-Conation framework.

In the present study, we view price discount promotions as stimuli. Thus, we propose that they directly affect consumers' perceptions of price and quality, which in turn affect perceived value and purchase intentions. Following this logic, before building up the integrative model, we need to derive hypotheses on the relationships among price discounts, price perceptions, quality perceptions, perceived value, and purchase intentions from the literature review findings and some well-known theories.

5. 2. 1 The Effects of Price Discounts on Consumers' Perceptions

According to Olson and Jacoby (1977), external stimuli do not directly affect behavior but only exert indirect effects. Stimuli must be perceived first and then interpreted before they affect human decision processes and behavior. Researchers define perceived discount as the discount encoded through the process of subjective interpretation and assignment of meaning to objective price discounts. Perceived discount, when manifested, describes and explains consumers' response to price promotions (Monroe 1984; Olson and Jacoby, 1977; Zeithaml, 1984). Therefore, price discounts should be perceived first before they can influence consumers' behavioral response. The phenomenon of discounting of discounts, which means perceiving that discounts are lower than advertised, plays an important role in the process of how consumers perceive price discounts (e.g., Mobley, Bearden and Teel, 1988; Urbany, Bearden and Weilbaker, 1988; Gupta and Cooper, 1992). Gupta and Cooper (1992) claimed that the discounting

of discounts increases with the increase in advertised discounts. Consistent with these findings, we propose hypothesis H_1:

H_1: Price discount affects perceived discounts in a convex curvilinear way.

Price discounts directly reduce the final price that consumers have to pay for a product or service. Jacoby and Olson (1977) distinguished between objective price (i.e., the actual price of a product) and perceived price (i.e., the price consumers encode in their minds). Zeithaml (1988) defined perceived price as what is given up or sacrificed to obtain a product. Following this logic, consumers' perceived price will be affected by perceived discounts. Specifically, when consumers perceive more price discounts, they will perceive the price of the product or service to be lower. Campo and Yagüe (2007) also found that price discounts negatively affect perceived price. Dodds, Monroe, and Grewal (1991) suggested that perceived price positively affects what they call perceived sacrifice. Moreover, the concept of perceived sacrifice rather than perceived price directly comes into the consumers' evaluation process because perceived value is conceptualized as the tradeoff between perceived quality and perceived sacrifice. To simplify the question, we are concerned about the direct relationship between perceived discount and perceived sacrifice with the missing mediating effect of perceived price. We also argue that consumers' perceived price discount directly reduces perceived price and perceived sacrifice. Accordingly, we propose hypothesis H_2:

H_2: Consumers' perceived price discounts negatively affect the perceived sacrifice.

According to the means-end model proposed by Zeithaml (1988), we can take price discount promotion as an extrinsic cue that consumers employ to form

a higher level of abstraction, that is, perceived quality. According to the review by Zeithaml (1988), perceived quality can be defined as the consumers' judgment of a product's overall excellence or superiority. Therefore, perceived price discounts can affect consumers' perceived quality. People may perceive that only the goods that are difficult to sell implement price discount promotions and that the reason for their poor selling status is due to their poor quality. Grewal, Krishnan, Baker, and Borin (1998) also hypothesized that price discounts negatively affect perceived quality; nevertheless this was not confirmed in their empirical test. In the present thesis, we hold that perceived price discounts negatively affect perceived quality, and we test this finding empirically. Hence, we propose hypothesis H_3:

H_3: Consumers' perceived price discounts negatively affect perceived quality.

5. 2. 2 The Effects of Consumers' Perceptions of Price and Quality on Perceived Value

Zeithaml (1988) defined perceived value as "the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given." Perceived value can be enhanced either by increasing benefits or by reducing costs or perceived sacrifice (Dodds et al., 1991). We take perceived quality as one indicator of benefits and perceived sacrifice as one indicator of cost. Thus, we can deduce that perceived value will increase as perceived quality increases, whereas it will decrease as perceived sacrifice increases. The findings of previous researchers have confirmed this conjecture (e.g., Monroe and

Krishnan, 1985; Zeithaml, 1988; Dodds, Monroe and Grewal, 1991; Kerin, Jain, and Howard, 1992).

Under the context of price discount promotions, we argue that consumers' perceived discounts affect their perceived value of the product under promotion through the mediating effects of perceived quality and perceived sacrifice; that is, perceived quality positively affects perceived value, whereas perceived sacrifice negatively affects perceived value. Thaler (1985) suggested that perceived value incorporates transaction value (i.e., utility derived from the net benefits compared with sacrifice) and acquisition value (i.e., utility derived from the transaction after comparing the sacrifice relative to some reference points). Acquisition value can be captured by perceived quality and perceived sacrifice; however, transaction value is still not accounted for in it. Price discount promotion can provide transaction value because it provides consumers with the opportunity of relative savings considering the original price as the reference price. The higher the perceived price discount, the higher the perceived relative savings will be; hence, the more perceived value will be produced. Therefore, we predict that perceived price discounts directly affect perceived value after controlling for the mediating effects of perceived sacrifice and perceived quality. Therefore, we propose hypotheses H_4, H_5, and H_6:

H_4: Consumers' perceived quality positively affects perceived value.

H_5: Consumers' perceived sacrifice negatively affects perceived value.

H_6: Consumers perceived discount positively affects perceived value after controlling for the mediating effects of perceived quality and perceived sacrifice.

5. 2. 3 **Effects of Consumers' Perceived Value on Purchase Intentions**

Purchase intention describes the readiness of consumers to purchase a product or service. Under the Cognition-Affection-Conation framework (Beeri and Martin Santana, 1999), consumers base their purchase decisions on their cognitive and affective evaluation of the item under consideration. Consumers are more likely to purchase the item if they value it. The positive effects of perceived value on purchase intention (or willingness to buy) have been widely examined and confirmed by previous researchers (e.g., Monroe and Krishnan, 1985; Dodds, Monroe and Grewal, 1991; Grewal, Krishnan, Baker and Borin, 1998; Grewal, Monroe and Krishnan, 1998). In the present thesis, we argue that consumers are more likely to purchase the product or service under promotion if they have more perceived value under the price discount promotions. Thus, H_7 reads as follows:

H_7: Consumers' perceived value positively affects purchase intention.

5. 2. 4 The Role of Anticipated Regret

Human behaviors are generally directed by the pursuit of their goals. As the well-known basic hedonic metaphor claims, people are motivated to approach pleasure and to avoid pain. Higgins (1997, 1998) extended the hedonic principle by allowing for distinct self regulatory systems with respect to fundamentally different human needs, and proposed the regulatory focus theory, which posits the existence of distinct regulatory systems that are concerned with acquiring either nurturance or security through goal attainment. According to the regulatory focus theory, individuals' self-regulation in relation to their hopes and aspirations satisfies nurturance needs where the goal is accomplishment and the regulatory focus is promotion, and individuals' self-regulation in relation to their duties and obligations satisfies security needs where the goal is safety and the regulatory

focus is prevention. Zeelenberg, Beattie, Van der Pligt, and De Vries (1996) also argued that human tendencies to avoid negative post-decisional feelings or emotions such as regret, disappointment, and self recrimination, along with the effort to strive for positive feelings and emotions such as rejoicing, elation and pride are assumed to be important determinants of individual decision making. Taking regret regulation as one of the human self regulation systems with prevention focus, researchers proposed the theory of regret regulation, which holds that consumers are regret averse and they actively try to minimize any potential for future regret (Zeelenberg and Pieters, 2006; Pieters and Zeelenberg, 2007). Therefore, human decisions and behaviors should be affected by anticipated regret through the so-called regret-minimizing regulation system.

Following the logic above, when consumers confront price discount promotions and make purchase decisions, their self-regulation systems should drive them to approach pleasure and avoid pain by maximizing the overall perceived value stemming from the price discount promotions. Similarly, their self-regulation systems should protect them by minimizing any possible negative consequence, including possible negative emotions stemming from missing the price discount promotions. One of the most salient negative consequences from the price discount promotion is the consumers' anticipated regret; that is, consumers may expect how regretful they will be in the future if they do not purchase the item under the price discount promotions and find that they have missed a good chance of purchase. This conjecture is consistent with Pieters and Zeelenberg's (2007) argument that "regret can stem from decisions to act (buy the item under price discounts) and from decisions not to act (not buy the item under price discounts)." Simonson (1992) suggested that anticipated regret affects

consumers' purchase behaviors under the price promotion setting. Therefore, we propose that consumers' purchase behaviors will be jointly guided by both the perceived value stemming from grasping the price discounts and the anticipated regret stemming from missing the good purchase chance. Derived from the theory of regret regulation, consumers are regret averse, and they try to minimize the anticipated regret of not purchasing under the price discount promotions when doing purchase decisions. Therefore, the anticipated regret of not purchasing the item under price discount promotions strengthens their purchasing intention. Hence, we propose hypotheses H_8:

H_8: Consumers' anticipated regret positively affects purchase intention.

According to the suggestion by Pieters and Zeelenberg (2007), anticipated regret is experienced when decisions are difficult and important and when the decision maker expects to learn the outcomes of both the chosen and rejected options quickly. One major characteristic of price discount promotions and other sales promotions is the temporality, which means that decision makers can quickly get to know the outcomes of both grasping and missing the current price discount promotions. As the perceived price discount increases, the possible net benefits stemming from grasping the chance and the possible emotional losses stemming from missing the chance should both increase, thus increasing the overall importance and difficulty of consumers' making decisions regarding whether to grasp this purchase chance or not. Thus, we propose the following hypothesis H_9:

H_9: Consumers' perceived price discount positively affects anticipated regret.

Under the context of price discount promotion, anticipated regret is essentially a cognitive emotion that consumers may experience if they decided not to purchase the item under promotion. Therefore, according to the Cognitive-Affective-Behavioral framework, anticipated regret can be considered an indicator representing consumers' affective reaction stemming from their cognitive information processing of the price discount promotion. As the most important concept in depicting consumers' evaluation of price discount promotion, perceived value directly determines the consequence of the alternative decision (i.e., not to purchase the item under the price discount promotion). In turn, perceived value influences the magnitude of the possible negative emotion triggered by missing an opportunity. Therefore, as perceived value increases, the negative consequence of not purchasing will increase. This in turn leads to a larger magnitude of the cognitive negative emotion (i.e., anticipated negative emotion after the decision), which includes anticipated regret. Hence, we argue that perceived value positively affects consumers' anticipated regret. Consequently, we propose hypothesis H_{10}:

H_{10}: Consumers' perceived value positively affects their anticipated regret.

5. 2. 5 The Joint Model Including both Perceived Value and Anticipated Regret

As indicated in the literature review, there is still a need for empirical studies describing the overall process of consumers' response to external marketing stimulus such as price discounts. To obtain the whole picture of how consumers respond to price discount promotion based on the research efforts of

previous relevant theoretical models (especially the means-end models) and the discussion above, we can develop an integrative model that integrates the hypotheses derived from the issues above, relating together the concepts of price discounts, perceived price discounts, sacrifice, quality, value, anticipated regret, and purchase intentions. In this regard, we propose the integrated model, as presented in Figure 4.8.

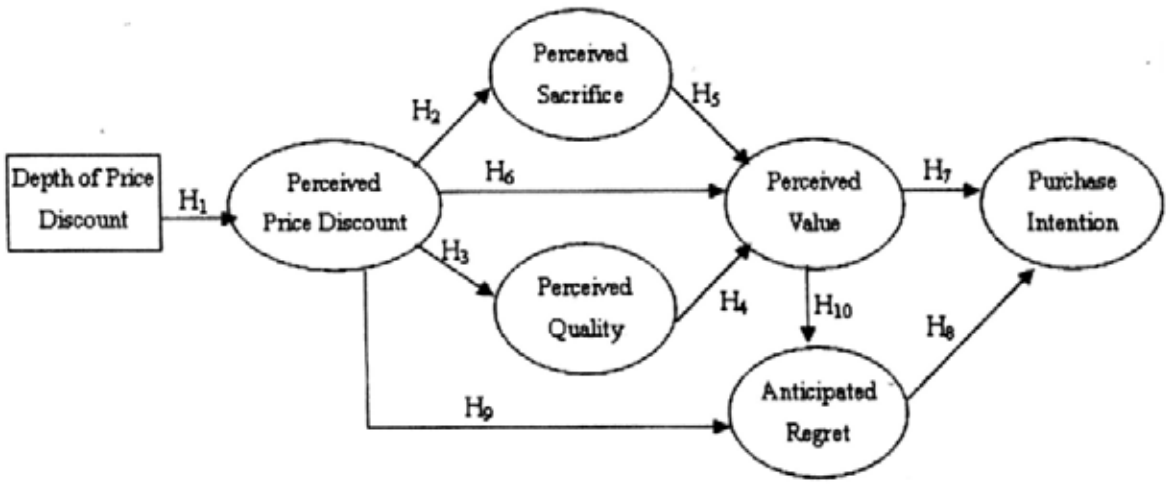


Figure 5.8 The Integrated Model Proposed in This Thesis

5.3 Examination of the Overall Fitness of the Integrated Model

We developed an integrated theoretical model and related hypotheses to account for how consumers respond to price discount promotions. In this section, we continue to test empirically the hypotheses and integrated model using experimental survey data and various multivariate statistical analyses. Specifically, this section aims to (1) examine the relationship between the depth of price discounts and the perceived price discounts to test hypothesis H_1 empirically; (2) examine the relationships among the concepts concerned in the integrated model to test hypotheses H_2–H_{10} empirically; and (3) examine the role of anticipated regret in consumers' behavioral response to price discount promotion by

empirically testing the overall fit of the proposed integrated model using the multivariate statistical analysis technique of SEM.

5. 3. 1 **Research Design and Procedure**

This study used an experimental survey to collect data on consumers' behavioral response to price discount promotion. Price discount promotion on clothing was selected as the stimulus because such promotions are commonly found in clothing retail and are familiar to most people. Participants were asked to read the following scenario describing a clothing purchase experience.

"Imagine that: you are shopping in a department store. You find out a coat that you very much like with regards to the materials, the design and the brand. The price tag indicates that the listing price of this coat is RMB 480. The on-site seller tells you that this coat is under price discounts promotion recently, and you can save [20%off /40%off/ 60%off /80%off] if you purchase it just now. The on-site seller also tells you that the price discounts promotion of this coat may be withdrawn in several days."

Participants were students from one major university in mainland China, including both MBA students and undergraduate students. They were randomly assigned to one of the four conditions (i.e., 20 percent off, 40 percent off, 60 percent off, and 80 percent off) and asked to tick their answers that describe their behavioral response based on their true feelings after reading the scenario. They were also informed that the research was for an academic research project and the data would be kept confidential and used limitedly for academic research.

Considering that the participants were from mainland China, the translated Chinese version of the questionnaire developed through back-translation was provided to the participants to facilitate the understanding and answering of the questionnaire.

5. 3. 2 **Measures**

All measurement items were borrowed and revised from the works of previous researchers (e.g., Dodds et al., 1991; Grewal et al. 1998; Abraham and Sheeran 2003; Coulter and Coulter 2007). *Perceived price discount* was measured indirectly using the item "The price discount provided to promote this coat is very high" using a 7-point Likert scale, where "strongly disagree=1" and "strongly agree=7." *Perceived sacrifice* was measured using two items using a 7-point Likert scale, that is, "If I purchase this coat under the indicated price discount, I will not be able to purchase some other products I would like to purchase now" and "If I purchase this coat under the indicated price discount, I will have to reduce the amount of money I will spend on other things for awhile." Similarly, "very disagree=1" and "very agree=7," with the higher value indicating a higher perceived sacrifice. *Perceived quality* was measured using a single item, "This coat is very much likely" using a 7-point Likert scale, where "Of very much poor quality=1" and "Of very much good quality=7". *Perceived value* was measured by two items using a 7-point Likert scales, that is, "This coat is:" where "Very poor value for money=1" and "Very good value for money=7," and "At the discounted price shown this coat is," where "Very uneconomical=1" and "Very economical=7." *Purchase intention* was measured by a single item using a 7-point Likert scale, that is, "I intend to purchase this coat," where "Strongly disagree=1"

and "Strongly agree=7." *Anticipated Regret* was measured by two items using a 7-point Likert scale, that is, "If I didn't purchase this coat under the price discount promotion at this time, I would feel regret" and "If I didn't purchase this coat under the price discount promotion at this time, I would feel upset," where "Strongly disagree=1" and "Strongly agree=7." Participants were also asked to indicate their demographic characteristics, such as their gender, age, and revenue.

5. 3. 3 Testing the Proposed Hypotheses

A total of 300 questionnaires were randomly assigned to the subjects; 274 were answered and returned to us. The distribution of the respondents who answered and returned the questionnaires is shown in Table 5.1.

Table 5.1 The Distribution of Respondents

	Category	Count	Percentage (%)
Stimulus exposed to	20% off	67	24.5
	40% off	79	28.8
	60% off	57	20.8
	80% off	71	25.9
Gender	Male	154	56.2
	Female	110	40.1
	Missing	10	3.6
Age	20-29	143	52.2
	30-39	64	23.4
	40-49	13	4.7
	Missing	54	19.7
Monthly revenue	Below RMB3000	113	41.2
	RMB3001-6000	51	18.6
	RMB6001-9000	20	7.3
	RMB9001-12000	8	2.9
	Above RMB12000	22	8.0
	Missing	59	21.5

Before testing the causal relationships among the concepts, we examined whether these concepts are well measured by their respective measurement items. Following the procedures suggested by Churchill (1979), we assessed the reliability and validity using Cronbach's alpha and exploratory factor analysis (EFA).

We checked the reliability of the relevant constructs measured with multi-item scales in the present study. The values of the alpha coefficients are 0.76 for perceived sacrifice, 0.76 for perceived value, and 0.85 for anticipated regret. Cronbach's α for all the constructs are above the hurdle value of 0.7, as suggested by previous researchers, indicating that the measurement items have good reliability.

We then examined the validity of the measurement items by conducting EFA. The results produced six factors consistent with the six constructs under examination, accounting for 89.48 percent of the variance. We listed the varimax-rotated component matrix by suppressing the factor loadings below 0.5, as shown in Table 5.2.

Table 5.2 The Rotated Component Matrix of EFA Analysis

Measurement Items	Component 1	2	3	4	5	6
PQ					.99	
PS1			.86			
PS2			.91			
PV1		.83				
PV2		.82				
AR1	.85					
AR2	.93					
PI						.67
PD				.95		

Extraction method: Principal Component Analysis
Rotation method: Varimax with Kaiser Normalization
Rotation converged in 6 iterations.

In Table 5.2, all items measuring AR converged in component 1; all items measuring perceived value converged in component 2; all items measuring perceived sacrifice converged in component 3; and items measuring perceived price discount, perceived quality, and purchase intention converged in component 4, component 5, and component 6, respectively. The EFA results indicate good convergence and discriminant validity for the overall measurement model. The EFA results, together with the reliability testing results, show that the measurement items exhibited both high reliability and high validity. Therefore, we took the average of the measurement items as the indicator of the constructs measured with multiple items in the statistical analyses.

5.3.3.1 Investigating Consumers' Perception of Price Discount

To test hypothesis H_1, we conducted a one way ANOVA by taking perceived price discounts as the dependent variable and depth of price discounts as the independent variable. The Levene's test of equality of error variances indicated the homogeneity across the four groups met the requirement by conducting ANOVA analysis ($F_{3, 270}$=1.93, p-value > .10). The results of the ANOVA indicate that there is a significant difference in perceived price discounts across the four depths of price discounts ($F_{3, 270}$=13.64, p-value < .001). The mean values and mean-difference values are shown in Table 5.3.

Table 5.3 The Means and Mean-differences of Perceived Price Discounts

Means		Mean-Differences	
20% off	3.45	20%off versus 40% off	-.98 (p-value<.001)
40% off	4.43	40%off versus 60% off	-.68 (p-value<.001)
60% off	5.11	60%off versus 80% off	.15 (p-value>.10)
80% off	4.96		

If we reject hypothesis H_1 and conjecture that the relationship between depth of price discounts and perceived price discounts is linear, then the mean difference across the intervals, that is, "20 percent off versus 40 percent off," "40 percent off versus 60 percent off," and "60 percent off versus 80 percent off," should be equal. However, the results shown in Table 5.3 reject this conjecture. The relationship between depth of price discounts and perceived price discounts is further mapped in Figure 5.9, where we can also intuitively observe the nonlinear relationship. These results confirm hypothesis H_1.

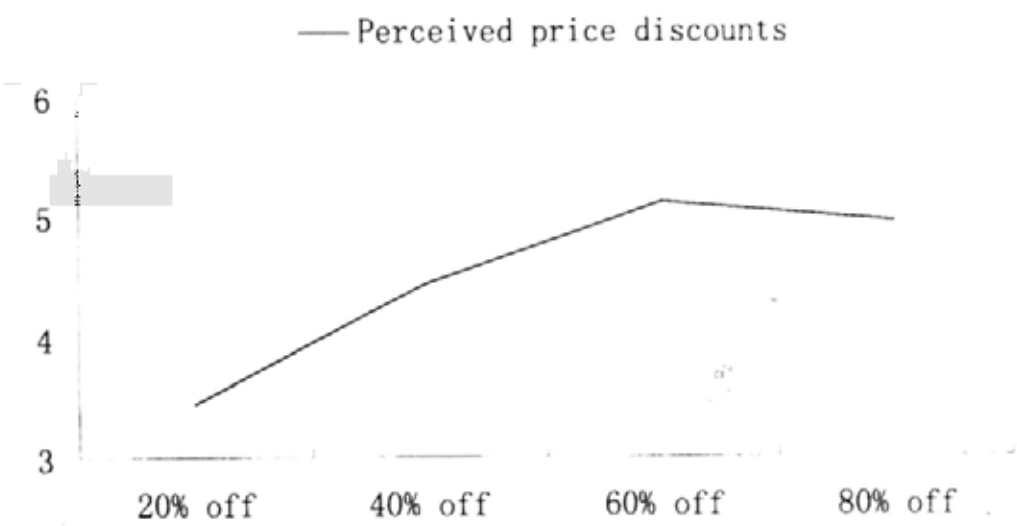


Figure 5.9 Consumers' Perceptions of Price Discounts

5.3.3.2 Testing the Hypotheses Regarding Consumers' Response Process

To test hypotheses H_2–H_{10}, a series of regression analyses were conducted using the mean scores of multi-item scales as the measures for the related multi-item constructs. To test hypothesis H_2, perceived sacrifice is taken as the dependent variable and perceived price discount is taken as the independent variable. Results of the regression analysis, as shown in Table 5.4, reveal that perceived price discount negatively affects perceived sacrifice ($t = -1.79$, $p\text{-value} < .10$). This confirms hypothesis H_2.

Table 5.4 The Effects of Perceived Price Discount on Perceived Sacrifice

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std.Error	Beta		
1	(Constant)	4.44	.29		15.17	.00
	Perceived Price Discount	-.11	.06	-.11	-1.79	.07

Note: R^2=.11, $F_{1,268}$=3.22, p < .1

Taking perceived quality as the dependent variable and perceived price discounts as the independent variable, results of the regression analysis, as shown in Table 5.5, indicate that perceived price discounts do not directly affect perceived quality (t= -.13, p-value >.10). Thus, H_3 is not confirmed. We further conducted ANOVA analysis of perceived quality on the depth of price discounts and found that perceived quality is contingent on the depth of price discounts ($F_{3,269}$=4.48, p-value<.01). Therefore, we conjectured that consumers use the extrinsic cues (i.e., depth of price discounts) rather than the intrinsic cues (i.e., perceived price discounts) to infer the quality of the products or services under price discount promotions.

Table 5.5 The Effects of Perceived Price Discount on Perceived Quality

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std.Error	Beta		
1	(Constant)	4.62	.22		21.27	.00
	Perceived Price Discount	-.01	.05	-.01	-.13	.90

Note: R^2=.01, $F_{1,271}$=.02, p >.10

To examine the effects of perceived sacrifice and perceived quality on perceived value, we conducted a multiple regression analysis by taking perceived value as the dependent variable, and perceived sacrifice and perceived quality as

the independent variables simultaneously entering the regression equation. The results, as shown in Table 5.6, reveal that perceived quality positively affects perceived value (t=3.29, p-value<.01), thus confirming hypothesis H_4. Moreover, perceived sacrifice negatively affects perceived value (t= -4.41, p-value<.001), thus confirming hypothesis H_5. Therefore, hypotheses H_4 and H_5 are empirically confirmed.

Table 5.6 The Effects of Perceived Quality and Perceived Sacrifice on Perceived Value

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std.Error	Beta		
1	(Constant)	4.52	.30		14.91	.00
	Perceived Sacrifice	-.19	.04	-.26	-4.41	.00
	Perceived Quality	.19	.06	.19	3.29	.00

Note: R^2=.31, $F_{2,264}$=13.81, p <.001.

Table 5.7 Direct Effects of Perceived Price Discount on Perceived Value

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std.Error	Beta		
1	(Constant)	3.14	.34		9.30	.00
	Perceived Price Discount	.28	.04	.39	7.19	.00
	Perceived Sacrifice	-.15	.04	-.21	-3.95	.00
	Perceived Quality	.19	.05	.20	3.64	.00

Note: R^2=.24, $F_{3,263}$=28.22, p <.001

To test hypothesis H_6, regression analysis was run by taking perceived value as the dependent variable and perceived sacrifice, perceived quality, and perceived price discount as the independent variables in the simultaneous regression. No multicollinearity among the independent variables was found (VIF

values for all independent variables were far less than the critical value, i.e., 10). The results, as shown in Table 5.7, reveal that perceived price discount positively affects perceived value (t=7.19, p-value<.001) after controlling for the effects of perceived sacrifice and perceived quality on perceived value. This confirms hypothesis H_6.

To investigate the effects of perceived value and anticipated regret on perceived value, we ran a hierarchical multiple regression analysis. Perceived value entered the regression in the first block, whereas anticipated regret entered the regression in the second block. The collinearity statistics indicates that the regression meets the assumption and that no collinearity exists among the independent variables (no VIF for any independent variable in both the two models exceeded the critical value, i.e., 10). The regression results, as shown in Table 5.8, reveals that perceived value positively affects purchase intention (t=8.19, p-value<.001), which confirms hypothesis H_7, and that anticipated regret positively affects purchase intention (t=9.04, p-value<.001), which confirms hypothesis H_8. Therefore, hypotheses H_7 and H_8 are empirically confirmed.

Table 5.8 The Effects of Perceived Value and Anticipated Regret on Purchase Intention

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std.Error	Beta		
1 (R^2=.38)	(Constant)	1.25	.29		4.32	.00
	Perceived Value	.75	.06	.61	12.60	.00
2 (R^2=.53)	(Constant)	.86	.26		3.35	.00
	Perceived Value	.49	.06	.40	8.19	.00
	Anticipated Regret	.42	.05	.44	9.04	.00

Considering that one major objective of this thesis is to introduce anticipated regret as a central construct other than perceived value in the integrated model to account for how consumers respond to price discount promotion, to further identify the additional contribution of anticipated regret in predicting purchase intention is required. The results in the Table 5.8 show that 38 percent variance of purchase intention is captured by taking perceived value as the independent variable only (R^2=.38, $F_{1, 262}$=158.74, p-value<.001), whereas 53 percent variance of purchase intention is captured by taking both perceived value and anticipated regret as the independent variables (R^2=.53, $F_{2, 261}$=144.65, p-value <.001). The change in effect size is statistically significant ($\triangle R^2$=.15, $F_{1, 261}$ =81.68, p-value<.001). Therefore, anticipated regret provides valuable additional information to predict consumers' purchase intention under price discount promotion settings better.

To investigate whether perceived price discount affects anticipated regret, we conducted regression analysis by taking anticipated regret as the dependent variable and perceived price discount as the independent variable. The regression analysis results, as shown in Table 5.9, reveal that perceived price discounts positively affect anticipated regret (t=5.22, p-value <.001), confirming hypothesis H_9.

Table 5.9 Effects of Perceived Price Discount on Anticipated Regret

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std.Error	Beta		
1	(Constant)	2.54	.27		9.59	.00
	Perceived Price Discount	.29	.06	.31	5.22	.00

Note: R^2 =.09, $F_{1, 265}$ =27.22, p <.001.

To identify the effects of perceived value on anticipated regret, we conducted regression analysis by taking anticipated regret as the dependent variable and perceived value as the independent variable. The regression results, as shown in Table 5.10, reveal that perceived value positively affects anticipated regret (t=9.02, p<.001), confirming hypothesis H_{10}.

Table 5.10 Effects of Perceived Value on Anticipated Regret

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std.Error	Beta		
1	(Constant)	.92	.33		2.75	.01
	Perceived Value	.62	.07	.49	9.02	.00

Note: R^2=.24, $F_{1, 262}$=81.37, p <.001.

Table 5.11 The Results of Hypotheses Testing

Path	Regression Coefficients	Hypotheses Testing
Perceived Price Discount→Perceived Sacrifice	-.11*	H_2 Marginally Confirmed
Perceived Price Discount→Perceived Quality	-.01	H_3 Not Confirmed
Perceived Quality→Perceived Value	.19***	H_4 Confirmed
Perceived Sacrifice→Perceived Value	-.26***	H5 Confirmed
Perceived Price Discount→Perceived Value	.39***	H6 Confirmed
Perceived Value→Purchase Intention	.40***	H7 Confirmed
Anticipated Regret→Purchase Intention	.44***	H8 Confirmed
Perceived Price Discount→Anticipated Regret	.31***	H9 Confirmed
Perceived Value → Anticipated Regret	.49***	H10 Confirmed

Note: * denoted p <.10; ** denoted p<.05; ***denoted p<.01

We examined the hypotheses on how consumers respond to price discount promotion in a piecemeal manner through a series of regression analyses as discussed above. We documented the results of the hypotheses testing in Table 5.11, which indicates that hypotheses H_2 and H_4–H_{10} are confirmed, whereas hypothesis H_3 is not. However, to account for the whole process of consumers'

behavioral response to price discount promotion, we still need to examine the overall fit of the integrated model developed previously by simultaneously considering all relevant constructs.

5. 3. 4 Examining the Overall Fit of the Integrated Model

To examine further the overall fitness of the integrated model (Figure 5.8) developed in the present thesis under the means-end framework, we investigated how these related concepts affect consumers' purchase decision making completely. According to the sample domain theory and the classical true score theory, concepts are measured by some sample items with measurement errors. Therefore, we also need to consider the measurement errors. The statistical technique of SEM was used to conduct this analysis.

SEM is a statistical methodology that takes a hypothesis-testing approach to the multivariate analysis of a structural theory (represented by a series of regression equations) bearing on some phenomenon (Byrne, 1998). As a general approach of multivariate analysis used to study complex relationships among variables, SEM extends standard statistical techniques, such as regression, factor analysis, and ANOVA, by simultaneously testing the causal relationships among latent variables while freeing the measurement error estimation based on analyzing the variance-covariance matrix. In sum, SEM integrates the techniques of confirmatory factor analysis (CFA) and path analysis. SEM analysis usually incorporates two steps: measurement model testing and structural model testing.

5.3.4.1 Measurement Model Testing

To examine the measurement model, we conducted CFA using Lisrel 8.71. The result of the measurement model is shown in Figure 5.10. The fit indices of the measurement model, as presented in Table 5.12, indicate that the measurement model fits the data well (X^2/df<3, RMSEA<.08; GFI>.95, AGFI>.90, CFI>.95).

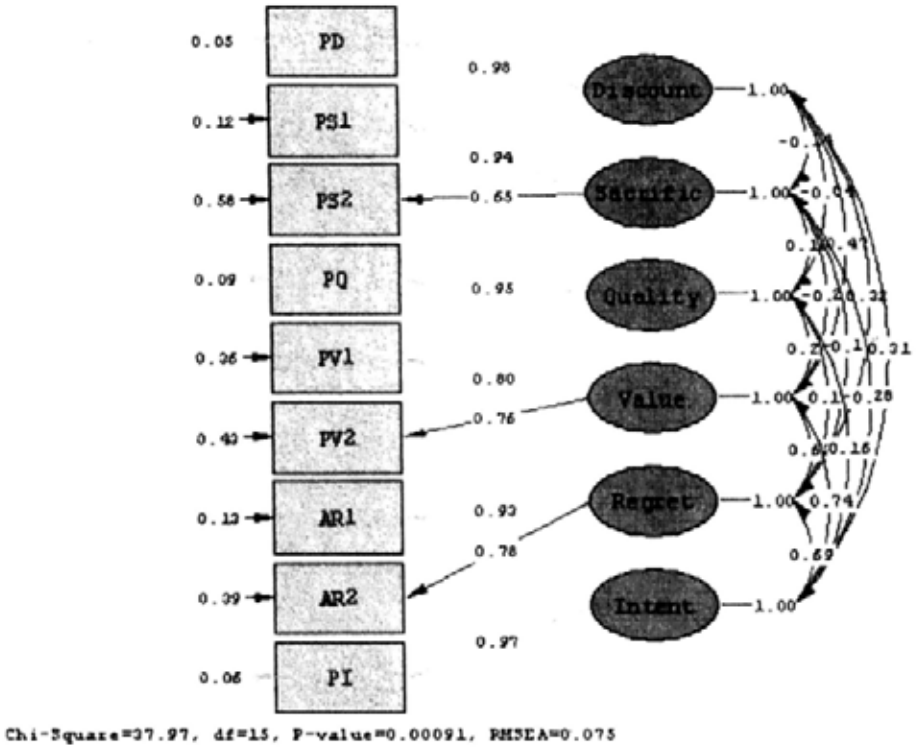


Figure 5.10 The Measurement Model for The Integrated Model

Table 5.12 Fit Indices of the Measurement Model for the Integrated Model

X^2 (Minimum Fit Function Chi-Square)	df (Degree of Freedom)	RMSEA (Root Mean Square Error of Approximation)	GFI (Goodness of Fit Index)	AGFI (Adjusted Goodness of Fit Index)	CFI (Comparative Fit Index)
38.15	15	.08	.97	.91	.98

To investigate the reliability and validity of the measures, we calculated the construct reliability coefficients (CR) and the variance extracted (VE) for each construct according to the formula suggested by Hair et al. (1998). Table 5.13

lists the coefficients together with the standardized factor loadings of all measurement items on the related constructs they intend to measure. From the table, the standard factor loadings for most of the items, except for the second item PS2 measuring perceived sacrifice, exceed .70. All CR coefficients are greater than .60, the hurdle value suggested by Bagozzi and Yi (1988). All VE coefficients are greater than .50, the hurdle value suggested by Hair et al. (1998). These results reveal that the measurement model has good reliability and convergent validity.

Table 5.13 Reliability and Convergent Validity Check

Constructs	Items	Standardized factor loadings	CR (Construct Reliability)	VE (Variance Extracted)
Perceived Price Discount	PD	.98	.95	.95
Perceived Sacrifice	PS1 PS2	.94 .65	.78	.65
Perceived Quality	PQ	.95	.91	.91
Perceived Value	PV1 PV2	.80 .76	.75	.61
Anticipated Regret	AR1 AR2	.93 .78	.85	.74
Purchase Intention	PI	.97	.94	.94

To further examine the discriminant validity of the measurement model, we documented the squared correlation coefficients among all the constructs from the SEM results presented in Table 5.14, used averages of squared multiple correlations for items and the related factors replaced the diagonal numbers in the table. Based on the table, no squared correlation coefficients between any two

constructs are greater than the coefficients in the grids on the diagonal line, indicating that the measurement model has good discriminant validity.

In conclusion, the measurement model exhibits good model fit, good reliability, and good validity. Therefore, we can continue to run the structural model to test the overall fit of the integrated model derived previously.

Table 5.14 Squared Correlation Coefficients among Constructs

	Perceived Price Discount	Perceived Sacrifice	Perceived Quality	Perceived Value	Anticipated Regret	Purchase Intention
Perceived Price Discount	.95*					
Perceived Sacrifice	.02	.65*				
Perceived Quality	.00	.01	.91*			
Perceived Value	.22	.08	.04	.61*		
Anticipated Regret	.10	.03	.03	.38	.74*	
Purchase Intention	.10	.08	.03	.55	.48	.94*

Note: * Average of squared multiple correlations for items and the related factor

5.3.4.2 Structural Model Testing

After examining the measurement model, we then analyzed the overall full model. Followed the analysis procedure used by Kerin, Jain, and Howard (1992), we firstly tested the overall fit of the proposed model (i.e., the integrated model as depicted in Figure 5.8) to the data, and then compared the integrated model with the alternative model that constrained the effects of anticipated regret in order to validate the importance of anticipated regret in describing and explaining consumers' behavioral response to price discount promotions.

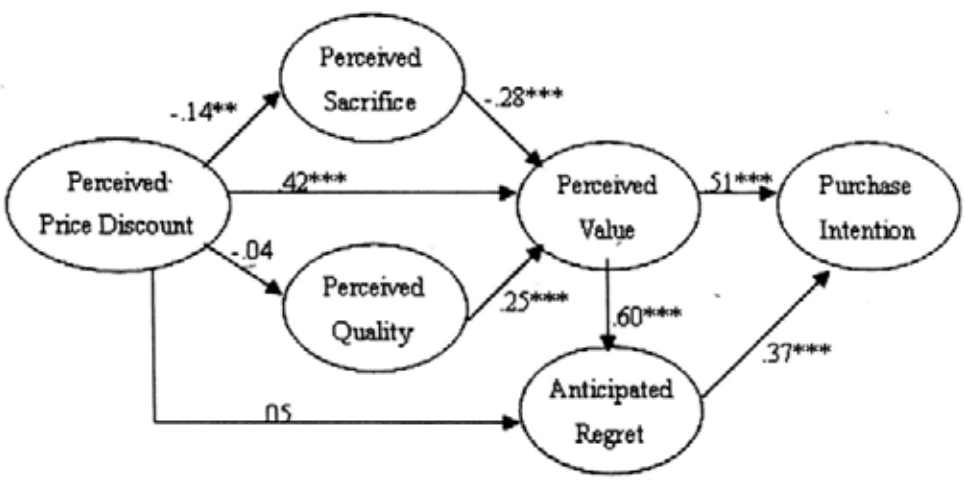
By inputting the covariance matrix, the full integrated model, which includes both the measurement model and the structural model, was run using the Lisrel 8.71 software. Fit indices of the produced full model, as shown in the

following table 5.15, indicated good fit of the full model to the data (X2/df<3, RMSEA<.08; GFI>.95, AGFI>.90, CFI>.95). Using the path coefficients produced in the integrated model, we obtained the fitted structural model as shown in Figure 5.11.

We then tested the alternative model that does not consider consumers' anticipated regret in their behavioral response by running the Lisrel program. Fit indices of the produced alternative model are listed in Table 5.15. All the fit indices indicated the poor fit of the alternative integrative model to the data (X^2/df>3, RMSEA>.10; GFI<.90, AGFI<.90, CFI<.90). To further compare the alternative model with the proposed integrated model, the chi square difference test was conducted, and the results produced indicated that the difference between the alternative model and the proposed integrated model was statistically significant ($\Delta X^2 = 123.70$, $\Delta df = 2$, p-value<.001).

Table 5.15 Fit Indices of Full Integrated Model and the Alternative Model

Model	X^2	df	RMSEA	GFI	AGFI	CFI
The Proposed Joint Model	44.59	21	.06	.97	.93	.98
The Alternative Model	168.29	23	.14	.89	.79	.87



Note: *denoted p <.10; ** denoted p<.05; ***denoted p<.01.

Figure 5.11 The Fitted Integrated Model

According to the results of model comparison, the integrated model, which includes both perceived value and anticipated regret, provides a better explanation of consumers' behavioral response to price discount promotion than the alternative model that did not consider the effects of anticipated regret. Hence, anticipated regret plays an important role in understanding how consumers respond to price discount promotions. Based on the path coefficients of the fitted integrated model as shown in Figure 5.11, we can calculate the effect size of anticipated regret on purchase intention. The total effect size of perceived value on purchase intention is the sum of the direct effect (.51) and the indirect effect (.60*.37), that is, .73. Thus, the total effect of anticipated regret on purchase intention is .37. Based on the fitted integrated model, the effects of perceived price discount on anticipated regret disappear (β=.05, p>.10), indicating that perceived price discount exerts indirect rather than direct effects on anticipated regret, through the mediator of perceived value. This further proves that anticipated regret (affective response) and perceived price discount (cognitive response) belong to different response stages, and that perceived value plays a central role between consumers' cognitive response and affective response.

5.4 Further Investigation of the Gender Difference

Bakewell and Mitchell (2006) suggested that male consumers are different from female consumer in decision-making traits. Relative to female consumes, male consumers make quick and careless decisions more commonly (Campbell, 1997), and are more independent, confident, externally motivated, competitive, and more willing to take risks (Areni and Kiecker, 1993; Prince, 1993). Barone

and Roy (2010) found evidence to support the existence of gender difference in consumers' response to sales promotion.

Based on the insights provided by current literature, we assume here that male consumers are less careful and more risk-seeking than female consumers. Less carefulness makes male consumers less likely to consider anticipated regret than females, while risk-seeking makes male consumers less likely to be regulated by regret or anticipated regret. Therefore, we suggest that, female consumers will generate more anticipated regret than male consumers, and that anticipated regret will affect female consumers' purchase intention more than males. Based on these viewpoints, we propose hypotheses H_{11} and H_{12}:

H_{11}: Under the same price discount promotion, female consumers generate more anticipated regret than male consumers.

H_{12}: The effects of anticipated regret on purchase intention are more evident for female consumers than for male consumers.

To test hypothesis H_{11}, we conducted ANOVA analysis by taking anticipated regret as the dependent variable and consumers' gender as the independent variable. The main effect of consumers' gender on anticipated regret is shown in Table 5.16. Specifically, female consumers generate more anticipated regret (M_1=4.06) than do male consumers (M_2=3.67), with the difference reaching acceptable statistical significance ($F_{1,255}$=3.67, p-value<.10). Results of the chi square test of consumers' gender distribution and scenario stimuli distribution (i.e., 20 percent off, 40 percent off, 60 percent off, and 80 percent off) indicate that there is no distribution difference of scenario stimuli between the male group and the female group (x^2=4.94, df=3, p-value>.10). Therefore, the mean difference in anticipated regret between the male group and the female group

should be attributed to the gender difference rather than the stimuli difference. Thus, hypothesis H_{11} is confirmed.

Table 5.16 The Effect of Consumers' Gender on Anticipated Regret

Source	Type III Sum of Squares	df	Mean Square	F	Sig
Gender	9.54	1	9.54	3.67	.06
Error	663.27	255	2.60		

To validate hypothesis H_{12}, we used hierarchical multiple regression analysis as suggested by Barron and Kenny (1986) to test the moderating effects of gender in two steps. In the first step, we split the data into two groups based on gender and performed regression analyses by taking purchase intention as the dependent variable and anticipated regret as the independent variable for the two groups, respectively. In the second step, we tested the statistical significance of the regression coefficient difference for the two groups obtained from the first step.

The results of regression analyses for the two groups divided based on the respondents' gender (as shown in the following Table 5.17) reveal that anticipated regret positively affects purchase intention for both the male group ($F_{1,148}$=142.78, p-value<.001, R^2=.33) and the female group ($_{F1,105}$=103.22, p-value<.001, R^2=.50). The standardized regression coefficient for the female group (i.e., .70) is greater than that for the male group (i.e., .57).

Table 5.17 The Regression Results for Male and Female Groups

Groups		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std. Error	Beta		
Male Group	(Constant)	2.81	.25		11.17	.00
	Anticipated Regret	.54	.06	.57	8.53	.00
Female Group	(Constant)	1.88	.31		6.11	.00
	Anticipated Regret	.71	.07	.70	10.16	.00

To further test whether the difference in standardized regression coefficient between female group and male group was statistically significant, we encoded the categorical variable on gender information into the dummy variable where male denoted by zero and female denoted by 1. We then created an interaction variable by multiplying the dummy variable on gender information with anticipated regret. Finally we performed the regression analysis by simultaneously including anticipated regret, the dummy variable, and the interaction as independent variables, and purchase intention as the dependent variable. The results as shown in Table 5.18 reveal that the interaction between anticipated regret and gender (i.e., Anticipated Regret × Gender) positively affect purchase intention ($t=1.87$, $p<.10$). Therefore, the statistical significance of the regression coefficient difference between the male group and the female group is acceptable.

Combining the results of the two-step analyses, we conclude that the effects of anticipated regret on purchase intention are contingent on consumers' gender. Specifically, anticipated regret positively affects purchase intention for both male consumers and female consumers; however, this effect is greater for female consumers than for male consumers. Thus, the hypothesis H_{12} is empirically confirmed here.

Table 5.18 The Moderating Effects of Consumers' Gender

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std.Error	Beta		
1	(Constant)	2.81	.25		11.37	.00
	Anticipated Regret	.54	.06	.56	8.68	.00
	Gender	-.93	.40	-.30	-2.33	.02
	Anticipated Regret ×Gender	.18	.10	.26	1.87	.06

Note: $R^2=.41$, $F_{3,253}=57.80$, $p<.001$

5.5 Conclusive Discussion of This Chapter

In this chapter, the major objective is to investigate how price discount depth affects consumers' behavioral response towards the price discount promotions. Based on previous studies, especially the means-end framework, we developed related hypotheses to account for consumers' behavioral response to price discount promotion. We further investigated the role of anticipated regret in consumers' response to price discount promotion and developed an integrated model by including the role of anticipated regret, in order to account for the overall process of consumers' behavioral response to price discount promotions.

The results of the empirical study confirm all the hypotheses except that on the effect of perceived price discount on perceived quality. The results prove that anticipated regret provides valuable additional information for better predicting consumers' purchase intention, indicating that the proposed integrated model provides good model fit to the data. The difference of consumers' gender in affecting the role of anticipated regret was also investigated in this chapter. The results of gender difference analyses indicate that, compared to male consumers, female consumers generate more anticipated regret and are more vulnerable to the effects of anticipated regret on purchase intention.

The research findings of the current chapter can shed light on marketers' designing price discount promotion schemes. When designing price discount promotion schemes, to make the promotion more effective in inducing consumers' purchase intention, marketers should not only pay attention to what they could deliver to consumers through implementing price discount promotions and how these promotions might be attractive for consumers, but also emphasize the role of anticipated regret by intriguing consumers to think how much they

might miss if they did not purchase the products or services under promotion. The latter tactic may especially be effective for attracting female consumers to purchase in retailing. According to the findings of the current chapter, marketers should also notice that price discount promotion depths affect consumers' response in a convex curvilinear way, therefore, price discount depth should not be designed too large.

The study of this chapter in testing the overall fit of the integrated model also suffered from the limitation of consumers' attitude towards the purchase not being included in the model. The major reason is that participants might not be able to differentiate too many interconnected concepts in one study, which can lead to poor discriminant validity in the measurement model and difficulty in the full model testing. According to our conjecture, consumers' affective response towards price discount promotion has two dimensions, where the affective response under "if purchase, then feel" dimension is represented by consumers' attitude, while the affective response under "if not purchase, then feel" dimension is represented by consumers' anticipated regret. This deficiency will be overcome in the next two chapters, which consider consumers' attitudes and anticipated regret jointly to obtain a full picture of consumers' affective responses towards price discount promotions.

CHAPTER 6: THE EFFECT OF PRICE DISCOUNT FREQUENCY ON CONSUMER BEHAVIORAL INTENTION

We investigated the effects of two important characteristics of price discount promotion, i.e., promotion framing and promotion depth on consumers' behavioral response. We also introduced anticipated regret as an important concept in depicting consumers' behavioral response to price discount promotion. In this chapter, we examine the effects of another important characteristic of price discount promotion (i.e., promotion frequency) on consumers' behavioral response.

Price discount promotions are more frequently provided for some brands than for others. Unlike in the previous work that mainly investigated how promotion frequency influences consumers' cognitive response (e.g., perceived value) under the price value framework, we determine how promotion frequency affects consumers' affective response and the ensuing behavioral response. Moreover, as we examined in the previous chapter, both the consumers' attitude reflecting how pleasure is derived from the perceived value of the price discount and the consumers' anticipated regret when they are unable to purchase the item under the price discount promotion are important in explaining and predicting consumers' affective response to price discount. Therefore, in the current study, we investigate how promotion frequency simultaneously affects consumers' attitudinal response and anticipated regret.

6.1 Developing Hypotheses regarding the Effects of Promotion Frequency

We derive the relevant hypotheses on the effects of promotion frequency on consumers' behavioral response. These hypotheses are investigated using empirical testing as described in the latter part of this chapter. According to the TPB (Ajzen, 1991), behavioral intentions are determined by attitudes, whereas attitudes represent the overall evaluation of the behavior. Ajzen (1991) indicated that the theory could be extended to achieve more accurate predictions of intentions and behavior. As discussed above, we extend the TPB model by including both consumers' attitudinal response and their response of anticipated regret in the current study.

6. 1. 1 **The Effect of Promotion Frequency on Consumers' Attitude**

In the context of price discount promotion, the effects of promotion frequency on perceived value have been widely discussed and confirmed. Compared with the less frequent price discount promotion, frequent price discount promotion decreases the consumers' IRP (Lattin and Bucklin, 1989) and lowers their perceived quality of the item under promotion (Yoo, Donthu and Lee, 2000), which in turn leads to lower consumers' perceived value according to our proposition on the effects of price and quality perception on perceived value in the previous chapter. Higher perceived value leads to consumers' more favorable attitude towards purchasing the item under the price discount promotion. Thus, we predict that a higher promotion frequency leads to a more favorable consumers' attitude towards the item under promotion than low promotion frequency. We propose hypothesis H_1:

H_1: Compared to high-frequency price discount promotion, low-frequency price discount promotion leads consumers to generate more favorable attitudes.

6. 1. 2 The Effect of Promotion Frequency on Consumers' Anticipated Regret

According to the adaptation level theory (Helson, 1964), under frequently implemented price discount promotions, consumers may be adapted to the price discount promotion, not pay much attention to the promotion, and think that it does not matter whether purchase the promotional item currently since there are many opportunities to revise the wrong decisions by purchasing the promotional item under future price discount promotions. Therefore, compared to high promotion frequency, low promotion frequency will make the price discount promotions more salient and the decisions more irreversible in consumers' information processing, and hence will lead to more anticipated regret of not purchasing (Pieters and Zeelenberg, 2007). Thus, we predict that higher promotion frequency leads to higher consumers' anticipated regret, and propose the following hypothesis H_2:

H_2: Compared to high-frequency price discount promotion, low-frequency price discount promotion leads consumers to generate more anticipated regret.

6. 1. 3 The Effects of Consumers' Affective Response on Purchase Intention

According to the TPB model, attitudes are important antecedent of behavioral intentions in a way that, more favorable attitudes lead to higher purchase intention. Therefore, we predict that consumers' attitudes towards the

item under price discount promotion positively affect consumers' purchase intention, and propose the following hypothesis H_3:

H_3: Consumers' attitudes positively affect their purchase intention.

Regarding the relationship between consumers' anticipated regret and purchase intention, we have discussed and found that consumers' anticipated regret positively affects their purchase intention. In current study, we include this hypothesis under empirical testing as well for obtaining the external generalizability of the hypothesized relationship. Hence, we put the following hypothesis H_4:

H_4: Consumers' anticipated regret positively affects their purchase intention under the settings of price discount promotion.

6. 1. 4 The Effect of Promotion Frequency on Consumers' Purchase Intention

As discussed above, under the context of price discount promotion, compared to lower promotion frequency, higher promotion frequency will lead to more favorable consumers' attitudes towards purchasing the item under promotion and more anticipated regret, which will both in turn lead to higher purchase intention. Given this, we predict that consumer's purchase intention will be higher when dealing with price discount promotion with lower promotion frequency rather than with higher promotion frequency. In addition, under the cognitive-affective-behavioral framework, we also predict that the effect of price promotion frequency on consumers' purchase intention is mediated by the consumers' attitude towards the item under promotion and their anticipated regret. Thus, we propose hypotheses H_5 and H_6.

H_5: Under the context of price discount promotion, consumers' purchase intention is higher for low–frequency promotion than for high-frequency promotion.

H_6: Under the context of price discount promotion, the effect of promotion frequency on consumers' purchase intention is mediated by consumers' attitudes and their anticipated regret.

We further integrate these hypotheses derived above in an integrative model, as shown in Figure 6.1.

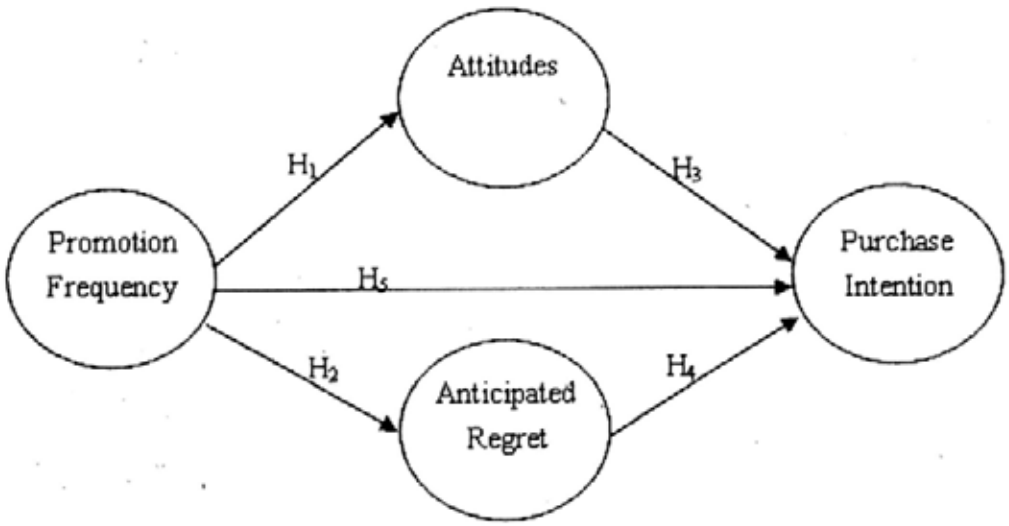


Figure 6.1 The Effect of Promotion Frequency on Consumers' Response

6.2 Research design and data collection

With the aim of validating the theoretical model proposed and hypotheses derived as above, an empirical study was designed and conducted. In specific, scenario experimental design was the research method employed in the study. This approach is useful in determining the effect of certain stimulus (e.g., price discount promotion scenario in this study) on the dependent variable (e.g., consumers' attitudes, consumers' anticipated regret, and consumers' purchase intention, in this study) while keeping the influence from other extraneous

variables to a minimum (Kerlinger, 1986). As the promotion frequency is the focus of this study, its level should be manipulated and identified in the scenario.

6. 2. 1 **Experimental Scenario**

To manipulate the levels of promotion frequency, two scenarios were designed. Scenario 1 aims to create a price discount promotion context of high promotion frequency; while the Scenario 2 aims to create a price discount promotion context of low promotion frequency. To make the two groups comparable, the only difference between the two scenarios is the level of promotion frequency by keeping all other details the same. This manipulation will be checked in the later part. The details of the scenarios are as following.

"Imagine that: you are shopping in a department store. You find out a coat that you very much like with regards to the materials, the design and the brand. The price tag indicates that the listing price of this coat is RMB 480. The on-site seller tells you that this coat is under price discounts promotion recently, and you can save 50% off if you purchase it just now. The on-site seller also tells you that there are ten days to go (or one day) before the deadline of the price discount promotion of this coat. You find that this coat brand very rarely [very frequently] conducts a price discount promotion."

The terms "very rarely" in one scenario and "very frequently" in another scenario (as indicated in the bracket) attempt to create "low promotion frequency condition" and "high promotion frequency condition" respectively. The two scenarios were incorporated in formatted questionnaires respectively. Except for

the difference in scenarios, the other parts and the questions were all the same in each questionnaire. The reasons for taking the coat with price discount of 50% off as the stimulus in the scenarios are as follows: (1) price discount promotions are very popular in the clothing industry; (2) the sample consists of university students presumed to be most familiar with the price discount promotion for coats; and (3) 50 percent off is large enough to stimulate consumers' response and easy enough to calculate so that there will be no significant difference between dollar-off and cents-off discount framing.

6. 2. 2 **Measures**

All measurement items were borrowed and revised from previous researchers' work (e.g., Zeelenberg and Pieters, 2004; Conner, Sandberg, McMillan, and Higgins, 2006). *Purchase intention* was measured by using a single item "How likely I would purchase this coat" with 7-points Likert scale anchored by "Very unlikely=1, Very likely=7". *Anticipated regret* was measured by using a single item "If I didn't purchase this coat under price discount promotion this time, I would feel regret" with 7-points Likert scale anchored by "Strongly disagree=1, Strongly agree=7". *Consumers' attitudes* were measured by using a single item "For me, to purchase this coat is" with three 7-points Likert scale, anchored by "Harmful=1, Beneficial=7", "Unpleasant=1, Pleasant=7", and "Bad=1, Good=7" respectively (Cronbach α=,91). To check whether the manipulation of promotion frequency was successful, one item "The frequency of price discount promotion for this coat brand is" with 7-points Likert scale anchored by "Very low=1, Very high=7" was included in the questionnaire.

Participants' personal data, including their gender, age and shopping experience of branded clothing in department stores were also collected.

6. 2. 3 **Participants**

A total of 117 undergraduate students from the business school of one major university in mainland china, who were enrolled in the course of marketing principle, participated in this experiment. They were randomly assigned into one of the two treatments (i.e., low-promotion frequency, and high-promotion frequency). Before answering the questions, they were told that the data would be used for academic purpose only, that there are no true or false answers, and that they should fill in the questionnaires based on their own feelings after reading the scenario. The distribution of participants is presented in Table 6.1.

Table 6.1 The Distribution of Participants

Category		Count	Percentage (%)
Stimulus exposed to	High frequency	58	49.60
	Low frequency	59	50.40
Gender	Male	51	43.60
	Female	62	53.00
	Missing	4	3.40
Shopping Experience	Nearly no	30	25.60
	Occasionally	70	59.80
	Very often	17	14.50

6.3 Data Analysis and Results

We first conducted a manipulation check to see whether the experimental manipulation of promotion frequency was successful or not. Once the manipulation check indicated successful experimental treatments, we further tested the hypotheses developed above.

6. 3. 1 Manipulation Check

We predict that the participants in a "high-frequency" condition should perceive higher promotion frequency than those in the "low-promotion frequency" after reading the scenario for successful manipulation. Thus, we performed an ANOVA analysis by taking experimental treatment as the independent variable and perceived frequency as the dependent variable. The results confirmed our prediction. Participants in the "high frequency" treatment perceived higher promotion frequency (M_1=5.16) than those in the "low-frequency" treatment (M_2=3.36). The difference was statistically significant ($F_{1,113}$=41.74, p-value<.001). Therefore, the manipulation of promotion frequency in the experimental study was successful.

6. 3. 2 Testing the Effect of Promotion Frequency on Consumers' Attitudes

Consumers' attitude towards the purchasing behavior was measured with multiple items. The results of the reliability check (Cronbach's alpha=.91, which is greater than the hurdle value of .70) indicate that the measures showed good reliability. Therefore, we were able to use the average score of the three-item scores for measuring consumers' attitude. Taking the consumers' attitude as the dependent variable and the frequency treatment as the independent variable, we performed the ANOVA using the SPSS 11.5 software. The results obtained are shown in Table 6.2. The result of Levene's test ($F_{1,109}$=1.14, p-value>.10) indicates that the error variance of the dependent variable is equal across the two treatment groups, meeting the assumption required by the ANOVA analysis.

Table 6.2 The Effect of Promotion Frequency on Consumers' Attitude

Source	Type III Sum of Squares	df	Mean Square	F	Sig
Treatment	6.97	1	6.97	5.42	.02
Error	140.03	109	1.28		

The result of the ANOVA analysis indicates that the participants in the "high-frequency" treatment group showed less favorable consumers' attitude (M_1=4.70) than those in the "low-frequency" treatment group (M_2=5.20), and that the difference between the two treatment groups was statistically significant ($F_{1,109}$=5.42, p-value<.05). Therefore, consumers generate more favorable attitude towards purchasing behavior when confronting low-frequency price discount promotion than when confronting high-frequency promotion. Hypothesis H_1 is hence confirmed.

6. 3. 3 Testing the Effect of Promotion Frequency on Anticipated Regret

To investigate the effect of promotion frequency on consumers' anticipated regret, we conducted an ANOVA analysis by taking the experimental treatment of promotion frequency as the independent variable and anticipated regret as the dependent variable. The result of Levene's test ($F_{1,115}$=3.00, p-value>.05) indicates that the error variance of anticipated regret is equal across the two treatment groups, meeting the assumption required by conducting the ANOVA analysis. The main effect of the promotion frequency on anticipated regret is shown as in Table 6.3.

Table 6.3 The Effect of Promotion Frequency on Anticipated Regret

Source	Type III Sum of Squares	df	Mean Square	F	Sig
Treatment	24.86	1	24.86	9.45	.00
Error	302.59	115	2.63		

The result of the ANOVA analysis indicates that the participants in the "high-frequency" treatment group showed less anticipated regret (M_1=3.60) than those in the "low-frequency" treatment group (M_2=4.53), and that the difference in anticipated regret between the two treatment groups was statistically significant ($F_{1,115}$=9.45, p-value<.01). Therefore, consumers generate more anticipated regret when confronting low-frequency price discount promotion than when confronting high-frequency promotion. Thus, hypothesis H_2 is confirmed.

6. 3. 4 Testing the Effects of Consumers' Affective Response towards Purchase Intention

To test the effects of consumers' affective response (i.e., consumers' attitude towards the purchase behavior and consumers' anticipated regret) on their purchase intention, we conducted multiple regression analyses by taking purchase intention as the dependent variable and consumers' attitude and anticipated regret as the independent variables. No multicollinearity was found according to the statistics (i.e., for all independent variables, VIF<10, Tolerance >.10), suggesting that the regression analysis meets the statistical requirements. Results of the multiple regression analyses are shown in Table 6.4.

In Table 6.4, consumers' attitude positively affects their purchase intention (i.e., standardized regression coefficient is equal to .63, t=2.89, p-value<.01), confirming hypothesis H_3. Consumers' anticipated regret positively affects their purchase intention (i.e., standardized regression coefficient is equal to .22, t=8.05, p-value<.001), thus confirming hypothesis H_4. Consumers' attitude and anticipated regret jointly explain 62 percent of the variance of their purchase intention. Consumers' attitude outperformed anticipated regret in predicting

consumers' purchase intention according to the comparison of related standardized regression coefficients. The reason may be due to the fact that we first asked the participants to indicate their purchase intention before asking for their anticipated regret, different from the sequence of the study in the previous chapter. The sequence effects of asking consumers' anticipated regret will be further discussed in the next chapter.

Table 6.4 The Regression Analysis Results for Predicting Purchase Intention

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std.Error	Beta		
1	(Constant)	-.65	.45		-1.46	.15
	Anticipated Regret	.23	.08	.22	2.89	.01
	Consumers' Attitude	.93	.12	.63	8.05	.00

Note: R^2=.62, $F_{2, 108}$=89.09, p <.001.

6. 3. 5 Testing the Effect of Promotion Frequency on Purchase Intention

To test the main effect of price discount promotion frequency on consumers' purchase intention, we conducted an ANOVA analysis by taking promotion frequency treatment as the independent variable and the consumers' purchase intention as the dependent variable. The result of Levene's test indicates that there was inequality in the error variances of purchase intention across the two groups ($F_{1,115}$=5.44, p-value<.05). Therefore, the corrected model was used for further analysis. The result of the ANOVA analysis is shown in Table 6.5.

Table 6.5 The Effect of Promotion Frequency on Purchase Intention

Source	Type III Sum of Squares	df	Mean Square	F	Sig
Treatment	35.20	1	35.20	12.44	.00
Error	325.38	115	2.83		

The results indicate that participants in the "high-frequency" treatment group showed less purchase intention (M_1=4.28) than those in the "low-frequency" treatment group (M_2=5.37), and that the difference between the two treatment groups in purchase intention was statistically significant ($F_{1,115}$=12.44, p-value<.01). Therefore, consumers produce higher purchase intention when confronting low-frequency price discount promotion than when confronting high-frequency promotion. Thus, hypothesis H_5 is confirmed.

To further investigate the possible mediating effects of consumers' attitude and anticipated regret between promotion frequency and consumers' purchase intention, the procedure suggested by Baron and Kenny (1986) were borrowed here. We first transformed the dichotomous variable of promotion frequency treatment into continuous dummy variable in a way that higher value means less promotion frequency. We then conducted a hierarchical multiple regression analysis by entering the dummy variable in the first block and consumers' attitude and their anticipated regret in the second block. No multicollinearity was found among the independent variables (e.g., no VIF for any independent variable in the two regression models exceeded the critical value, i.e., 10). Results of the regression analysis are shown in Table 6.6.

The regression results, as shown in Table 6.6, reveal that promotion frequency negatively affects consumers' purchase intention (t=2.88, p-value<.01, keeping in mind that the higher the value of the dummy variable is, the lesser the promotion frequency). However, this effect disappeared when consumers' attitude and anticipated regret were included in the regression analysis (t=1.30, p>.10). Together with the regression analysis on the effects of consumers' attitude and anticipated regret on purchase intention, we conclude that the effect of promotion

frequency on consumers' purchase intention is fully mediated by consumers' attitude towards purchase behavior and their anticipated regret. These results confirm hypothesis H_6.

Table 6.6 Hierarchical Regression Analysis of Purchase Intention

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std.Error	Beta		
1	(Constant)	4.43	.23		19.61	.00
(R^2=.06)	Promotion Frequency	.91	.32	.27	2.88	.01
	(Constant)	-.67	.45		-1.51	.13
2	Promotion Frequency	.27	.21	.08	1.30	.20
(R^2=.62)	Consumers' Attitude	.92	.12	.62	7.96	.00
	Anticipated Regret	.22	.08	.21	2.67	.01

6.4 Further Examining the Effect of Consumers' Gender

As we have collected the data regarding consumers' gender in the current study, we can further test the effects of consumers' gender using the same procedure as discussed in Chapter 5. Results of the chi square test of consumers' gender distribution and scenario stimuli distribution (i.e., high-promotion frequency and low-promotion frequency) indicate that there is no distribution difference in scenario stimuli between the male group and the female group (x^2=.01, df=1, p-value>.10). Therefore, the mean difference in anticipated regret between the male group and the female group comes from the gender difference rather than from the stimuli difference. Results of the ANOVA analysis, as shown in Table 6.7, indicate that consumers' gender affects their anticipated regret. Specifically, the female consumers generate more anticipated regret (M_1=4.37) than do the male consumers (M_2=3.73), with the difference reaching a statistical

significance ($F_{1,111}$=4.19, p-value<.05). Therefore, hypothesis H_{11} in Chapter 5 is further confirmed.

Table 6.7 Further Testing the Effect of Gender on Anticipated Regret

Source	Type III Sum of Squares	df	Mean Square	F	Sig
Gender	11.66	1	11.66	4.19	.04
Error	308.63	111	2.78		

To further validate the moderating effects of consumers' gender in the relationship between anticipated regret and purchase intention, we followed the same procedure as that in the previous chapter. The obtained results are shown in Table 6.8.

Table 6.8 Further Testing the Moderating Effects of Consumers' Gender

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std.Error	Beta		
1	(Constant)	2.38	.43		5.50	.00
	Anticipated Regret	.64	.11	.60	6.09	.00
	Gender	-1.04	.67	-.29	-1.55	.12
	Anticipated Regret ×Gender	.17	.15	.24	1.14	.26

Note: R^2=.44, $F_{3,109}$=30.03, p <.001

The results of the regression analyses for the two groups (as shown in Table 6.8) reveal that, anticipated regret positively affects purchase intention (β=.60, t=6.09, p-value<.001, R^2=.44). However, the results shown in Table 6.8 also reveal that the interaction between anticipated regret and gender has no effect on purchase intention (t=1.14, p>.10). Therefore, hypothesis H_{12} in previous chapter5 is not confirmed here. One possible reason for this result is that we asked the respondents to indicate their purchase intention before answering their

anticipated regret in this study, while asked respondents to rate their anticipated regret before indicating their purchase intention in Chapter5. We will further investigate this possible sequence effect in Chapter7.

6.5 Conclusive Discussion

In this chapter, we investigated how promotion frequency affects consumers' response to price discount promotion. Specifically, we focused on the effects of promotion frequency on consumers' affective and behavioral response towards price discount promotion. We also developed relevant hypotheses together with an integrated model, which includes both consumers' attitude and their anticipated regret, to reflect consumers' affective response. To validate the proposed hypotheses, a scenario experiment was conducted by taking undergraduates as subjects. The manipulation check indicates that the experiment was manipulated successfully. A series of ANOVA analyses and regression analyses confirmed all the hypotheses.

The findings of the current study show profound theoretical significance. They further validate our argument that anticipated regret is an important cognitive emotion that plays a role in consumers' affective response towards price discount promotion. The findings also extend the traditional TPB model by including anticipated regret in the model, corresponding with the suggestion by Ajzen (1991).

The findings of the current study also have meaningful practical relevance in guiding marketing practitioners when designing price discount promotion schemes. According to our research findings, promotion frequency negatively

affects consumers' purchase intention under the context of price discount promotions. Therefore, to make the price discount promotion more effective in affecting consumers' purchase behavior, markers should avoid frequently conducting price discount promotions.

The current research has several limitations. First, consumers' cognitive response towards price discount promotion frequency was not included in the research. Second, promotion frequency may interact with promotion depth in affecting consumers' behavioral response under price discount promotion settings, which was not examined in this study. Third, the effects of price discount promotion frequency on consumers' purchase intention may be contingent on some exogenous variables (e.g., price, brand, product category, etc.). Such information was also not considered in the current study. For instance, if the product under promotion is of well-known brand, high promotion frequency may lead to higher perceived value, thus leads to more favorable consumers' attitudes and purchase intentions. Hence, it is worth putting research efforts to further identify the boundary conditions for the findings of current chapter. Towards these directions, the current research can be further extended to obtain more cumulative knowledge about the effects of promotion frequency on consumers' purchase intention under the context of price discount promotions.

CHAPTER 7: PRICE DISCOUNT PROMOTION AND THE COGNITIVE - AFFECTIVE - BEHAVIORAL RELATIONSHIP

Under the framework of a cognitive-affective-behavioral response, we hypothesize that perceived value plays a role in the cognitive stage, whereas anticipated regret plays a role in the affective stage to explain consumers' behavioral response to price discount promotions. Accordingly, we hypothesize that consumers' anticipated regret is affected by perceived value. However, the alternative conjecture that consumers' anticipated regret is affected by perceived value has not yet been tested. Therefore, eliminating the alternative conjecture to further validate the integrated model proposed in the previous chapters is required. This issue undergoes further empirical testing in this chapter. In addition, anticipated regret may not automatically be included in consumers' decision-making process (Crawford, McConnell, Lewis and Sherman, 2001). Therefore, anticipated regret plays an important role in some decision-making contexts while plays a trivial or minimal role under other decision-making contexts. In this chapter, we also discuss the boundary conditions of anticipated regret affecting consumers' decision making under the price discount promotion settings.

7.1 The Relationship between Perceived Value and Anticipated Regret

In our previous study, we considered perceived value as reflecting the cognitive part and anticipated regret as reflecting the affective part of the consumers' behavioral response process. Therefore, we hypothesize that

perceived value increases anticipated regret. This hypothesis is confirmed by our data.

However, there is still another possible relationship between perceived value and anticipated regret, i.e., anticipated regret may positively affect perceived value. Consumers' perceived value is subjective and contingent on some reference points, such as the possible outcome of alternative choice (Boles and Messick,1995; Hoelzl and Loewenstein, 2005). Under the context of price discount promotion, anticipated regret is essentially a cognitive emotion that consumers may experience if they decide not to purchase the item under promotion. Therefore, anticipated regret can be considered as an indicator representing the perceived emotional sacrifice of the alternative decision (i.e., not to purchase the item under the price discount promotion), which may in turn increase the relative value of purchasing the item by decreasing the value of the alternative decision.

According to the discussion above, we conjecture that there exists reciprocal relationship between perceived value and anticipated regret, i.e., perceived value increases anticipated regret, whereas anticipated regret in turn increases perceived value as well. We conducted another study using the similar scenario experiments but extending the product categories to notebook computers and shampoos. Consumers' behavioral response including perceived discount, perceived value, consumers' attitude, anticipated regret, and purchase intention were measured. The constructs including perceived discount, perceived value, consumers' attitude, anticipated regret, and purchase intention were all measured using the same scales used earlier in the present thesis. Deviating from the study design in Chapter 5, we asked the participants to indicate their purchase intention

before answering other questions including anticipated regret, as we intended to test the sequence effect of the questions later. A total of 434 responses, including both MBA students and undergraduate students, were considered for the statistical analysis. The distribution of the respondents is shown in Table 7.1.

Table 7.1 The Distribution of Respondents

	Category	Count	Percentage (%)
Product Category	Clothing	90	20.74
	Notebook computer	251	57.83
	Shampoo	93	21.43
Gender	Male	260	59.90
	Female	166	38.20
	Missing	8	1.80
Shopping Experience	Very few	65	15.00
	Occasionally	283	65.20
	Frequently	76	17.50
	Missing	10	2.30

The results of the reliability check indicate that perceived value (Cronbach's α=.78), anticipated regret (Cronbach's α=.85), and consumers' attitude (Cronbach's α=.88) were all measured well. We further used the SEM technique to compare the competing models with the base model, which does not include the reciprocal relationship between perceived value and anticipated regret. To conduct these analyses, we followed the same analytical procedure used in Chapter 5.

7. 1. 1 Measurement Model Testing

We first conducted CFA analysis to examine the measurement model. The fitted measurement model is illustrated in Figure 7.1. The fit indices of the measurement model are listed in Table 7.2. All fit indices indicate that the

measurement model provides a good fit to the data (X^2/df<3, RMSEA<=.06; GFI>.95, AGFI>.90, CFI>.95).

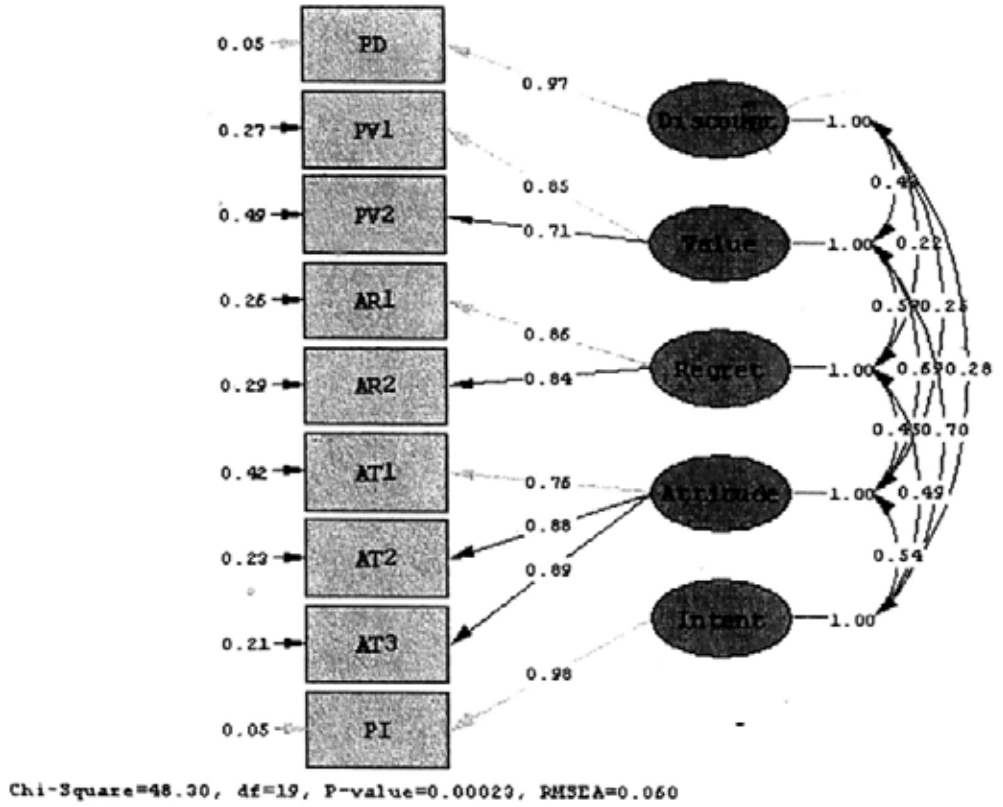


Figure 7.1 The Measurement Model

Table 7.2 Fit Indices of the Measurement Model

X^2	df	RMSEA	GFI	AGFI	CFI
49.43	19	.06	.98	.94	.99

To examine further the reliability and construct validity of the measures, we calculated the construct reliability coefficients (CR) and the variance extracted (VE) for each construct. We then listed the coefficients together with the standardized factor loadings of all measurement items on the respective constructs they intend to measure, as shown in Table 7.3. All standardized factor loadings coefficients are greater than .70; all CR coefficients are greater than .60, which is the hurdle value suggested by Bagozzi and Yi (1988); and all VE coefficients are

greater than .50, which is the hurdle value suggested by Hair et al. (1998). These results reveal that the measurement model exhibits good reliability and convergent validity.

Table 7.3 Reliability and Convergent Validity Check

Constructs	Items	Standardized Factor Loadings	CR (Construct Reliability)	VE (Variance Extracted)
Perceived Price Discount	PD	.97	.95	.95
Perceived Value	PV1	.85	.76	.62
	PV2	.71		
Anticipated Regret	AR1	.86	.84	.72
	AR2	.84		
Consumers' attitude	AT1	.76	.88	.71
	AT2	.88		
	AT3	.89		
Purchase Intention	PI	.98	.95	.95

To investigate the discriminant validity of the measurement model, Table 7.4 presents the squared correlation coefficients among all the constructs resulting from the SEM results report. The averages of the squared multiple correlations for the items and the related factors replace the diagonal numbers in the table. Based on the table, no squared correlation coefficients between any two constructs are greater than the coefficients in the grids on the diagonal line, proving that the measurement model shows good discriminant validity.

According to the results of the measurement model testing, the measurement model exhibits good model fit to the data, good reliability, and good validity. Therefore, we can further analyze the structural relationship by running the full model.

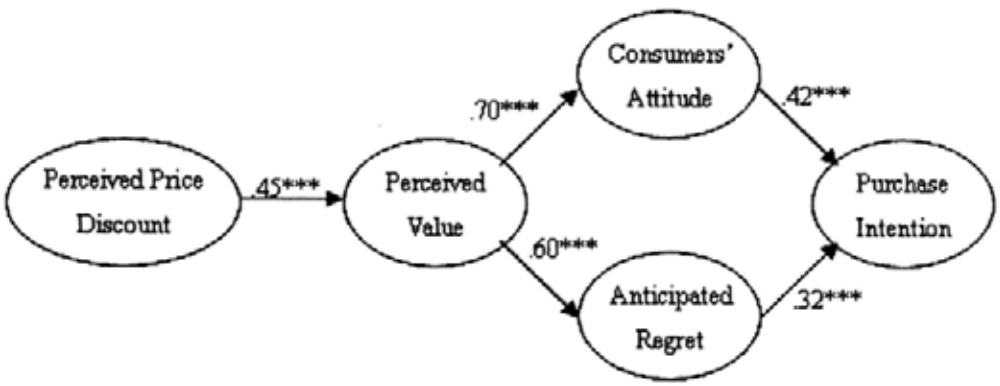
Table 7.4 Squared correlation coefficients among constructs

	Perceived Price Discount	Perceived Value	Anticipated Regret	Consumers' Attitude	Purchase Intention
Perceived Price Discount	.95*				
Perceived Value	.23	.62*			
Anticipated Regret	.05	.32	.73*		
Consumers' Attitude	.06	.48	.20	.71*	
Purchase Intention	.08	.49	.24	.29	.95*

Note: * Average of squared multiple correlations for items and the related factor.

7. 1. 2 Structural Model Testing

We tested the base model (i.e. the model proposed and confirmed in Chapter 5) with the difference that consumers' perceived quality and perceived sacrifice are not included in the base model, as we focused on the relationship between perceived value and anticipated regret. By inputting the dada and running Lisrel 8.71, we obtained the base model presented in Figure 7.2.



Note: * denoted p <.10; ** denoted p<.05; ***denoted p<.01

Figure 7.2 The Base Model

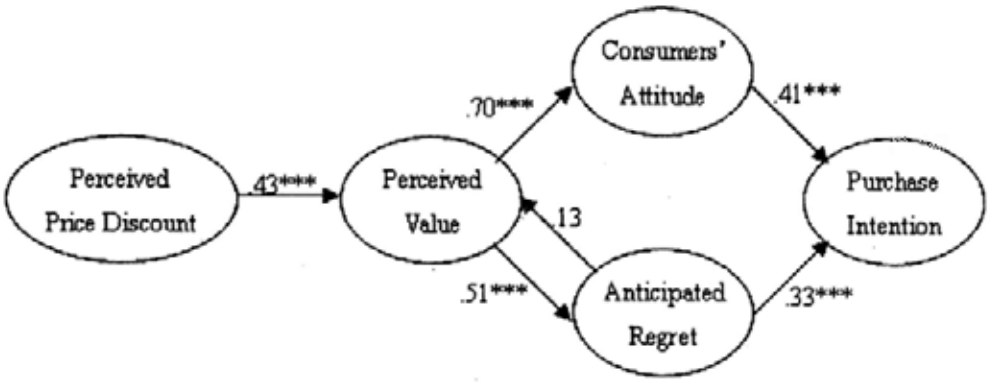
The model fit indices in Table 7.5 indicate that the model provides marginally acceptable fit to the data (RMSEA<.10; GFI>.95, AGFI>.90, CFI>.95). The standardized path coefficients listed in Figure 7.2 further confirm

that price discount affects consumers' purchase intention through the three stages: cognitive information processing as reflected in price discount perception and evaluation, affective response as reflected in attitude formation and anticipating regret, and behavioral reaction as reflected in behavioral intention.

Table 7.5 Fit Indices of the Structural Model

Model	X^2	df	RMSEA	GFI	AGFI	CFI
Base Model	109.17	24	.09	.95	.90	.97
Alternative Model	108.35	23	.09	.95	.90	.97

Next, we tested the alternative structural model by including the reciprocal relationship between perceived value and anticipated regret, and obtained the alternative structural model as shown in Figure 7.3. The model fit indices are presented in Table 7.5.



Note: * denoted p <.10; ** denoted p<.05; ***denoted p<.01

Figure 7.3 The Alternative Model

The chi-square difference test indicates that the alternative model does not provide a better model fit to the data ($\triangle\chi^2$=.82, $\triangle$df=1, p-value>.10). Therefore, the more parsimonious model shown in Figure 7.2 is preferred and selected as the model we suggested here. The path coefficient of anticipated regret affecting perceived value does not reach the statistical significance (β=.13, t=1.00, p>.10) in the alternative model. Thus, our hypothesis on the reciprocal relationship

between perceived value and anticipated regret under price discount promotion settings is rejected. Hence, regarding the relationship between perceived value and anticipated regret, we suggest that consumers' perceived value affects their anticipated regret in consumers' behavioral response process in price discount promotion.

7.2 The Sequence Effect

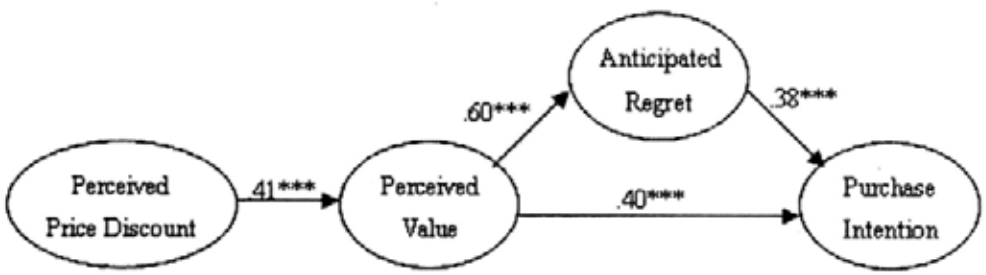
As shown in previous chapters, the moderating effect of gender in the relationship between anticipated regret and purchase intention under price discount promotion settings exist under some conditions, but disappear under other conditions. One important factor contributing to this effect is the sequence of questions in the questionnaire. We call the sequence effect.

We argue that if the respondents are asked about their anticipated regret before indicating their purchase intention, the question regarding anticipated regret itself will likely prime respondents with a mindset of anticipating regret when making a purchase decision, and hence enlarge the effects of anticipated regret. Therefore, the effect of anticipated regret on purchase intention should be larger for the "anticipated regret question first" condition than for the "purchase intention question first" condition.

To validate our conjecture, we jointly analyze the dataset of 434 respondents collected in this chapter and the dataset of 274 respondents we mentioned in Chapter 5. The major difference is that we asked the respondents to indicate their purchase intention before rating their anticipated regret in the dataset collected in the current chapter, whereas we asked the respondents to rate their anticipated regret before indicating their purchase intention in the dataset

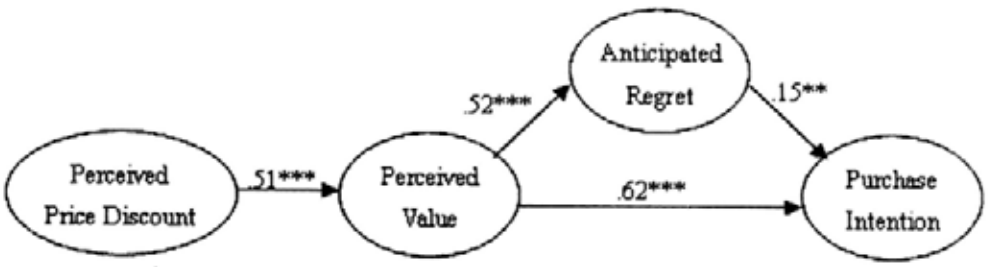
collected in Chapter5. As we focus on the role of anticipated regret, we did not include the consumers' attitude in the analysis. The statistical technique of multi-group SEM analysis was conducted to test the sequence effect. The model indices shown in Table 7.6 demonstrate that the measurement model fits the data well (RMSEA<.08; GFI>.95, CFI>.95).

We further investigated the structural models. As we did not include the consumer's attitude in the model, we freed the path between the perceived value and purchase intention to reflect the effects of affective factors other than anticipated regret in the model. The fit indices of the full structural model, as shown in Table 7.6, indicate that the full structural model fits the data well (RMSEA<.08; GFI>.95, CFI>.95). Furthermore, in identifying the effect size of anticipated regret on purchase intention across the two groups, as depicted in Figure 7.4 and 7.5, we found that the standardized path coefficient for the "anticipated regret question first" group (β=.38, t=6.82, p-value<.001) is greater than that for the "anticipated regret question later" group (β=.15, t=2.83, p-value<.05).



Note: * denoted p <.10; ** denoted p<.05; ***denoted p<.01

Figure 7.4 The Model Asking Anticipated Regret Before Purchase Intention



Note: * denoted p <.10; ** denoted p<.05; ***denoted p<.01

Figure 7.5 The Model Asking Purchase Intention Before Anticipated Regret

To test whether the difference in the regression coefficients of anticipated regret affecting purchase intention across the two conditions reaches the statistically significant level, we constrained the path coefficients across the two groups be the same, applied the constrained model, and obtained the model fit indices as shown in Table 7.6. The results of the chi-square difference test results proves that the difference in the standardized path coefficients of anticipated regret affecting purchase behavior across the two groups reaches statistical significance ($\triangle\chi^2$=7.89, $\triangle$df=1, p-value<.01).

Table 7.6 Fit Indices of the Measurement Model of Sequence Effect

Model	X^2	df	RMSEA	GFI	CFI
Measurement Model	75.73	22	.08	.98	.98
Full Structural Model	65.11	20	.08	.98	.98
Constrained Structural Model	73.00	21	.08	.98	.98

To compare the effect size of anticipated regret on purchase intention, we further split the data into two groups according to the question sequence, and applied the regression analyses for the two groups, respectively. The results show that anticipated regret positively affects purchase intention both in the "anticipated regret question first" condition ($F_{1,265}$=183.43, p-value<.001, R^2=.41) and in the "anticipated regret question later" condition ($F_{1,424}$=101.08, R^2=.19).

Moreover, more variance of purchase intention is explained by anticipated regret in the former condition than in the latter condition.

Thus, we demonstrate here that the sequence effect does exist. If we ask the respondents to rate their anticipated regret before indicating their purchase intention, their purchase decision will be more affected by anticipated regret than if we reverse the question-asking sequence.

7.3 Conclusive Discussion

In this chapter, we further validated the cognitive-affective-behavioral stages of consumers' response to price discount promotion by extending our research settings to other product categories, such as notebook computer and shampoo, therefore enhancing the external generalizability of our proposed model regarding consumers' response to price discount promotion. We also investigated the relationship between perceived value and anticipated regret. By comparing the model that includes the one-way effect of perceived value affecting anticipated regret and the model that includes the reciprocal effects between perceived value and anticipated regret, we found that the former provides better model fit to the data than the model with the reciprocal relationship. This research finding provides us with a more profound understanding of consumers' response process to price discount promotion.

Finally, we investigated the boundary condition for the effect of anticipated regret on purchase intention. Through model comparison, we found that the sequence of question asking moderates the effect of anticipated regret on purchase intention. Specifically, anticipated regret influences purchase intention

more when respondents are asked to rate their anticipated regret before indicating their purchase intention than when they are asked in a reverse sequence.

The research findings of the current chapter have managerial implications for marketers to implement price discount promotion schemes. In implementation of price discount promotion schemes, marketers can obviously ask consumers to think more details about how much regret they might experience if they missed the current good purchase opportunity before persuade consumers to purchase the products or services that under promotion.

The research in current chapter also suffered from some limitations. For instance, the sequence effect needs further investigation by stricter experimental control to eliminate the possible confounding factors aside from the sequence effect in affecting the relationship between anticipated regret and purchase intention, such as the difference in price discount promotion depth, and the difference in product categories.

CHAPTER 8: GENERAL CONCLUSION AND DISCUSSION

In this chapter, we briefly conclude the research findings from the investigations in the previous chapters. We then discuss their theoretical and practical marketing implications, and finally present the research limitations of the present thesis and define the future research direction.

8.1 General Conclusion

This thesis centered on investigating how price discount promotion affects consumers' purchase decision making. We have investigated the important characteristics of price discount promotion, i.e., promotion framing, promotion depth, and promotion frequency with focus on their influences on consumers' behavioral response in Chapter 4, Chapter 5, and Chapter 6, respectively. We have further investigated the relationship between perceived value and anticipated regret, and the sequence effect in moderating the relationship between anticipated regret and purchase intention in Chapter7. Consumers' gender difference was also investigated in Chapter 5 and Chapter 6.

Regarding the effects of price discount framing on consumers' purchase decision making, we proposed a model under the price-value framework and empirically tested the model using two experimental studies. We arrived at the following results: 1) price discount framing exerts influences on consumers' purchase intention through the mediating effects of consumers' perceived value; 2) all other things remaining the same, dollar-off price discount leads consumers to generate higher perceived value purchase intention than percentage-off price

discount; 3) the effects of price discount framing on consumers' perceived value are moderated by the degree of calculation of price discounts in a way that if the price discount is easy to calculate then dollar-off price discount framing produces higher consumers' perceived value. However, the effect of price discount framing on consumers' perceived value disappears if the price discount is very easy to calculate; 4) the effects of price discount framing on consumers' perceived value are moderated by the price level of the promotional products in a way that the dollar-off price discount promotion leads to higher consumers' perceived value than the percentage-off price discount promotion for high-priced promotional products, whereas the effect of price discount framing on consumers' perceived value disappears for low-priced promotional products.

Regarding the influences of price discount promotion depth on consumers' purchase decision-making process, we proposed an integrated model that extends the well-known price-value model by including consumers' anticipated regret in the model under the means-end framework. According to the study results, we found that: 1) due to the discounting of discounts, consumers perceive price discounts in a curvilinear way, where the marginal increase of consumers' perceived price discount decreases as the price discount depth increases; 2) consumers' perception of price discount negatively affects their perceived sacrifice; 3) consumers' perceived price discount has no effect on perceived quality; 4) consumers' perceived price discount positively affects their perceived value, and this effect exists even after controlling for the effects of perceived sacrifice and perceived quality; 5) consumers' perceived discount positively affects their anticipated regret. However, this effect is fully mediated by the effects of perceived sacrifice, perceived quality and perceived value; 6)

consumers' perceived sacrifice negatively affects their perceived value; 7) consumers' perceived quality positively affects their perceived value; 8) consumers' perceived value positively affects their purchase intention; 9) consumers' perceived value positively affects their anticipated regret; 10) consumers' anticipated regret positively affects their purchase intention; 11) consumers' purchase intention is better predicted by including consumers' anticipated regret as the predictor; and 12) to describe the overall process of consumers' response to price discount promotions, the integrated model that includes the role of anticipated regret provides a good model fit.

In terms of the influences of price discount promotion frequency on consumers' purchase decision-making process, we proposed an extended TPB model that includes anticipated regret as another key construct in describing consumers' affective response to price discount promotions. We found that: 1) consumers generate a more favorable attitude towards price discount promotion with low-promotion frequency than that with high-promotion frequency; 2) consumers generate more anticipated regret towards the price discount promotion with low-promotion frequency than that with high-promotion frequency; 3) consumers' purchase intention is higher when the price discount promotion frequency is low than when it is high; 4) consumers' attitude towards the purchasing behavior positively affects their purchase intention; 5) consumers' anticipated regret positively affects their purchase intention; 6) the effects of price discount promotion frequency on consumers' purchase intention are fully mediated by the effects of attitude towards purchasing behavior and anticipated regret.

Regarding the factors that affect the role of anticipated regret in explaining and predicting consumers' behavioral response to price discount promotions, we examined the consumers' gender and the sequence effect of asking questions, and further investigated the relationship between perceived value and anticipated regret. According to the study results, we found that: 1) under the same price discount promotion, female consumers generate more anticipated regret than do males; 2) the effect of anticipated regret on consumers' purchase intention is generally larger for female consumers than for male consumers, although the difference is not statistically significant when subjects are asked about their purchase intention before their anticipated regret; 3) the effect of anticipated regret on consumers' purchase intention is moderated by the sequence of question asking. Specifically, the effect of anticipated regret on purchase intention is larger when the subjects are asked the question on anticipated regret before the question on purchase intention than when they are asked the questions in reverse; and 4) consumers' perceived value is the antecedent rather than the consequence of anticipated regret in affecting purchase intention, as the integrated model including the former relationship provides a better model fit.

8.2 Theoretical and Practical Implications

The research findings of the present thesis have potentially important theoretical significance in explaining and predicting consumers' purchase decision making under price discount promotions, and providing insightful guidance to marketing practitioners in designing price discount promotion schemes.

8. 2. 1 Theoretical Contribution

The research findings of the current thesis make several cumulative theoretical contributions to academic research on price discount promotions. First, this thesis investigates and empirically validates the critical role of anticipated regret in explaining and predicting consumers' response to price discount promotions, filling the research gap in the current literature on price discount promotions. Specifically, under the means-end framework (Zeithaml, 1988), based on the regret regulation theory (Zeelenberg and Pieters, 2006; Pieters and Zeelenberg, 2007), this thesis investigates the entire process of consumers' cognitive, affective and behavioral response towards price discount promotion, and proposes an integrated model, which includes the role of anticipated regret in describing the consumers' affective response towards the price discount promotion. Both the price-value model, including the derived models (e.g., Monroe and Krishnan, 1985; Zeithaml 1988; Dodds et al.,1991; Kerin et al., 1992; Grewal, et al., 1998), and the theory of planned behavior (Ajzen, 1991) do not consider how consumers' motivation activated by the avoidance goal (e.g., to avoid future possible negative emotion including regret) plays a role in explaining and predicting consumers' response towards price promotions. Hence, the proposed integrated model, including the role of anticipated regret in this thesis, fills the research gap to understand the overall mechanism underlying consumers' response to price discount promotions.

Second, the research findings on the effects of price discount promotion framing fills the research gap in the stream of discount framing research literature. Although the effects of price discount framing on consumers' perceived value and

purchase receive much research attention (e.g., Della Bitta and Monroe, 1980; Gupta and Cooper, 1992; Krishna et al. 2002; Estelami, 2003;Kim and Kramer, 2006), the effects of discount calculation difficulty and price level of promotional product in affecting consumers' response to percentage-off versus dollar-off discount framing have not yet been examined. The research findings of the present thesis suggest that dollar-off discount usually generates higher consumers' perceived value and purchase intention. However, this effect is moderated by the discount calculation difficulty and the price level of the promotional product. These findings help to understand how consumers respond to different price discount framing forms.

Third, the research findings on the effects of price discount frequency enrich the literature regarding consumers' response to price discount frequency. The research findings suggest that, compared to the frequent price discount promotion, infrequent price discount promotion leads consumers to generate more anticipated regret and higher purchase intention. Current literature (e.g., Lattin and Bucklin, 1989; Yoo, Donthu and Lee, 2000) extensively discusses the role of price discount frequency in affecting consumers' cognitive response (e.g., perceived quality, perceived price, consumers' internal reference point, and perceived value) and behavioral response (e.g., purchase intention), but few of them investigate the effects of price discount promotion frequency on consumers' affective response (e.g., consumers' attitude). Moreover, no current research was found to investigate the effects of price discount promotion frequency on consumers' anticipated regret. The research findings of this thesis can fill this research gap.

Fourth, the research finding on the sequence effect offers both theoretical and methodological significances. The finding of this thesis suggests that the effect of consumers' anticipated regret on their purchase intention is contingent on the questions-asking sequence in the questionnaire. Theoretically, this finding identifies the question-asking sequence as one antecedent of anticipated regret, which fills the research gap with response to the call raised by Zeelenberg (1999). Methodologically, the finding of this thesis further confirms that the research findings can be influenced by the listing sequence of questions in the questionnaire, making the researchers aware of the sequence effect in designing research schemes.

Fifth, the research finding on gender difference enriches the literature on gender studies. The finding of this thesis further confirms that, gender difference does exist in consumers' decision making process. Although the issue has been expounded in previous research (e.g., Areni and Kiecker, 1993; Prince, 1993; Campbell, 1997; Barone and Roy, 2010), few of the studies discussed how gender affects consumers' anticipated regret. The relevant finding of this thesis can help better understand gender difference in responding to price discount promotions.

Last but not the least, the present research findings on the relationship between consumers' perceived value and their anticipated regret enrich the literature regarding consumers' perceived value. Although marketing managers are interested in what influences consumers' perceptions of value, researchers rarely have investigated or measured the concept of perceived value (Dodds, Monroe and Grewal 1991). One reason for this deficiency is that value is an abstract concept that is highly interrelated and frequently confused with the concepts of quality, benefits, and price (Zeithaml 1988; Dodds, Monroe and

Grewal 1991). By taking consumers' perceived value as a measure for consumers' overall cognitive response to price discount promotions, and by taking consumers' attitude and anticipated regret as measures for consumers' affective response to price discount promotions, we validated the cognitive–affective-behavioral link in consumers' response to price discount promotions. We also revealed that perceived value is the antecedent of consumers' attitude and anticipated regret. This difference between perceived value and related concepts can provide reference for future relevant studies.

8. 2. 2 **Practical Marketing Implications**

The research findings of this thesis can provide insightful guidance to marketing managers in designing price discount schemes more effectively. First, the findings on the role of anticipated regret in predicting consumers' purchase intention indicate that, consumers' purchase intentions can be better explained and predicted when anticipated regret is considered. Accordingly, consumers' purchase intention can be induced by markers either through communicating to them how attractive the price discount promotion is or through letting them realize how regretful they will be if they miss the price discount promotion

Second, the research findings of present thesis regarding the moderators in affecting the effects of price discount framing on consumers' response indicate that, marketers should design the price discount promotion in an easy-to-calculate manner, especially when promoting high-priced products, in order to produce higher perceived value and higher purchase intention.

Third, the findings of present thesis indicate that, price promotion frequency not only affects consumers' attitudes towards the purchasing behavior

but also the affects consumers' anticipated regret. Therefore, markers should avoid to frequently conducting price discount promotion as possible as they can.

Fourth, the finding of present thesis on sequence effect implies that, directly asking consumers to anticipate their future regret if missing the current purchase opportunity under price discount promotion before persuading them to purchase the products or services under promotion is a good tactic for inducing higher consumers' purchase intentions.

Fifth, the findings of this thesis on the gender difference indicated that, female consumers are generally more affected by anticipated regret, whereas male consumers are generally more affected by their attitudes towards the purchasing behavior. Hence, the effectiveness of price discount promotion can be enhanced if marketers design different marketing communication messages for the female and male consumers respectively. Specifically, marketers can emphasize more on how much regret consumers might experience if they missed a good purchase opportunity the price discount promotions provide if the targeted consumers are mainly comprised of females, while emphasize more on how much consumers may save if they grasp the purchase opportunity the current price discount promotions provide if the targeted consumers are mainly comprised of males.

8.3 Research Limitations and Future Research Directions

The current thesis suffers from several research limitations. First, when testing the integrated model in Chapter 5, convenience sampling was used to collect data. The distribution of respondents covered population with varying ages and different revenue levels; nevertheless, the generalizability of the fitted model still needs further examination. Second, we separately studied how promotion

depth, promotion frequency and promotion framing affect consumers' response; however, we did not investigate their interaction effects in affecting consumers' response. Third, although we validated that anticipated regret plays a critical role in consumers' response to price discount promotions, we did not examine the effects of potential antecedents and moderators other than promotion depth, promotion frequency, sequence of asking anticipated regret, and consumers' gender. To overcome these research limitations of present thesis, future research efforts on how consumers respond to price discount promotions are encouraged towards the following directions.

First, we recommend testing the integrated model, which includes consumers' anticipated regret by collecting data from other populations and under the price discount promotion settings, to other product categories. This should be done to examine the external generalizability and possible moderators of the proposed integrated model.

Second, we suggest investigating the interaction effects of promotion depth and promotion frequency on affecting consumers' perceived value, attitudes, and purchase intentions to provide a more cumulative knowledge of the role of anticipated regret and consumers' overall response process to price discount promotions.

Third, further investigating the factors affecting the role of anticipated regret in consumers' response to price discount promotions is also encouraged, following the direction suggested by the five conditions of anticipated regret (Janis and Man, 1977; Zeelenberg, 1999) . For instance, temporality is one important characteristic of price discounts promotions; therefore, when customers step into the store and find out about the product under price discount promotion,

they may not notice the deadline of the promotion, whether or not to saliently notify customers of the information regarding the deadline of the price discount promotion (i.e., deadline notification) may be a possible antecedent of consumers' anticipated regret. For another example, the price level of promotional products may also be an antecedent of consumers' anticipated regret, because the high price of the promotional products increases the importance of the purchase decision, leading consumers to generate more anticipated regret.

Fourth, Higgins (1998) proposed a regulatory focus to describe how people approach pleasure and avoid pain. People may center on the acquisition of positive goals, such as advancement, achievement, and growth, as described in the term "promotion focus". People may also center on preserving an absence of unwanted occurrence, such as safety, security and protection, as described in the term "prevention focus". Regulatory focus can be manipulated by priming procedure, and can influence counterfactual thinking (Roese, Hur and Pennington 1999). Therefore, future research efforts are encouraged to further investigate the relationship between consumers' anticipated regret and their regulatory focus, in order to bridge a link between the literature regarding anticipated regret and the literature regarding the regulatory focus.

Finally, further identifying the cross-cultural difference in anticipated regret under price discount promotions is also worth of delving efforts into. Human behaviors are unconsciously shaped by the culture to which they are exposed. Many researchers have investigated and confirmed the cross-cultural difference in consumer behaviors. When focusing on the dimension of culture "individualism-collectivism", we can conjecture that consumers exposed to the individualism culture are less likely affected by others in making decisions than

those exposed to the collectivism culture. Zeelenberg (1999) proposed that the patience of the significant individuals in the decision makers' social network who are interested in this particular decision is an important source for decision makers to anticipate regret in making decisions. Therefore, we can predict that consumers exposed to the collectivism culture are more likely to be affected by the significant persons in their social network and hence generate more anticipated regret than those exposed to the individualism culture. To reveal the truth about this conjecture, future empirical examinations are encouraged in the field.

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APPENDICES

Appendix A: Thesis Title and Abstract in Chinese

論文題目：

價格折扣促銷對消費者反應的影響

論文摘要：

本文主要研究價格折扣促銷如何影響消費者購買決策過程，並聚焦于消費者預期後悔在其中的作用。詳細而言，本文研究價格折扣促銷的三個重要特徵（也就是，折扣形式、促銷幅度和促銷頻率）如何影響消費者行爲反應。本文首先對價格促銷影響消費者反應的相關文獻進行回顧，深入討論預期後悔的概念，並隨後針對折扣形式、促銷幅度和促銷頻率對消費者反應的影響逐個進行實證檢驗。

然後，本文針對折扣形式如何影響消費者反應進行深入研究，提出了一個價格-價值模型用以解釋價格折扣形式對消費者購買意願的影響。 兩個實驗的結果表明，價格折扣形式通過消費者感知價值的完全仲介作用影響消費者購買意願。金額基礎的價格折扣形式比百分比基礎的價格折扣形式產生更高的感知價值和購買意願，但是，這一關係受到折扣計算難度和被促銷品價格水準的調節作用影響。

隨後，本文研究價格折扣幅度對消費者行爲反應的影響。基於“手段-結果”這一框架，本文引入預期後悔延伸既有的價格-價值模型，並提出一個解釋支撐消費者對價格折扣促銷行爲反應內在機制的整合模型。基於問卷調研資料進行分析，結果顯示本文所提出的整合模型擬合數據較好，並且，當預期後悔納入模型後，消費者購買意願得到更好的解釋和預測。

接下來，本文研究價格折扣促銷頻率對消費者行爲反應的影響，並聚焦于消費者情感反應階段，提出一個同時考慮消費者態度和預期後悔的模型。實驗研究分析結果顯示，價格折扣促銷頻率負向影響消費者預期後悔和購買意願，消費者態度和預期後悔是促銷頻率影響消費者購買意願的完全仲介變數。

本文同時也針對那些影響預期後悔對購買意願作用的前導變數、調節變數和仲介變數進行研究。關於性別差異的研究發現，面臨價格折扣促銷時，女性消費者比男性消費者產生更高的預期後悔。關於順序效應的研究結果表明，與先讓消費者做購買決定再讓他們預期如果不買未來將感受到的後悔相比，如果在消費者做出購買決定之前讓他們預期如果不買未來將感受到的後悔，預期後悔對購買意願的影響將更大。關於感知價值與預期後悔之間關係的研究結果表明，預期後悔是感知價值影響購買意願的仲介變數。

本文的研究發現對於理解價格折扣促銷如何影響消費者反應具有深刻的理論意義，同時對於指導行銷者更有效地設計其價格折扣促銷活動具有深邃的時間意義。本文最後討論了研究局限和未來研究方向。

Appendix B: Questionnaires in Study 1 of Chapter 4

A study on consumers' response to sales promotion

The purpose of this study is to understand how consumers react to sales promotions. All data are for academic purposes only and would be kept strictly confidential. There are three independent scenarios followed by respective questions. Please note that there are no right or wrong answers. We are only interested in how you *truly* feel. Thanks for your cooperation!

Your particulars:

Your gender: ( ) Male; ( ) Female.

Your age: _____.

Your major: _____.

You are (year 1/ year 2/ year 3/ year 4/ post-grad) student.

You are (Local HKSAR student/ From mainland China / From other countries)

Scenario 1

Imagine that you are going to buy a coat at a department store. You find a coat that meets your quality requirement (including materials, style, etc.). The price tag of this coat indicates: Original price RMB476, now 25% off.

設想如下情景：你到一家百貨商店購買一件外套，你發現一款外套符合你的品質（包括面料與式樣等）要求，這款外套的價格牌上顯示：原價 476 元，立即購買省 25%。

Please answer the following questions based on your feelings after the scenario experience.
請根據你經歷該情景後真實的想法回答如下問題：

1. I would consider buying this coat:

	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

2. I definitely will buy this coat:

	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

3. I think the price-offer for this coat is inexpensive:

	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

4. I think the price-offer for this coat is acceptable:

	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

5. For this price-offer, this coat is good value for the money:

	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

6. People who purchase this coat using this price-offer would save a lot of money:

	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

7. Overall, the price-offer for this coat appears to be a bargain (特價):

	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

8. Overall, the price-offer for this coat is:

	Very poor value	1	2	3	4	5	6	7	Very good value

9. I believe that this coat will be regularly sold at the original price:

	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

10. I believe that the original price is the regular price for this coat:

	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

11. I feel satisfied with the quality of this coat:

	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

12. I feel the original price of this coat is:

	Very low	1	2	3	4	5	6	7	Very high

Scenario 2

Imagine that you are going to buy a coat at a department store. You find a coat that meets your quality requirement (including materials, style, etc.). The price tag of this coat indicates: Original price RMB476, now 50% off.

設想如下情景：你到一家百貨商店購買一件外套，你發現一款外套符合你的品質（包括面料與式樣等）要求，這款外套的價格牌上顯示：原價 476 元，立即購買省 50%。

Please answer the following questions based on your feelings after the scenario experience.
請根據你經歷該情景後真實的想法回答如下問題：

1. I would consider buying this coat:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

2. I definitely will buy this coat:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

3. I think the price-offer for this coat is inexpensive:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

4. I think the price-offer for this coat is acceptable:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

5. For this price-offer, this coat is good value for the money:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

6. People who purchase this coat using this price-offer would save a lot of money:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

7. Overall, the price-offer for this coat appears to be a bargain (特價):

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

8. Overall, the price-offer for this coat is:

Very poor value	1	2	3	4	5	6	7	Very good value

9. I believe that this coat will be regularly sold at the original price:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

10. I believe that the original price is the regular price for this coat:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

11. I feel satisfied with the quality of this coat:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

12. I feel the original price of this coat is:

Very low	1	2	3	4	5	6	7	Very high

Scenario 3

Imagine that you are going to buy a coat at a department store. You find a coat that meets your quality requirement (including materials, style, etc.). The price tag of this coat indicates: Original price RMB476, now RMB119 off.

設想如下情景：你到一家百貨商店購買一件外套，你發現一款外套符合你的品質（包括面料與式樣等）要求，這款外套的價格牌上顯示：原價 476 元，立即購買省 119 元。

Please answer the following questions based on your feelings after the scenario experience.
請根據你經歷該情景後真實的想法回答如下問題：

1. I would consider buying this coat:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

2. I definitely will buy this coat:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

3. I think the price-offer for this coat is inexpensive:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

4. I think the price-offer for this coat is acceptable:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

5. For this price-offer, this coat is good value for the money:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

6. People who purchase this coat using this price-offer would save a lot of money:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

7. Overall, the price-offer for this coat appears to be a bargain (特價):

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

8. Overall, the price-offer for this coat is:

Very poor value	1	2	3	4	5	6	7	Very good value

9. I believe that this coat will be regularly sold at the original price:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

10. I believe that the original price is the regular price for this coat:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

11. I feel satisfied with the quality of this coat:

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

12. I feel the original price of this coat is:

Very low	1	2	3	4	5	6	7	Very high

Scenario 4

Imagine that you are going to buy a coat at a department store. You find a coat that meets your quality requirement (including materials, style, etc.). The price tag of this coat indicates: Original price RMB476, now RMB238 off.

設想如下情景：你到一家百貨商店購買一件外套，你發現一款外套符合你的品質（包括面料與式樣等）要求，這款外套的價格牌上顯示：原價 476 元，立即購買省 238 元。

Please answer the following questions based on your feelings after the scenario experience.
請根據你經歷該情景後真實的想法回答如下問題：

1. I would consider buying this coat:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
2. I definitely will buy this coat:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
3. I think the price-offer for this coat is inexpensive:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
4. I think the price-offer for this coat is acceptable:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
5. For this price-offer, this coat is good value for the money:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
6. People who purchase this coat using this price-offer would save a lot of money:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
7. Overall, the price-offer for this coat appears to be a bargain (特價):
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
8. Overall, the price-offer for this coat is:
   Very poor value 1 2 3 4 5 6 7 Very good value
9. I believe that this coat will be regularly sold at the original price:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
10. I believe that the original price is the regular price for this coat:
    Strongly disagree 1 2 3 4 5 6 7 Strongly agree
11. I feel satisfied with the quality of this coat:
    Strongly disagree 1 2 3 4 5 6 7 Strongly agree
12. I feel the original price of this coat is:
    Very low 1 2 3 4 5 6 7 Very high

Appendix C: Questionnaire in Study 2 of Chapter 4

A study on consumers' response to sales promotion

The purpose of this study is to understand how consumers react to sales promotions. All data are for academic purposes only and would be kept strictly confidential. There are three independent scenarios followed by respective questions. Please note that there are no right or wrong answers. We are only interested in how you *truly* feel. Thanks for your cooperation!

Your particulars:

Your gender: ( ) Male; ( ) Female.

Your age: _____.

Your major: _____.

You are (year 1/ year 2/ year 3/ year 4/ post-grad) student.

You are (Local HKSAR student/ From mainland China / From other countries)

Scenario1

Imagine that you are going to buy a coat at a department store. You find a coat that meets your quality requirement (including materials, style, etc.). The price tag of this coat indicates: Original price RMB76, now 25% off.

設想如下情景：你到一家百貨商店購買一件外套，你發現一款外套符合你的品質（包括面料與式樣等），要求，這款外套的價格牌上顯示：原價 76 元，立即購買省 25%，

Please answer the following questions based on your feelings after the scenario experience.
請根據你經歷該情景後真實的想法回答如下問題：

1. I would consider buying this coat:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
2. I definitely will buy this coat:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
3. I think the price-offer for this coat is inexpensive:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
4. I think the price-offer for this coat is acceptable:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
5. For this price-offer, this coat is good value for the money:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
6. People who purchase this coat using this price-offer would save a lot of money:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
7. Overall, the price-offer for this coat appears to be a bargain (特價):
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
8. Overall, the price-offer for this coat is:
   Very poor value 1 2 3 4 5 6 7 Very good value
9. I believe that this coat will be regularly sold at the original price:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
10. I believe that the original price is the regular price for this coat:
    Strongly disagree 1 2 3 4 5 6 7 Strongly agree
11. I feel satisfied with the quality of this coat:
    Strongly disagree 1 2 3 4 5 6 7 Strongly agree
12. I feel the original price of this coat is:
    Very low 1 2 3 4 5 6 7 Very high

Scenario2

Imagine that you are going to buy a coat at a department store. You find a coat that meets your quality requirement (including materials, style, etc.). The price tag of this coat indicates: Original price RMB476. now 25% off.

設想如下情景：你到一家百貨商店購買一件外套，你發現一款外套符合你的品質（包括面料與式樣等）要求，這款外套的價格牌上顯示：原價 476 元，立即購買省 25%。

Please answer the following questions based on your feelings after the scenario experience.
請根據你經歷該情景後真實的想法回答如下問題：

1. I would consider buying this coat:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
2. I definitely will buy this coat:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
3. I think the price-offer for this coat is inexpensive:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
4. I think the price-offer for this coat is acceptable:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
5. For this price-offer, this coat is good value for the money:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
6. People who purchase this coat using this price-offer would save a lot of money:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
7. Overall, the price-offer for this coat appears to be a bargain (特價):
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
8. Overall, the price-offer for this coat is:
   Very poor value 1 2 3 4 5 6 7 Very good value
9. I believe that this coat will be regularly sold at the original price:
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
10. I believe that the original price is the regular price for this coat:
    Strongly disagree 1 2 3 4 5 6 7 Strongly agree
11. I feel satisfied with the quality of this coat:
    Strongly disagree 1 2 3 4 5 6 7 Strongly agree
12. I feel the original price of this coat is:
    Very low 1 2 3 4 5 6 7 Very high

Scenario 3

Imagine that you are going to buy a coat at a department store. You find a coat that meets your quality requirement (including materials, style, etc.). The price tag of this coat indicates: Original price RMB 476, now RMB 119 off.

設想如下情景：你到一家百貨商店購買一件外套，你發現一款外套符合你的品質（包括面料與式樣等）要求，這款外套的價格牌上顯示：原價 476 元，立即購買省 119 元。

Please answer the following questions based on your feelings after the scenario experience.
請根據你經歷該情景後真實的想法回答如下問題：

1. I would consider buying this coat:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

2. I definitely will buy this coat:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

3. I think the price-offer for this coat is inexpensive:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

4. I think the price-offer for this coat is acceptable:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

5. For this price-offer, this coat is good value for the money:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

6. People who purchase this coat using this price-offer would save a lot of money:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

7. Overall, the price-offer for this coat appears to be a bargain (特價):

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

8. Overall, the price-offer for this coat is:

   Very poor value 1 2 3 4 5 6 7 Very good value

9. I believe that this coat will be regularly sold at the original price:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

10. I believe that the original price is the regular price for this coat:

    Strongly disagree 1 2 3 4 5 6 7 Strongly agree

11. I feel satisfied with the quality of this coat:

    Strongly disagree 1 2 3 4 5 6 7 Strongly agree

12. I feel the original price of this coat is:

    Very low 1 2 3 4 5 6 7 Very high

Scenario 4

Imagine that you are going to buy a coat at a department store. You find a coat that meets your quality requirement (including materials, style, etc.). The price tag of this coat indicates: Original price RMB 76, now RMB 19 off.

設想如下情景：你到一家百貨商店購買一件外套，你發現一款外套符合你的品質（包括面料與式樣等）要求，這款外套的價格牌上顯示：原價 76 元，立即購買省 19 元。

Please answer the following questions based on your feelings after the scenario experience.
請根據你經歷該情景後真實的想法回答如下問題：

1. I would consider buying this coat:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

2. I definitely will buy this coat:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

3. I think the price-offer for this coat is inexpensive:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

4. I think the price-offer for this coat is acceptable:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

5. For this price-offer, this coat is good value for the money:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

6. People who purchase this coat using this price-offer would save a lot of money:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

7. Overall, the price-offer for this coat appears to be a bargain (特價):

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

8. Overall, the price-offer for this coat is:

   Very poor value 1 2 3 4 5 6 7 Very good value

9. I believe that this coat will be regularly sold at the original price:

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

10. I believe that the original price is the regular price for this coat:

    Strongly disagree 1 2 3 4 5 6 7 Strongly agree

11. I feel satisfied with the quality of this coat:

    Strongly disagree 1 2 3 4 5 6 7 Strongly agree

12. I feel the original price of this coat is:

    Very low 1 2 3 4 5 6 7 Very high

Appendix D: Questionnaire in the Study of Chapter 5

Scenario1

Imagine that: you are shopping in a department store. You find out a coat that you very much like with regards to the materials, the design and the brand. The price tag indicates that the listing price of this coat is RMB 480. The on-site seller tells you that this coat is under price discounts promotion recently, and you can save 20%off if you purchase it just now. The on-site seller also tells you that the price discounts promotion of this coat may be withdrawn in several days.

假想如下情景：您到一家百货商店购物，您看中了一件外套，发现这款外套的质地和式样您都很喜欢，品牌也是您喜欢的，价格牌上显示这款外套的标价为 480 元，现场销售人员告诉您，这款外套最近正在进行打折促销，您如果现在买就可以省 20%，现场销售人员同时告诉您，过段时间以后，可能这款外套就不打折了。

Please answer the following questions based on your feelings after the scenario experience(Please tick your answer)
请根据你经历该情景后真实的想法回答如下问题（请勾选您的答案）：

1. I think the discounted price of this coat is inexpensive:
   Very Disagree 1 2 3 4 5 6 7 Very Agree
2. The discounted price of this coat is:
   Very Unacceptable 1 2 3 4 5 6 7 Very Acceptable
3. This coat is very much likely:
   Of very much poor quality 1 2 3 4 5 6 7 Of very much good quality
4. If I purchase this coat under the indicated price discount, I will not be able to purchase some other products I would like to purchase now:
   Very Disagree 1 2 3 4 5 6 7 Very Agree
5. If I purchase this coat under the indicated price discount, I will have to reduce the amount of money I will spend on other things for awhile:
   Very Disagree 1 2 3 4 5 6 7 Very Agree
6. This coat is:
   Very poor value for money 1 2 3 4 5 6 7 Very good value for money
7. At the discounted price shown this coat is:
   Very Uneconomical 1 2 3 4 5 6 7 Very Economical
8. I think purchasing this coat is a good buy:
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
9. For me, to purchase this coat is:
   Harmful 1 2 3 4 5 6 7 Beneficial
   Unpleasant 1 2 3 4 5 6 7 Pleasant
   Bad 1 2 3 4 5 6 7 Good
   Invaluable 1 2 3 4 5 6 7 Valuable
   Unjoyful 1 2 3 4 5 6 7 Joyful
10. If I didn't purchase this coat under the price discount promotion at this time, I would feel regret:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
11. If I didn't purchase this coat under the price discount promotion at this time, I would feel upset:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
12. I intend to purchase this coat:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
13. I plan to purchase this coat:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
14. I will try to purchase this coat
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
15. The price discount provided to promote this coat is very high :
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Your Gender: ☐Male ☐Female Your Age: ☐20-29 ☐30-39 ☐40-49 ☐50-59

Your Monthly Revenue: ☐ Below ¥3000 ☐¥3001-6000 ☐¥6001-9000 ☐¥9001-12000 ☐Above ¥12001

Scenario2

Imagine that: you are shopping in a department store. You find out a coat that you very much like with regards to the materials, the design and the brand. The price tag indicates that the listing price of this coat is RMB 480. The on-site seller tells you that this coat is under price discounts promotion recently, and you can save 40%off if you purchase it just now. The on-site seller also tells you that the price discounts promotion of this coat may be withdrawn in several days.

假想如下情景：您到一家百货商店购物，您看中了一件外套，发现这款外套的质地和式样您都很喜欢，品牌也是您喜爱的，价格牌上显示这款外套的标价为 480 元，现场销售人员告诉您，这款外套最近正在进行打折促销，您如果现在买就可以省 40%，现场销售人员同时告诉您，过段时间以后，可能这款外套就不打折了。

Please answer the following questions based on your feelings after the scenario experience(Please tick your answer)
请根据你感受到情景体验后真实的想法回答如下问题（请勾选您的答案）：

1. I think the discounted price of this coat is inexpensive:
   Very Disagree 1 2 3 4 5 6 7 Very Agree
2. The discounted price of this coat is:
   Very Unacceptable 1 2 3 4 5 6 7 Very Acceptable
3. This coat is very much likely:
   Of very much poor quality 1 2 3 4 5 6 7 Of very much good quality
4. If I purchase this coat under the indicated price discount, I will not be able to purchase some other products I would like to purchase now:
   Very Disagree 1 2 3 4 5 6 7 Very Agree
5. If I purchase this coat under the indicated price discount, I will have to reduce the amount of money I will spend on other things for awhile:
   Very Disagree 1 2 3 4 5 6 7 Very Agree
6. This coat is:
   Very poor value for money 1 2 3 4 5 6 7 Very good value for money
7. At the discounted price shown this coat is:
   Very Uneconomical 1 2 3 4 5 6 7 Very Economical
8. I think purchasing this coat is a good buy:
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
9. For me, to purchase this coat is:
   Harmful 1 2 3 4 5 6 7 Beneficial
   Unpleasant 1 2 3 4 5 6 7 Pleasant
   Bad 1 2 3 4 5 6 7 Good
   Invaluable 1 2 3 4 5 6 7 Valuable
   Unjoyful 1 2 3 4 5 6 7 Joyful
10. If I didn't purchase this coat under the price discount promotion at this time, I would feel regret:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
11. If I didn't purchase this coat under the price discount promotion at this time, I would feel upset:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
12. I intend to purchase this coat:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
13. I plan to purchase this coat:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
14. I will try to purchase this coat
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
15. The price discount provided to promote this coat is very high :
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Your Gender: ☐Male ☐Female Your Age: ☐20-29 ☐30-39 ☐40-49 ☐50-59

Your Monthly Revenue: ☐ Below ￥3000 ☐￥3001-6000 ☐￥6001-9000 ☐￥9001-12000 ☐Above ￥12001

Scenario3

Imagine that: you are shopping in a department store. You find out a coat that you very much like with regards to the materials, the design and the brand. The price tag indicates that the listing price of this coat is RMB 480. The on-site seller tells you that this coat is under price discounts promotion recently, and you can save 60%off if you purchase it just now. The on-site seller also tells you that the price discounts promotion of this coat may be withdrawn in several days.

設想如下情景：您到一家百貨商店購物，您看中了一件外套，發現這款外套的質地和式樣您都很喜歡，品牌也是您喜歡的，價格牌上顯示這款外套的標價為 480 元，現場銷售人員告訴您，這款外套最近正在進行打折促銷，您如果現在買就可以省 60%，現場銷售人員同時告訴您，過段時間以後，可能這款外套就不打折了。

Please answer the following questions based on your feelings after the scenario experience(Please tick your answer)
請根據你經歷該情景後真實的想法回答如下問題（請勾選您的答案）：

1. I think the discounted price of this coat is inexpensive:
   Very Disagree 1 2 3 4 5 6 7 Very Agree
2. The discounted price of this coat is:
   Very Unacceptable 1 2 3 4 5 6 7 Very Acceptable
3. This coat is very much likely:
   Of very much poor quality 1 2 3 4 5 6 7 Of very much good quality
4. If I purchase this coat under the indicated price discount, I will not be able to purchase some other products I would like to purchase now:
   Very Disagree 1 2 3 4 5 6 7 Very Agree
5. If I purchase this coat under the indicated price discount, I will have to reduce the amount of money I will spend on other things for awhile
   Very Disagree 1 2 3 4 5 6 7 Very Agree
6. This coat is:
   Very poor value for money 1 2 3 4 5 6 7 Very good value for money
7. At the discounted price shown this coat is:
   Very Uneconomical 1 2 3 4 5 6 7 Very Economical
8. I think purchasing this coat is a good buy:
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
9. For me, to purchase this coat is:
   Harmful 1 2 3 4 5 6 7 Beneficial
   Unpleasant 1 2 3 4 5 6 7 Pleasant
   Bad 1 2 3 4 5 6 7 Good
   Invaluable 1 2 3 4 5 6 7 Valuable
   Unjoyful 1 2 3 4 5 6 7 Joyful
10. If I didn't purchase this coat under the price discount promotion at this time, I would feel regret:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
11. If I didn't purchase this coat under the price discount promotion at this time, I would feel upset:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
12. I intend to purchase this coat:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
13. I plan to purchase this coat:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
14. I will try to purchase this coat
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
15. The price discount provided to promote this coat is very high :
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Your Gender: ☐Male ☐Female Your Age: ☐20-29 ☐30-39 ☐40-49 ☐50-59

Your Monthly Revenue: ☐ Below ¥3000 ☐¥3001-6000 ☐¥6001-9000 ☐¥9001-12000 ☐Above ¥12001

Scenario4

Imagine that: you are shopping in a department store. You find out a coat that you very much like with regards to the materials, the design and the brand. The price tag indicates that the listing price of this coat is RMB 480. The on-site seller tells you that this coat is under price discounts promotion recently, and you can save 80%off if you purchase it just now. The on-site seller also tells you that the price discounts promotion of this coat may be withdrawn in several days.

設想如下情景：您到一家百貨商場購物，您看中了一件外套，發現這款外套的質地和式樣您都很喜歡，品牌也是您喜歡的，價格上顯示這款外套的標價為 480 元，現場銷售人員告訴您，這款外套最近正在進行打折促銷，您如果現在買就可以省 80%，現場銷售人員還告訴您，過段時間以後，可能這款外套就不打折了。

Please answer the following questions based on your feelings after the scenario experience(Please tick your answer)
請根據你經歷該情景後真實的想法回答如下問題（請勾選您的答案）：

1. I think the discounted price of this coat is inexpensive:
   Very Disagree 1 2 3 4 5 6 7 Very Agree
2. The discounted price of this coat is:
   Very Unacceptable 1 2 3 4 5 6 7 Very Acceptable
3. This coat is very much likely:
   Of very much poor quality 1 2 3 4 5 6 7 Of very much good quality
4. If I purchase this coat under the indicated price discount, I will not be able to purchase some other products I would like to purchase now
   Very Disagree 1 2 3 4 5 6 7 Very Agree
5. If I purchase this coat under the indicated price discount, I will have to reduce the amount of money I will spend on other things for awhile
   Very Disagree 1 2 3 4 5 6 7 Very Agree
6. This coat is:
   Very poor value for money 1 2 3 4 5 6 7 Very good value for money
7. At the discounted price shown this coat is:
   Very Uneconomical 1 2 3 4 5 6 7 Very Economical
8. I think purchasing this coat is a good buy:
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
9. For me, to purchase this coat is:
   Harmful 1 2 3 4 5 6 7 Beneficial
   Unpleasant 1 2 3 4 5 6 7 Pleasant
   Bad 1 2 3 4 5 6 7 Good
   Invaluable 1 2 3 4 5 6 7 Valuable
   Unjoyful 1 2 3 4 5 6 7 Joyful
10. If I didn't purchase this coat under the price discount promotion at this time, I would feel regret:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
11. If I didn't purchase this coat under the price discount promotion at this time, I would feel upset:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
12. I intend to purchase this coat:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
13. I plan to purchase this coat:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
14. I will try to purchase this coat
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
15. The price discount provided to promote this coat is very high:
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Your Gender: ☐Male ☐Female Your Age ☐20-29 ☐30-39 ☐40-49 ☐50-59

Your Monthly Revenue: ☐ Below ¥3000 ☐¥3001-6000 ☐ ¥6001-9000 ☐¥9001-12000 ☐Above ¥12001

Appendix E: Questionnaire in the Study of Chapter 6

Scenario 1

Imagine that: you are shopping in a department store. You find out a coat that you very much like with regards to the materials, the design and the brand. The price tag indicates that the listing price of this coat is RMB 480. The on-site seller tells you that this coat is under price discounts promotion recently, and you can save 50% off if you purchase it just now. The on-site seller also tells you that there are ten days to go before the deadline of the price discount promotion of this coat. You find that this coat brand very rarely conducts a price discount promotion.

設想如下情景：您到一家百貨商店購物，您看中了一件外套，發現這款外套的質地和式樣您都很喜歡，品牌也是您喜歡的，但標牌上顯示這款外套的標價爲 480 元，現場銷售人員告訴您，這款外套最近正在進行打折促銷，您如果現在買就可以省 50%，現場銷售人員同時告訴您，這款外套打折時間還剩餘 10 天，十天以後這款外套就不打折了，您以往在百貨商店購物時很少看到這個服裝品牌進行打折促銷。

Please answer the following questions based on your feelings after the scenario experience(Please tick your answer)
請根據你經歷該情景後真實的想法回答如下問題（請勾選您的答案）：

1. How likely I would purchase this coat:
   Very Unlikely 1 2 3 4 5 6 7 Very Likely
2. If I didn't purchase this coat under price discount promotion this time, I would feel regret.
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
3. For me, to purchase this coat is:
   Harmful 1 2 3 4 5 6 7 Beneficial
   Unpleasant 1 2 3 4 5 6 7 Pleasant
   Bad 1 2 3 4 5 6 7 Good
4. The frequency of price discount promotion for this coat brand is:
   Very Low 1 2 3 4 5 6 7 Very High
5. The time left for discount promotion of this coat is abundant:
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
6. This scenario mainly intrigues me to consider how much I would save if I purchase this coat at this time:
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
7. This scenario mainly intrigues me to consider I would miss a good purchase opportunity if I didn't purchase this coat at this time:
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Your Gender: ☐Male ☐Female Your Age: ☐20-29 ☐30-39 ☐40-49 ☐50-59
Your experience of shopping branded cloth at departmental stores is: ☐Nearly No ☐Occasional ☐Frequent

Thanks for your answer!

Scenario 2

Imagine that: you are shopping in a department store. You find out a coat that you very much like with regards to the materials, the design and the brand. The price tag indicates that the listing price of this coat is RMB 480. The on-site seller tells you that this coat is under price discounts promotion recently, and you can save 50% off if you purchase it just now. The on-site seller also tells you that there are ten days to go before the deadline of the price discount promotion of this coat. You find that this coat brand very frequently conducts a price discount promotion.

設想如下情景：您到一家百貨商店購物，您看中了一件外套，發現這款外套的質地和式樣您都很喜歡，品牌也是您喜歡的，價格牌上顯示這款外套的標價為 480 元，現場銷售人員告訴您，這款外套最近正在進行打折促銷，您如果現在買就可以省 50%，現場銷售人員同時告訴您，這款外套打折時間還剩最後 10 天，十天以後這款外套就不打折了，您以往在百貨商店購物的經歷看到這個服裝品牌進行打折促銷，

Please answer the following questions based on your feelings after the scenario experience(Please tick your answer)
請根據你經歷該情景後真實的想法回答如下問題（請勾選您的答案）：

1. How likely I would purchase this coat:
   Very Unlikely 1 2 3 4 5 6 7 Very Likely
2. If I didn't purchase this coat under price discount promotion this time, I would feel regret:
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
3. For me, to purchase this coat is:
   Harmful 1 2 3 4 5 6 7 Beneficial
   Unpleasant 1 2 3 4 5 6 7 Pleasant
   Bad 1 2 3 4 5 6 7 Good
4. The frequency of price discount promotion for this coat brand is:
   Very Low 1 2 3 4 5 6 7 Very High
5. The time left for discount promotion of this coat is abundant:
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
6. This scenario mainly intrigues me to consider how much I would save if I purchase this coat at this time:
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
7. This scenario mainly intrigues me to consider I would miss a good purchase opportunity if I didn't purchase this coat at this time:
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Your Gender: □Male □Female Your Age: □20-29 □30-39 □40-49 □50-59

Your experience of shopping branded cloth at departmental stores is: □Nearly No □Occasional □Frequent

Thanks for your answer!