

ESSAYS ON
CONSUMERS' GOAL ORIENTATION AND PRICE SENSITIVITY

A Dissertation
by
WOO JIN CHOI

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY

May 2012

Major Subject: Marketing

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ABSTRACT

Essays on Consumers' Goal Orientation and Price Sensitivity. (May 2012)

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The objective of my dissertation work was to provide a better understanding of consumer choices related to these two important tradeoffs that consumers are often confronted with in the marketplace. Drawing upon regulatory focus theory, I investigated how consumers choose between price and quality or price and quantity, in each of two essays, thereby shedding light on the role of consumer goals in purchase decisions. In the first essay, I propose that quality is predominantly a promotion feature whereas price is predominantly a prevention feature. Therefore, promotion oriented consumers should be more attentive to differences in product quality whereas prevention oriented consumers should be more attentive to differences in product price. Three studies demonstrate that quality (price) is more strongly associated with a promotion (prevention) orientation, that promotion (prevention) oriented consumers prefer products with higher quality (cheaper prices), and that these preferences are mitigated when consumers do not need to prioritize between price and quality and are mediated by relative attention to quality versus price. In the second essay, I investigate the manner in which consumers' goal orientations affect their preferences for monetary versus

nonmonetary promotional offers, such as bonus packs and price discounts. I propose that consumers with a promotion (vs. prevention) orientation are more likely to prefer a bonus pack offer over an economically equivalent price discount offer. Two pretests and one study provide empirical support for this key prediction. I also identify theoretically defensible and managerially actionable boundary conditions for this effect that are related to price levels and product types.

DEDICATION

To my parents Dal-Hee Choi and Young-Sook Kim,
and my husband Ho Jung Yoon,
to whom I owe my existence and reason for living in this world.

My parents have always sought to provide me with a happy and pleasant life by making sacrifices in their own lives. They tried their best to make many opportunities available to me, so that I could “choose” among them rather than “having to accept” one. For their sacrifices and endless love, I appreciate and love them with all of my heart.

For my husband Ho Jung Yoon, I believe I am here, at this point in my life, today because of his support and love. Thank you for being on my side, I love you.

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NOMENCLATURE

B/CS	Bryan/College Station
HSUS	Humane Society of the United States
P	Pressure
T	Time
TVA	Tennessee Valley Authority
TxDOT	Texas Department of Transportation

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CHAPTER I

INTRODUCTION

Consumers are often faced with the necessity of making tradeoffs when they decide upon products to purchase. For example, they may have to trade off between better quality and cheaper price, or between a price discount and a bonus pack. Extensive research has explored the trade-offs involved in choosing between price and quality/quantity, as these trade-offs represent important domains of consumer decision making.

The objective of my dissertation is to provide a better understanding of consumer choices related to these two important tradeoffs that consumers are often confronted with in the marketplace. Drawing upon the regulatory focus theory, I investigate how consumers choose between price and quality or between price and quantity, in an attempt to shed light on the role of consumers' goal orientations in purchase decisions. Goal orientations are postulated to be one of the key drivers of consumer behavior (Mogilner et al. 2008). According to the regulatory focus theory (Higgins 1998), our behaviors are guided by two distinct goal orientations: a promotion orientation, which regulates behaviors directed toward achieving gains and accomplishments, and a prevention orientation, which regulates behaviors directed toward avoiding losses and securing safety (Higgins, Grant, and Shah 1999). I argue that the distinctions between the promotion and prevention orientations have important implications in explaining

how consumers choose between products that differ in price and quality and how consumers choose between monetary and nonmonetary offers such as price discounts and bonus packs.

In the first essay, I examine consumers' sensitivity to price versus quality information. Consumers consider both price and quality in most purchase decisions, and there is a large body of marketing research that explores the price-quality relationship (e.g., Baumgartner 1995; Bettman, John, and Scott 1986; Broniarczyk and Alba 1994; Kardes, Cronley, Kellaris, and Posavac 2004; Pechmann and Ratneshwar 1992), showing, for example, that consumers use price to infer quality (e.g., Shiv et al. 2005; Rao and Monroe 1988, 1989). Trade-offs between price and quality oftentimes have to be made, if consumers are to optimize their purchase decisions considering. In this research, I draw upon the regulatory focus theory and propose that consumers' goal orientations affect their sensitivity to product price and quality information in a purchase decision. I propose that quality is predominantly a promotion feature whereas price is predominantly a prevention feature. Therefore, promotion-oriented consumers should be more attentive to differences in product quality whereas prevention-oriented consumers should be more attentive to differences in product price. Three studies demonstrate that quality (price) is more strongly associated with a promotion (prevention) orientation, that promotion (prevention)-oriented consumers prefer products with higher quality (cheaper prices), and that these preferences are mitigated when consumers do not need to prioritize between price and quality and are mediated by relative attention to quality versus price. This research expands upon previous studies of consumer tradeoffs

between price and quality, introducing consumer goal orientation as a new moderating factor that is both theoretically meaningful and managerially useful.

In the second essay, I investigate the manner in which consumers' goal orientations affect their preferences for monetary versus nonmonetary offers, such as bonus packs and price discounts. Prior research has demonstrated that the types of benefits provided by monetary and nonmonetary offers are different. When consumers make use of a nonmonetary offer such as a bonus pack, they believe that they are getting something for free, so it is perceived as a pure gain (Chandran and Morwitz 2006; Nunes and Park 2003); on the other hand, a monetary offer such as a price discount is frequently considered as a reduction in loss (Mishra and Mishra 2011; Diamond and Campbell 1989; Diamond and Sanyal 1990). As a result, consumers' preference for and choice of one of these two types of offers may depend on whether the type of benefits offered is compatible with consumers' goal orientations. I propose that a bonus pack (price discount) is more likely to address consumers' promotion-related (prevention-related) concerns. And, consequently, consumers with a promotion (vs. prevention) orientation should be more likely to prefer a bonus pack offer over an economically equivalent price discount offer. A series studies provide evidence that bonus packs (price discounts) are more strongly associated with a promotion (prevention) orientation and consumers tend to prefer offers that are compatible with their goal orientations. In addition, I identify theoretically defensible and managerially actionable boundary conditions for this effect that are related to price levels and product types. The present work makes an important theoretical contribution by introducing the construct of

consumers' goal orientations to the literature on framing effects (e.g., Thaler 1985) and the benefit congruency framework (Chandon et al. 2000). In doing so, I also expand our understanding of the regulatory focus theory, which has traditionally focused on the fit effect between consumers' goal orientations and product attributes (e.g., Aaker and Lee 2001), by demonstrating a similar effect between consumers' goal orientations and various types of offers.

Taken together, I believe that these two essays provide meaningful insights with respect to how consumers resolve trade-offs that they often encounter in the marketplace.

CHAPTER II

STANDING AT A FORK IN THE ROAD: HOW GOAL ORIENTATION AFFECTS CONSUMERS' SENSITIVITY TO PRICE VERSUS QUALITY

INTRODUCTION

Imagine a consumer who is considering purchasing one of two products: product X with better quality and a higher price and product Y with lower quality but a cheaper price. The choice is essentially between getting better quality and saving money. Therefore, the consumer's choice should depend on, among other things, how much attention is paid to price and quality. If the consumer is more attentive to quality, product X will look more appealing. On the other hand, if she is more attentive to price, product Y will be more attractive.

The choice scenario described above is not uncommon in real life. For many products a positive relationship exists between price and quality (Rao and Monroe 1988). In addition, a positive relationship may also exist between price and *perceived* quality when consumers cannot easily judge the real quality of a product (Lichtenstein, Ridgway, and Netemeyer 1983; Rao 2005; Rao and Monroe 1989, 1988; Shiv, Carmon and Ariely 2005). When such positive relationships exist, a consumption decision involves some trade-offs between price and quality.

Despite the prevalence of such trade-offs, little research has examined consumers' sensitivity to price relative to their sensitivity to quality. While there has been a fair amount of work on consumers' price sensitivity in the marketing literature

(Bell and Lattin 2000; Hoch et al. 1995; Van Heerde et al. 2008; Wakefield and Inman 2003), studies on consumers' sensitivity to quality information are rather scarce.

Possible exceptions may include studies of framing effects in the traditional behavioral decision theory literature and more recent research in the regulatory focus literature. For example, Levin and Gaeth (1988) documented how the same product (e.g., beef) could create different perceptions depending on whether its quality attribute was framed as a gain (e.g., "75% lean") or a loss (e.g., "25% fat"). The recent finding in the regulatory focus literature also offers an illustration of how products (e.g., juice) can be perceived differently depending on the fit between the framing of its quality attributes (e.g., enhancing energy vs. reducing risk of heart disease) and consumers' regulatory foci (Aaker and Lee 2001). Possibly the only paper that has examined consumers' sensitivity to price *and* quality is Simonson and Tversky (1992), who speculate that consumers' greater aversion to low quality (vs. high price) may be due to the perception that quality is more important than price in a purchase. Although many real world consumption decisions are simultaneously affected by price and quality, the concurrent influence of these two factors has not been sufficiently studied.

To address this gap in the literature, in current research I investigate consumers' sensitivity to product price and product quality information by building upon regulatory focus theory (Higgins 1997). Regulatory focus theory distinguishes between two basic goal orientations that individuals employ in the pursuit of their goals: promotion and prevention. One robust finding from this literature is that promotion-oriented people are more sensitive to gains, whereas prevention-oriented people are more sensitive to losses

(Aaker and Lee 2001, 2002; Avnet and Higgins 2006; Higgins et al. 2003; Lee, Aaker, and Gardner 2000; Wang and Lee 2006). While quality information can be either promotion or prevention orientated (e.g., Aaker and Lee 2001; Wang and Lee 2006), to the extent that quality is a “get” component to be maximized and price is a “give” component to be minimized, *relatively speaking* promotion-oriented consumers should pay more attention to product quality, whereas prevention-oriented consumers should pay more attention to product price. And the differential attention paid to price and quality information should, in turn, lead to preferences for products of high quality by promotion-oriented consumers and preferences for products with low prices by prevention-oriented consumers.

My research contributes to the literature in marketing and regulatory focus theory in several important ways. First, the research sheds light on how consumers’ goal orientations affect their information processing and decision making when a purchase situation involves price-quality tradeoffs. Motivation is a very important construct to consider in a consumption context, as it has been shown to be a prerequisite for attitude and behavioral changes (Moorman and Matulich 1993; Petty and Cacioppo 1986). By introducing motivation into the equation on price (vs. quality) sensitivity, I contribute to extant research that has modeled price sensitivity as a function of situational factors (e.g., consumption occasion; Wakefield and Inman 2003), strategic variables (e.g., competition; Van Heerde et al. 2008), consumer demographics (e.g., income; Hoch et al. 1995) and other consumer attributes (e.g., brand loyalty; Bell and Lattin 2000).

Second, most research on regulatory focus has centered around the notion of the fit between quality-related product attributes and consumers' goal orientations and typically employs price as a dependent variable to measure the consequences of such a fit (e.g., Avnet and Higgins 2006, 2003; Higgins et al. 2003). For example, Higgins et al. (2003) measured willingness-to-pay for products that were framed differently and showed that the willingness to pay was higher when there was a fit between participants' chronic regulatory focus and the framing of the product. The current research expands upon these studies by considering both price and quality as relevant product features that can simultaneously affect the consequences of the regulatory fit. In doing so, I contribute to regulatory focus theory by introducing price as a critical component into this theoretical framework.

The findings of this research are relevant to marketing practitioners as well. Consumers often are trying to decide whether getting better quality or saving money is more important in a consumption occasion. The results of the current study show that marketers may be able to influence the inclinations of these consumers in a desired direction. Thus, it would be advantageous for companies that produce and sell high-end goods to emphasize promotion-related themes (e.g., hopes and aspirations) in their marketing campaigns and retail environment, so as to motivate their consumers to be more attentive to quality in their choices. On the other hand, companies that produce relatively cheap merchandise would benefit from highlighting prevention-related themes in their marketing campaigns, so as to induce consumers to be more attentive to price in their choices. In addition, given the link between culture and regulatory focus (Aaker

and Lee 2001; Lee, Aaker and Gardner 2000), my findings can also help companies competing in an increasingly global market to better tailor their marketing campaigns to consumers from different cultural backgrounds.

The remainder of the paper is organized as follows. I begin with a discussion of regulatory focus theory and how this relates to consumers' sensitivity to price and quality. I then present a series of studies that test my predictions. The results suggest that consumers tend to associate quality (price) with a promotion (prevention) orientation (pretest); that preferences for high-quality (low-priced) products are correlated with a chronic promotion (prevention) orientation (experiment 1); that manipulating regulatory focus leads to such preferences (experiment 2); and that these preferences are mitigated under circumstances in which consumers are not required to prioritize between price and quality and are mediated by relative differences in attention to price/quality (experiment 3).

THEORETICAL BACKGROUND

Regulatory focus theory (Higgins 1997) identifies two basic goal orientations that individuals adopt as they strive to attain a goal: promotion and prevention. A promotion orientation emphasizes individuals' need for growth and advancement, such that promotion-oriented individuals perceive their goals as ideals and aspirations. In contrast, a prevention orientation highlights individuals' need for safety and security, such that prevention-oriented individuals perceive their goals as the fulfillment of duties and responsibilities (Chernev 2004; Higgins 1998; Idson, Liberman and Higgins 2000).

The distinctions between the two goal orientations may lead to different approaches in pursuing the same goal (Chernev 2004; Mogilner, Aaker and Pennington 2008). As a result, promotion-oriented people are eager to assure hits against errors of omission, and are more sensitive to the presence or absence of positive outcomes. In contrast, prevention-oriented people are more vigilant in guarding against failures and avoiding errors of commission and are more sensitive to the presence or absence of negative outcomes (Förster, Higgins, and Bianco 2003; Idson, Liberman, and Higgins 2000).

Regulatory focus theory has been applied in various marketing contexts, including consumer information processing (Kirmani and Zhu 2007; Pham and Higgins 2005; Zhu and Meyers-Levy 2007), persuasion (Aaker and Lee 2001; Lee and Aaker 2004), perceptions of product value (Higgins et al. 2003), and self-control (Frietas, Liberman and Higgins 2002). Of particular relevance to the current paper is the research on the influence of consumers' regulatory focus on their product preferences.

This stream of research suggests that there is a “fit” effect between consumers' regulatory focus and their product preferences: the same product is more appealing to promotion-focused consumers when promotion-focus-related features are highlighted, but it is more appealing to prevention-focused consumers when prevention-focus-related features are highlighted (e.g., Aaker and Lee 2001; Avnet and Higgins 2003; Higgins 2000; Higgins et al. 2003; Wang and Lee 2006). For example, Aaker and Lee (2001) find that, for consumers who are promotion-focused, an advertisement that emphasizes promotion-focus-related attributes of a product (e.g., great taste of grape juice) is more persuasive than another advertisement that emphasizes prevention-focus-related

attributes (e.g., cardiovascular disease prevention). Likewise, recent research has shown that people are especially sensitive to information that fits their dominant goal orientation (Higgins 2000; Labroo and Lee 2006; Lockwood, Jordan, and Kunda 2002). Consequently, under the promotion orientation promotion-related information becomes more accessible and more diagnostic than prevention-related information, and the opposite holds true under the prevention orientation (Kirmani and Zhu 2007; Murali, Bockenholt, and Laroche 2007). One reason for this effect is that people use their regulatory focus as “a filter to process information selectively,” such that promotion-focused individuals tend to think promotion-related attributes are more important and vice versa (Wang and Lee 2006, p. 36). As I detail below, the distinctions between promotion and prevention orientations and the fit effect have important implications for how people choose between products that differ in price and quality.

CONCEPTUAL DEVELOPMENT

Oftentimes, consumers are torn between “two seemingly conflicting goals” (Hanip, 2008): Pursuing high quality without paying too high a price. While price is “the amount of money that buyers must give up” to get a product (Monroe and Lee 1999, p. 209; Zeithaml 1988), quality can be defined as the “degree to which a specific product satisfies the wants of a specific consumer” (Gilmore 1974, p. 16). Therefore, in general, price is a “give” component whereas quality is a “get” component in a purchase. And this distinction seems to be in line with the distinctions between promotion and prevention orientations.

To empirically verify this assumption, in a preliminary study I asked one hundred and ninety-six undergraduate students to write about what they wanted to get and what they wanted to avoid when making a purchase. I did not specify any particular product; nor did I instruct them to think in terms of price and quality; rather, they were asked to write down whatever came to mind. I counted the number of times they mentioned the words “price” and “quality” in their open ended responses. Consistent with my expectation, a repeated-measures ANOVA revealed a significant interaction effect between wants/avoids and price/quality ($F(1, 196) = 35.77, p < .001$). As shown in Figure 1, participants listed quality more often than price for “wants” (64.9% > 42.6%, $\chi^2(1) = 19.7, p < .001$), but they listed price more often than quality for “avoids” (46.7% > 30.9%, $\chi^2(1) = 10.2, p < .001$). These results verified my assumption that price is a “give” component and quality is a “get” component in a purchase.

FIGURE 1
Percentages of Participants Mentioning Price and Quality in the Preliminary Study



While information on quality can be either promotion or prevention orientated (e.g., Aaker and Lee 2001; Wang and Lee 2006), to the extent that quality *in general* is a “get” component to be maximized in a purchase, there seems to be a better fit between quality and promotion orientation that emphasizes achieving positive outcomes. Conversely, to the extent that price is a “give” component to be minimized in a purchase, there seems to be a better fit between price and prevention orientation that emphasizes avoiding negative outcomes. Consequently, I propose that quality is predominantly a promotion feature and price is predominantly a prevention feature. Since information that matches individuals’ regulatory focus will be accorded more attention (Aaker and Lee 2006), it follows that consumers with a promotion orientation will be more attentive to quality-related information, and those with a prevention orientation will be more attentive to price-related information.

The differential amount of attention paid to quality and price due to consumers’ regulatory focus will, in turn, result in differential product preferences. If one product has better quality but is more expensive than another product, a choice of the former means a gain on quality but a loss on price, and a choice of the latter means a gain on price and a loss on quality. To the extent that consumers with a promotion orientation are more attentive to differences in product quality, the loss on quality associated with choosing the cheaper product may outweigh the loss on price associated with choosing the more expensive product, and therefore those consumers will be more likely to choose the more expensive product than the cheaper product. Conversely, to the extent that consumers with a prevention orientation are more attentive to differences in product

price, the loss on price associated with choosing the more expensive product may outweigh the loss on quality associated with choosing the cheaper product, and therefore those consumers will be more likely to choose the cheaper product than the more expensive product. Therefore, I propose that:

H1: On consumption occasions in which consumers are required to make a choice between a more expensive product with higher quality and a cheaper product with lower quality, those with a promotion orientation will be more likely to prefer the more expensive product with higher quality, whereas those with a prevention orientation will be more likely to prefer the cheaper product with lower quality.

The focus of my discussion so far has been on circumstances under which consumers have to prioritize between price and quality in making a decision regarding which product to buy. Under such circumstances, regulatory focus will influence consumers' product preferences by directing their attention to either price or quality. However, there are situations in which consumers do not need to prioritize between price and quality. Under such circumstances, consumers' attentiveness to price and quality may be independent of their regulatory focus because they do not need to make trade-offs between price and quality, and the effect of consumers' regulatory focus on their product choice should be mitigated. As I argue below, this may occur when consumers have a reference point that is either higher or lower than any of the products in their choice set.

Past research has indicated that when consumers assess the value of a product, they compare the product to a reference point, view the product either as a gain or a loss depending on whether it is better or worse than the reference point, and make their choices accordingly (Bolton, Warlop and Alba 2003; Heath, Larrick and Wu 1999; Kamins, Dreze and Folkes 2004; Krishnamurthi, Mazumdar and Raj 1992). If consumers have a high reference point, they may have a sufficiently large budget to afford even the more expensive product between the two, but they may also have high quality expectations that cannot be met by either of the two products. For these consumers, both products meet their price expectations but neither meets their quality expectations. In other words, both products represent a gain on price but a loss on quality. Therefore, consumers with a high reference point will be more likely to choose the more expensive product to minimize the loss on quality, regardless of their regulatory focus.

In contrast, if consumers have a low reference point, they may have a budget that is insufficient to be able to afford even the cheaper product, but they may also have low quality expectations that can be met by either product. For these consumers, both products represent a gain on quality but a loss on price. Therefore, consumers with a low reference point will be more likely to choose the cheaper product to minimize the loss on price, regardless of their regulatory focus. Finally, if the reference point lies between the two products in terms of price and quality, the expensive product will represent a gain on quality and a loss on price whereas the cheap product will represent a gain on price and a loss on quality. In such situations, consumers need to prioritize between price and

quality and consumers' regulatory focus will have the predicted effects on their product preferences as specified in H1. This discussion leads to the following hypothesis:

H2: Regulatory focus should interact with reference points to affect people's preferences between a more expensive product with higher quality and a cheaper product with lower quality, such that the effect of consumers' regulatory focus on product preferences as proposed in H1 will be exhibited only when the reference point is between the two products on price and quality, but not when the reference point is either higher or lower than both products on price and quality.

Finally, based on my earlier argument that the effects of regulatory focus on consumers' product preferences are due to the fact that those with a promotion (prevention) orientation are more likely to be attentive to information related to product quality (price), I propose that:

H3: The effects of regulatory focus on consumers' product preferences are mediated by attention to price/quality.

Taken together, the goal of my hypotheses is to help explain the manner in which consumers' regulatory focus leads them to selectively pay attention to product quality versus price information, which in turn affects consumers' consumption decisions. The following four studies are designed to test these hypotheses.

PRETEST

Before I test my predictions, I first verified the proposed associations between people's regulatory focus and quality/price. I investigated these associations using a

word association task in which participants were asked to sort a list of words into two groups. I predicted that the word ‘price’ would be more strongly associated with the prevention orientation, while the word ‘quality’ would be more strongly associated with the promotion orientation.

Seventy-nine undergraduates participated in this pretest in exchange for course credit. They were asked to categorize 26 words into two groups. Of the 26 words, 12 were related to promotion orientation, 12 were related to prevention orientation, and the remaining two were price and quality. The 24 words related to regulatory focus were taken from Lockwood, Jordan and Kunda (2002, study 2), where these words were used to prime regulatory focus. The 12 promotion-focus-related words were: *strive, seek, pursue, gain, win, succeed, ambition, achieve, thrive, triumph, accomplish, and aspiration*. The 12 prevention-focus-related words were: *avoid, prevent, avert, rejection, mistake, fiasco, flounder, flunk, defeat, disappointing, setback, and fail*. No hints were given with regard to how the two groups should be formed; participants were only told that they should place the words into two groups of 13 words each, as they desired.

To test the associations between regulatory focus and price/quality, I summed up each participant's responses across the 12 promotion (prevention)-related words to construct a promotion (prevention) scale. For example, if 10 promotion-related words and 2 prevention-related words were placed in the first group, then the value of the promotion scale would be 10 and that of the prevention scale would be 2. The reliability of the two scales was assessed using the proportional reduction in loss (PRL) measure developed by Rust and Cooil (1994) for categorical variables. PRL is a direct extension

of, and thus is evaluated in a manner similar to, Cronbach's alpha. The PRL for both the promotion and prevention scales was greater than .99, supporting the reliability of the scales. Since the two scales are highly correlated ($r = -.99, p < .0001$), I used the difference between the two scales as the independent variable to avoid the problem of multicollinearity.

To test the association between regulatory focus and price/quality, I ran two binary logistic regressions. The analysis on price revealed a negative effect of the difference score ($B = -.15, Wald \chi^2 = 19.1, p < .0001$), indicating that 'price' is mostly grouped with the prevention words. Quality was analyzed in a similar manner, and the results revealed a positive effect of the difference score ($B = .24, Wald \chi^2 = 24.6, p < .0001$), indicating that 'quality' is mostly grouped with the promotion words. Therefore, the results of the pretest confirmed that quality (price) was associated with promotion (prevention) orientation.

Having established the association between the two goal orientations and quality/price, I test H1 in the first main study below.

EXPERIMENT 1

In this experiment, I examined the effect of goal orientations on consumers' product choices. As per H1, promotion-oriented (prevention-oriented) people are more likely to prefer products with better quality (lower prices). I test this prediction by linking people's chronic regulatory focus to their product choices.

Method

A total of 95 students participated in this experiment for course credit. First, they were given a choice task that involved making a hypothetical purchase decision between two smartphones. One smartphone was priced at \$269 with a quality rating of 87 out of 100 (product X), while the other smartphone was priced at \$349 with a quality rating of 93 out of 100 (product Y).² After the choice task, participants' chronic regulatory focus was measured using the 10-item chronic regulatory focus scales developed by Haws et al. (2010). Examples of the promotion orientation scale include "I feel like I have made progress toward being successful in my life" and "When I see an opportunity for something I like, I get excited right away." Examples of the prevention orientation scale include "I worry about making mistakes" and "I frequently think about how I can prevent failures in my life."

Results

Using five items for each regulatory focus, I constructed a promotion and a prevention orientation scale by averaging these items (Cronbach's $\alpha = .82$ for promotion, $.61$ for prevention).³ I calculated the difference score between the promotion and prevention orientation scales and used this as the independent variable.

² In a pretest, I asked 67 participants from the same population the extent to which they perceived the prices/quality of the two products to be different. Not surprisingly, they were ($5.52 > 4$, $t(65) = 7.74$, $p < .001$ for price; $6.13 > 4$, $t(66) = 15.32$, $p < .001$ for quality, on 7-point scales where 1 = strongly disagree; 4 = neutral; 7 = strongly agree).

³ The reliability for the prevention orientation scale was low. In the process of developing the chronic regulatory focus scale, Haws et al. (2010) reported a Cronbach's α of $.74$ for the prevention orientation scale with a much larger sample size ($N = 367$), but noted that it ranged from $.67$ to $.77$ in other studies. Hence, the reliability in our study seems to be acceptable. When one item from the prevention orientation scale was removed, α increased to $.72$, and I came to the same conclusion when I used the 4-item scale in our analysis.

H1 predicts that consumers who are promotion oriented would be more likely to pick the more expensive smartphone than would those who are prevention oriented. To test this prediction, a logistic regression was performed, using product choice as the dependent variable (0 = *product X*; 1 = *product Y*) and the difference score between the promotion scale and the prevention scale as the independent variable. The results showed that the effect of the difference score on product choice was significant ($\beta = .43$, $s.e. = .21$, $Wald(1) = 3.97$, $p < .05$), indicating that those high on the promotion scale were more likely to pick the more expensive smartphone with better quality. This finding supports H1.

EXPERIMENT 2

While regulatory focus is a personal trait (Higgins 1996), it can also be manipulated through priming (Avnet and Higgins 2006; Haws et al. 2010; Idson, Liberman, and Higgins 2000; Pham and Avnet 2009; Wang and Lee 2006; Zhou and Pham 2004). Therefore, in experiment 2 I manipulate participants' regulatory focus to investigate its effect on product choice. Specifically, I first primed participants with either a promotion or prevention orientation. This was followed by information on quality ratings and price for two digital cameras, one of which was of better quality but had a higher price than the other digital camera. Participants' choice of one of the two digital cameras was measured as the key dependent variable. I predicted that those with a promotion orientation would be more likely to select the more expensive digital camera, and the reverse would hold true for those with a prevention orientation.

Method

Regulatory Focus Manipulation. Participants' regulatory focus was manipulated via a PowerPoint presentation, consisting of a series of pictures and quotes accompanied by music. The slides in the promotion condition emphasized promotion-focus-related themes, such as achieving hopes and aspirations (e.g., "If you aspire to the highest place, it is no disgrace to stop at the second, or even the third."). The presentation in the prevention condition highlighted prevention-focus-related themes, such as fulfilling one's duty (e.g., "You cannot escape the responsibility of tomorrow by evading it today."). Both versions had the same background music and lasted for approximately two minutes. Since this study was conducted under the guise of rating the quality of a slide show, participants were asked to focus on the quality of sound and images, rather than the embedded messages, providing a strong test of the proposed effects.

Procedure. One hundred and twenty-one undergraduate students participated in this experiment for course credit. Participants were randomly assigned to one of the two regulatory focus conditions and watched the slides while listening to the sound on headsets. This was presented to participants as a study to measure the quality of images and sound. Participants then completed several manipulation check measures. In particular, they were asked to indicate the extent to which they agreed with the following four statements on a seven-point scale (1 = *completely disagree*, 7 = *completely agree*):

- 1) this slide show has made me think carefully about the hopes and aspirations that I want to strive for in my day-to-day life,
- 2) this slide show has encouraged me to consider the hopes and aspirations that I aim to follow in my life,
- 3) because of this slide show, I

am more convinced than ever that it is important for me to take on my responsibilities and obligations, and 4) this slide show has caused me to think about the responsibilities and obligations that influence the decisions I make. The first two items measured participants' promotion orientation, while the last two items measured their prevention orientation. Since this was disguised as a study for evaluating the quality of a video clip, measures of image quality, sound quality and message agreement were also administered. In addition, to investigate whether the manipulation impacted participants' emotions, the 20-item PANAS scale (Watson, Clark, and Tellegen 1988) was also administered. These procedures and measures were all adopted from Finnel, Reed, and Aquino (2011).

Next, participants were provided with instructions for an ostensibly unrelated study that examined consumers' product choices. Then, they were given a choice task that involved making a hypothetical purchase decision between two digital cameras. One digital camera was priced at \$191 with a quality rating of 86 out of 100 (product X), while the other was priced at \$249 with a quality rating of 92 out of 100 (product Y). Lastly, demographic information was collected.

Results

Manipulation Checks. I first examined whether participants' emotions and thoughts about the PowerPoint presentation varied across the two conditions. Five control variables were measured: image quality (two items, $r = .75, p < .0001$), sound quality (two items, $r = .48, p < .0001$), message agreement (two items, $r = .52, p < .0001$), and positive (10 items, Cronbach's $\alpha = .95$) and negative affect (10 items,

Cronbach's $\alpha = .87$). I used all five variables as covariates in my subsequent analyses. Since none of their effects were significant, they were not discussed further.

To assess the effectiveness of the regulatory focus manipulation, I averaged the two manipulation check items for each regulatory focus ($r = .89$ for the two promotion orientation items; $r = .83$ for the two prevention orientation items). A one-way ANOVA on the difference between the promotion scale and the prevention scale revealed a significant effect of the regulatory focus manipulation ($F(1,113) = 13.72, p = .01$; $M_{\text{Promotion}} = .45, M_{\text{Prevention}} = -.08$), indicating that those in the promotion condition were more promotion-oriented and vice versa. Thus, the manipulation of regulatory focus was successful.

Product Choice. A binary logistic regression predicting product choice (0 = product X, 1 = product Y) revealed a significant effect of the regulatory focus manipulation ($\beta = 1.10, s.e. = .42, \text{Wald } \chi^2(1) = 6.97, p < .01$), with promotion-oriented participants being more likely to choose the more expensive digital camera than prevention-oriented participants (59% > 34%). These results support H1.

Discussion

As expected, I found that promotion-oriented participants are more likely to choose the more expensive digital camera than prevention-oriented participants. It is noteworthy that the choice share of the more expensive digital camera is 25% higher in the promotion condition, in comparison to the prevention condition. The results of this and the previous experiments, therefore, provide converging evidence in support of H1.

EXPERIMENT 3

The objectives of this experiment were twofold. First, I tested H2 concerning the boundary condition of the effect of regulatory focus. Second, I investigated whether the amount of attention paid to quality versus price mediates the influence of regulatory focus on product preferences (H3).

Method

The design was a 2 (regulatory focus: promotion vs. prevention) x 3 (reference point: high vs. middle vs. low) between-subjects full factorial design. A total of 206 students participated in this experiment for course credit. The procedures were similar to those used in experiment 2. First, regulatory focus was manipulated in the same manner and the same manipulation check measures were administered as in experiment 2. Next, in a seemingly unrelated study, participants completed a product evaluation task. The two smartphones used in experiment 1 were presented: one priced at \$269 with a quality rating of 87 out of 100 (product X) and the other priced at \$349 with a quality rating of 93 out of 100 (product Y). Participants were told that they had a certain level of quality expectation and a budget for purchasing a smartphone that varied across three experimental conditions: 1) In the high reference point condition, the budget (\$400) and quality expectations (95) were higher than the price and quality ratings of the two presented products, 2) In the middle reference point condition, the budget (\$300) and quality expectations (90) were between the price and quality ratings for the two presented products, and 3) In the low reference point condition, the budget (\$200) and quality expectations (80) were below the price and quality ratings of the two products.

Then participants indicated which of the two smartphones they preferred and completed reference point manipulation check items along with the process measures. Product preference was measured on a seven-point scale (1 = *prefer product X*, 7 = *prefer product Y*). I used this preference measure (vs. a choice) to enhance the generalizability of my results.

Four process measures were evaluated on 7-points scales: 1) how much attention did you pay to quality? (1 = *no attention at all*, 7 = *a lot of attention*), 2) how much attention did you pay to price? (1 = *no attention at all*, 7 = *a lot of attention*), 3) when considering which smartphone to purchase, I would pay more attention to: (1 = *price*, 7 = *quality*), and 4) how important is quality in your preference of a smartphone? (1 = *not important at all*, 7 = *very important*). The order of the dependent variable (product preference) and the process measures was counterbalanced. Doing so enabled me to rule out the possibility that the process measures captured post-choice justification instead of the real underlying processes. The effect of order was not significant ($p > .10$) and was not discussed further. Lastly, two manipulation check measures for reference points were administered: 1) products were priced (1 = *above*, 2 = *at*, 3 = *below*) my budget, and 2) products have quality ratings that were (1 = *above*, 2 = *at*, 3 = *below*) my expectations.

Results

Manipulation Check. To examine whether the manipulation of regulatory focus was successful, the average of the two manipulation check items for the promotion ($r = .87, p < .0001$) and prevention orientation was used ($r = .73, p < .0001$). An ANOVA revealed a significant effect of regulatory focus on the difference between the two scales

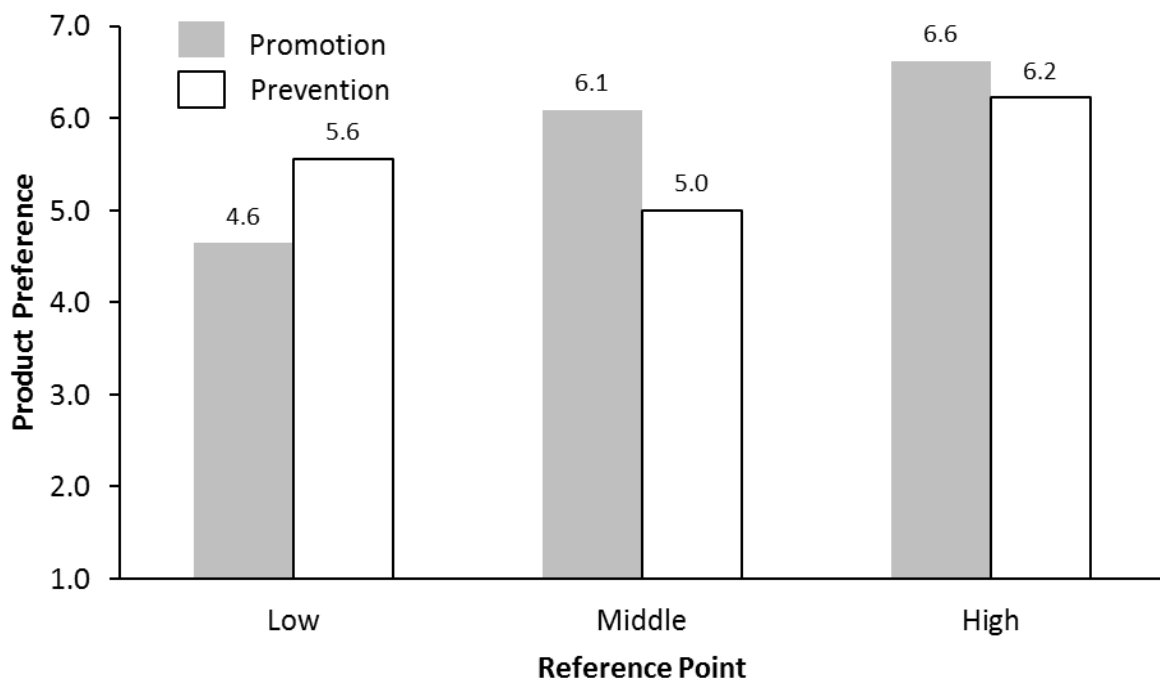
($F(1,203) = 4.96, p < .05; M_{\text{Promotion}} = .28, M_{\text{Prevention}} = -.66$), indicating that those in the promotion orientation condition were more promotion-focused and vice versa. Thus, the manipulation of regulatory focus was successful.

Participants completed two manipulation check items designed to assess the extent to which they perceived the two products were above/at/below their reference points (1 = *above*, 2 = *at*, 3 = *below*) in terms of quality and price. An ANOVA on quality perceptions revealed a significant effect of reference point ($F(2, 196) = 41.02, p < .0001$). Planned contrasts showed that quality perceptions differed in the expected manner ($M_{\text{high_RP}} = 2.27 > M_{\text{middle_RP}} = 1.86 > M_{\text{low_RP}} = 1.16; p\text{-values} < .01$). A similar ANOVA on price perceptions revealed a significant effect of reference point ($F(2, 196) = 67.88, p < .0001$), with price perceptions differing in the expected manner ($M_{\text{high_RP}} = 2.49 > M_{\text{middle_RP}} = 1.99 > M_{\text{low_RP}} = 1.30; p\text{-values} < .01$). Therefore, the reference point manipulation was successful.

Product Preferences. An ANOVA on product preferences revealed a significant main effect of reference point ($F(2, 200) = 6.40, p < .01$), indicating that participants' preference differed across the three reference point conditions. Post-hoc contrasts revealed that more participants preferred the more expensive product in the high reference point condition than in the low ($F(1, 200) = 12.16, p < .001; M_{\text{high_RP}} = 6.41, M_{\text{low_RP}} = 5.16$) and middle reference point conditions ($F(1, 200) = 5.69, p < .05, M_{\text{high_RP}} = 6.41, M_{\text{middle_RP}} = 5.54$), but the preferences were similar for the low and middle reference point conditions ($F(1, 200) = 1.38, p = .24, M_{\text{low_RP}} = 5.16, M_{\text{middle_RP}} = 5.54$). The effect of regulatory focus condition was not significant ($p > .10$).

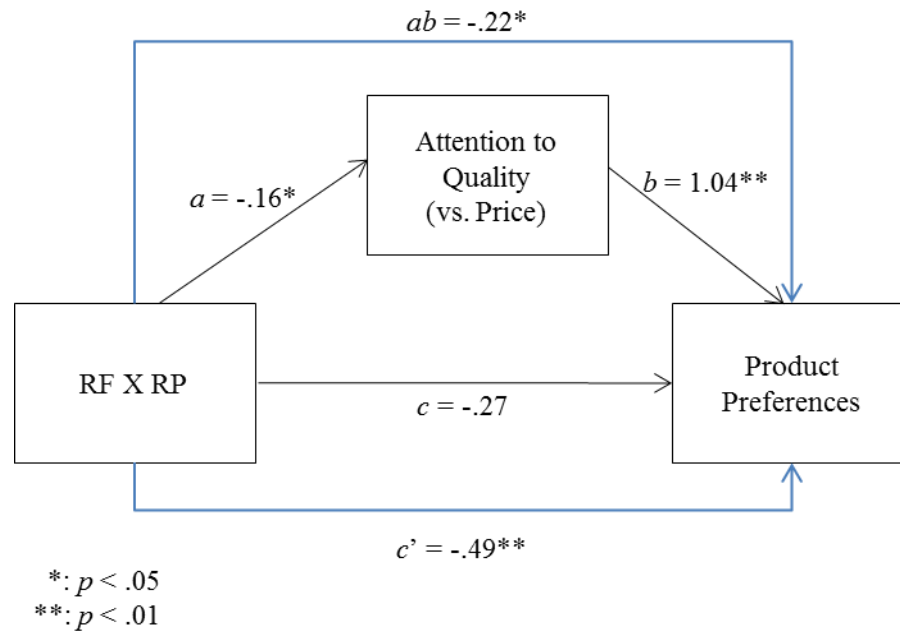
More critical to my purpose, the interaction effect between regulatory focus and reference point was significant ($F(2, 200) = 3.58, p < .05$), suggesting that the effect of regulatory focus differed across the three reference point conditions (see Figure 2). Further analyses demonstrated that the simple effect of regulatory focus was significant only in the middle reference point condition ($M_{\text{Promotion}} = 6.09, M_{\text{Prevention}} = 5.00, p < .05$), but not in the low or high reference point conditions ($M_{\text{Promotion}} = 4.64, M_{\text{Prevention}} = 5.56, p > .10$; $M_{\text{Promotion}} = 6.62, M_{\text{Prevention}} = 6.22, p > .10$). These results are supportive of H2.

FIGURE 2
Product Preferences in Experiment 3
 (7-point scale with 1 = prefer the cheaper product,
 7 = prefer the expensive product)



Mediation Analysis. To test whether attention to quality/price (Cronbach's $\alpha = .84$) mediated the effect of regulatory focus on product preferences, a bootstrapping analysis was conducted (Preacher and Hayes 2004; Zhao, Lynch and Chen 2010). Since this analysis is in the form of a regression, I first created two dummy variables for the reference point manipulation: RP (= 1 for the middle RP condition, = -1 otherwise) and RPH (= 1 for the high RP condition, = -1 otherwise), and one dummy variable for the regulatory focus manipulation: RF (= 1 for promotion orientation, = 0 for prevention orientation). To test the mediation effect of attention to quality (vs. price), I then ran a regression with product preferences as the dependent variable, RF x RP as the independent variable, attention to quality (vs. price) as the mediator, and RF, RP, RPH, RF x RPH as covariates. This analysis revealed that the total effect of the independent variable on the dependent variable was significant ($c' = -.49, p < .01$), the effect of the independent variable (RF x RP) on the mediator (attention to quality vs. price) was significant ($a = -.16 (.08), p < .05$), the effect of the mediator on the dependent variable (product preference) was significant ($b = 1.40 (.12), p < .01$), but the direct effect of the independent variable on the dependent variable was marginally significant ($c = -.27, p = .07$). The 95% confidence interval for the indirect effect did not include zero ($a \times b = -.22$; 95% CI = $(-.51, -.01)$), demonstrating a statistically significant mediation effect, supporting H3. This mediation pattern is shown in Figure 3.

FIGURE 3
Mediation Analysis in Experiment 3



RF stands for regulatory focus. RP stands for reference point.

Discussion

Taken together, the results of experiment 3 provide support for H2 that reference points act as moderators of the regulatory focus effect. The findings in the middle reference point condition replicate those of experiments 1 and 2 concerning the regulatory focus effect on product preference. That is, people with a promotion orientation are more likely than those with a prevention orientation to prefer the more expensive smartphone over the cheaper one. However, the regulatory focus effect on product preference is not observed when the reference point is either higher or lower than both products, illustrating boundary conditions of the effect. These results are

consistent with my argument that when consumers do not need to prioritize between price and quality, product preferences are not affected by regulatory focus. Finally, the results reveal the mediating role of attention to quality (vs. price), thereby shedding light on the underlying cognitive processes for the regulatory focus effect on product preferences.

GENERAL DISCUSSION

Product price and product quality are two important and oftentimes positively correlated factors in a purchase decision. As such, consumers may have to make trade-offs between the two factors in their purchase decisions. In this research, I examine such trade-offs through the theoretical lens of regulatory focus. The basic premise behind my hypotheses, which is verified empirically in my preliminary study, is that quality is a “get” component and price is a “give” component in a purchase. As a result, quality is associated with a promotion orientation and price is associated with a prevention orientation, which is confirmed in the pretest. Consequently, when presented with two products that differ in price and quality, consumers with a promotion orientation are more likely to prefer the more expensive product with higher quality, whereas those with a prevention orientation are more likely to prefer the cheaper product with lower quality. And these preferences are mediated by the attention consumers pay to price and quality. In addition, the effect of regulatory focus on product preferences only holds under circumstances in which consumers have to prioritize between price and quality. When consumers have either a high or low reference point, they tend to pay more attention to

the attribute that does not meet their expectations and are more likely to choose the product that allows them to minimize the loss on that attribute, regardless of their regulatory focus.

Contributions and Implications

My findings contribute to the marketing literature on pricing and to the literature on regulatory focus theory by providing a unique perspective on the effect of regulatory focus on consumption behaviors. Extant research has shown that consumers tend to be attracted by different products depending on the fit between marketed product features and their regulatory foci (Avnet and Higgins 2006; Keller 2006; Wang and Lee 2006). And previous studies have typically employed price as a dependent variable to measure the effects of such a fit (e.g., Avnet and Higgins 2003, 2006; Higgins, Idson, Freitas, and Molden 2003). In doing so, this stream of research has largely overlooked the fact that consumption behaviors are based upon the exchange of money for a good. My findings expand this research by demonstrating how consumers' regulatory focus affects their product preferences through differential attention to quality versus price, thus adding to the literature by emphasizing the transaction aspect of purchase behaviors.

My results also have implications for consumers' overall tendency to spend and save. Even though loss aversion may not apply to money spent (Novemsky and Kahneman 2005; Thaler 1985), my findings suggest that individuals with a prevention orientation may experience less utility in a transaction as they are more likely to monitor how much they spend. As a result, prevention-oriented consumers may be less likely to consume in general compared with promotion-oriented consumers. Given the link

between culture and regulatory focus (e.g., Aaker and Lee 2001; Lee, Aaker and Gardner 2000), the current findings are therefore capable of explaining the large differences in savings rates across countries that “are poorly explained by traditional economic variables” (Carroll, Rhee and Rhee 1994, p. 698).

While there are no existing measures of regulatory focus across countries, I conduct a preliminary test of this proposition by using Hofstede’s (2001) individualism score which has been linked to the promotion orientation (Aaker and Lee 2001; Lee, Aaker and Gardner 2000). With data on individualism for 24 countries (obtained from the Geert Hofstede Cultural Dimensions Web site, Hofstede 2005) and data for the gross savings rate and GDP per capita in 2006 (the most recent year available, <http://data.worldbank.org/country>), I estimated an ordinary least squares regression model, with the gross savings rate as the dependent variable, individualism as the independent variable, and the other four cultural dimensions and GDP per capita as covariates ($R^2 = .70$). The analysis showed a significant effect of individualism ($\beta = -.18$, $p < .05$), suggesting that more individualistic countries (which should also be more promotion-oriented) are less likely to save. This result is consistent with my argument that the promotion orientation reduces sensitivity to price and thus may lead to a stronger tendency to spend and a weaker tendency to save. A rigorous investigation of the relationship between consumers’ regulatory foci and their spending/saving tendency is a promising direction for future research.

Another avenue for future research concerns how the effect of regulatory focus may vary depending on which aspect of quality is emphasized. Prior research shows that

quality can be considered in terms of either promotion- or prevention-related features (e.g., Aaker and Lee 2001; Wang and Lee 2006). For example, marketing campaigns can emphasize the promotion-related features of a product (e.g., breath-freshening, teeth-whitening, tooth-enamel-strengthening for toothpaste) or prevention-related features of the same product (e.g., cavity prevention, gingivitis prevention, plaque control; Wang and Lee 2006). In my experiments, I presented the quality of products in terms of overall quality ratings, to control for individual differences in the perceived importance of each product feature. Another prediction that follows naturally from my argument is that if prevention-focused quality attributes (e.g., durability) are emphasized, the effect of consumers' goal orientations on product preference should diminish.

To address this possibility, I conducted an experiment ($N = 128$) with a scenario that was similar to experiment 1 but with an additional condition in which the quality ratings were presented for a prevention-related feature (i.e., durability).⁴ Consistent with my expectation, I found a significant interaction effect between quality emphasis and participants' regulatory focus on product preferences ($\beta = .44, t = 2.17, p < .05$). In particular, when overall quality ratings were provided promotion orientated participants preferred the more expensive product, replicating my earlier results ($\beta = .55, t = 1.98, p = .05$). When quality ratings concerning durability were provided, however,

⁴ Following Wang and Lee (2006, study 1), I used the following manipulation check items: 1) Good durability of a smartphone gives me a sense of accomplishment and advancement, 2) I would feel disappointed when my smartphone does not have good durability, 3) Good durability of a smartphone helps me avoid potential costs and losses, and 4) I would feel relieved when my smartphone has good durability. The first two items were averaged ($\lambda = .42, p < .0001$) as a measure of the extent to which durability represented promotion-related concerns; the last two items were averaged ($\lambda = .57, p < .0001$) as a measure of the extent to which durability represented prevention-related concerns. As expected, durability was more related to prevention than to promotion ($M_{\text{prevention}} = 5.36$ vs. $M_{\text{promotion}} = 4.33, t(66) = 8.16, p < .0001$).

the effect of regulatory focus on product preferences disappeared ($\beta = -.31, t = 1.06, p > .10$). Attention to quality versus price showed a similar pattern: Promotion (vs. prevention) focused participants paid more attention to quality than price in the overall quality condition ($\beta = .44, t = 2.29, p < .05$), but attention was not affected by regulatory focus in the durability condition ($\beta = -.07, t = .17, p > .10$). In addition, attention to quality versus price mediated the interaction effect between quality emphasis and regulatory focus on product preferences. These findings are consistent with my theoretical framework and suggest that when a prevention quality attribute is emphasized, the differential attention to quality versus price and subsequently the preferences for different products disappear.

From a managerial perspective, the findings of this research may also offer useful insights. As mentioned earlier, price and quality are critical factors that drive consumers' purchase decisions. Therefore, companies can enhance the efficiency of their marketing campaigns by highlighting promotion- or prevention-related themes based on their positioning in the market, thus influencing the amount of attention that consumers pay to price or quality. While providing consumers with quality-related information can decrease their price sensitivity (Alba et al. 1997; Bakos 1997; Degeratu et al. 2000; Lal and Sarvary 1999; Lynch and Ariely 2000), the current research further suggests that companies offering high-end products can increase their revenue by highlighting promotion-related themes in their marketing campaigns. This would provide these companies with an opportunity to reduce consumers' price sensitivity and increase the appeal of their superior quality products. Moreover, considering the cross-cultural

differences in regulatory focus between western and eastern countries (Aaker and Lee 2001; Lee et al. 2000), companies competing in the global market need to note that, *ceteris paribus*, eastern consumers who are more prevention-focused tend to be more sensitive to price than quality. This raises an important question for marketers: Does a penetration (vs. skimming) pricing strategy work more effectively in eastern markets? This would be an interesting question to address in future research. Finally, my results on the moderating effect of reference points suggest that marketers of high-end products may be able to mitigate the negative effect of the prevention orientation among some of their consumers by shaping their reference points (e.g., by providing price and quality comparisons). Intriguingly, my results also suggest that marketers of low quality products may benefit from lowering consumers' reference points, a tactic that is rarely observed in the market and thus deserves more attention.

Limitations

The products used in the three main experiments are electronic products, for which quality is an important attribute. The associations between regulatory focus and price/quality are documented in a product-void context in the pretest and the main results seem to hold for two different products (i.e., digital camera and smartphone). Nevertheless, future research should examine whether the effects documented here vary according to different product characteristics.

Another limitation is that in my analysis, I focused on the difference between the promotion and prevention orientations. This follows the tradition in the literature on regulatory focus theory that treats the two goal orientations as the end points of a

continuum. However, given the recent evidence that the two goal orientations may not constitute a uni-dimensional construct (Haws et al. 2010), future research could fruitfully explore the contribution of each orientation to consumers' price and quality sensitivities.

CHAPTER III
MORE OR LESS? GOAL ORIENTATION AND PREFERENCES
FOR MONETARY AND NONMONETARY SALES OFFERS

INTRODUCTION

Sales tactics are widely used in the market place to attract interest to a product, provide extra value to customers, expedite consumers' purchase decisions to boost sales, or to respond effectively to competition (Solomon, Cornell, and Nizan 2009).⁵ The employment of different sales tactics, not surprisingly, shapes consumer preferences and choices in fundamental ways. For example, sales may shift consumer purchases across time (Nij et al. 2003) or among brands (Gupta 1998; Van Heerde, Gupta, and Wittink 2003).

Monetary sales tactics such as price discounts and nonmonetary sales tactics such as bonus packs are most widely used, and consumers may encounter these two types of sales offers on almost a daily basis. A recent example is illustrated by The *Body Shop's* 2011 Christmas sale, in which they offered a price discount of "Buy 2 Get 1 Free". Economically, the bonus pack offer was a better deal (equivalent to a 33% discount) than the price discount offer (equivalent to a 25% discount). However, it is not entirely clear which sale tactics consumers prefer. For example, even though earlier research has documented a general preference for nonmonetary sales tactics over monetary sales tactics (Diamond 1992; Diamond and Sanyal 1990), recent investigations have identified

⁵ Throughout the paper, I use "sales tactics" instead of "sales promotions" to avoid possible confusion with a promotion regulatory focus.

conditions under which this preference may be diminished or even reversed (e.g., Chen et al. 2012; Mishra and Mishra 2011; Hardesty and Bearden 2003).

In the current research, I build upon this stream of research and investigate consumers' preferences for monetary and nonmonetary sales tactics – price discounts and bonus packs in particular. I draw upon the theoretical perspective of regulatory focus and study how consumers' goal orientations affect their preferences for different sales formats. Goal orientations are known to be key drivers of consumer behaviors (Mogilner, Aaker, and Pennington 2008). According to the regulatory focus theory (Higgins 1997), our behaviors are guided by two distinct goal orientations: a promotion orientation, which regulates behaviors to achieve gains and accomplishments, and a prevention orientation, which regulates behaviors to avoid losses and secure safety (Higgins, Grant, and Shah 1999).

Building on this line of research, I propose that nonmonetary sales offers such as bonus packs (monetary sales offers such as price discounts) are more likely to address consumer concerns associated with a promotion orientation (prevention orientation). That is, even though both promotions provide benefits to customers, the types of benefits provided are different. As a result, consumers' preference and choice of one of these two sales formats may depend on whether the type of benefits offered is compatible with consumers' goal orientations.

My research contributes to the literature in marketing and regulatory focus theory in several important ways. First, despite the prevalence of monetary and nonmonetary sales offers, little is known with respect to how consumers choose between the two types

of sales formats and how firms can influence these preferences (c.f., Chen et al. 2012; Mishra and Mishra 2011). The variable I introduce in the current research, i.e., consumers' goal orientations, which is drawn from the well-grounded and widely accepted theory of regulatory focus, brings a novel theoretical perspective to the issue. Therefore, my results are of theoretical significance and contribute to a better understanding of framing effects, in general, and consumers' responses to different sales formats, in particular.

The current research also expands our understanding of regulatory focus theory. Most previous studies in this area have focused on showing a regulatory fit effect between goal orientations and product attributes by demonstrating, for example, how the attractiveness of a product varies depending on which product attributes are emphasized (Aaker and Lee 2001). No research to the best of my knowledge has examined how consumers' goal orientations affect their preferences for different sales offers. While some products can be categorized as intrinsically being more promotion-related (e.g., acceleration of a car) or prevention-related (e.g., safety of a car), or can be experimentally manipulated to emphasize either orientation (e.g., Wang and Lee 2006), for many products that do not have obvious promotion/prevention-related features, employing appropriate sales tactics would allow marketers to effectively communicate these motivation-neutral features to consumers.

Finally, to the extent that the key variable I identify, consumers' goal orientations, and the moderators of its effect, including relative price levels and product types, can be measured or manipulated by retailers, my results shed light on the

managerially important question of how marketers can choose between the two types of sales tactics under different circumstances to persuade consumers and boost sales. In that regard, my results also hold potential implications for other product attributes that can be framed as “more” (e.g., speed) or “less” (e.g., time).

In the following section, I review the pertinent literature in order to delineate my foundational prediction. Then I present the results from two pretests, one preliminary study using a secondary dataset and one lab experiment to provide supportive evidence for this prediction. After that, I identify theoretically defensible and managerially actionable boundary conditions of the effect and empirically test them in two additional lab experiments. I conclude the paper by discussing the implications of my findings.

CONCEPTUAL DEVELOPMENT

Consumer motivation influences all decision making processes, which occur within the context of the goals that they pursue, the needs that they seek to satisfy, and the desires that are of the utmost importance in their minds (Pham and Higgins 2005). Regulatory focus theory (Higgins 1998) suggests that people approach a desired outcome in one of two distinct ways: sometimes their major concern is to achieve a positive outcome (i.e., a promotion orientation); at other times, the focus is on avoiding a negative outcome (i.e., a prevention orientation). When a behavior is directed by a promotion orientation, a consumer is more likely to be sensitive to gains and seek to maximize what she can obtain. On the other hand, when her behavior is guided by a prevention orientation, she is more likely to be sensitive to losses and seek to secure

safety (Aaker and Lee 2001; Higgins et al. 1999; 2003). Moreover, as Chernev (2004) suggests, for consumers with a strong promotion orientation, gains tend to be exaggerated in comparison to corresponding losses, while the opposite is true for those with a strong prevention orientation. Therefore, how consumers' goal orientations affect their responses to different outcomes may have implications for how they perceive bonus packs and price discounts.

A large body of behavioral research on framing effects provides important insights into how consumers perceive different types of sales tactics. This literature suggests that bonus pack and price discount offers are generally perceived differently and indicates several psychological perspectives that may explain the varying preferences of consumers for price discounts versus bonus packs. Of particular interest to the current paper is the stream of research based on prospect theory's value function that views a bonus pack as a pure gain and a price discount as a reduction in loss (Diamond and Campbell 1989; Diamond and Sanyal 1990). To the extent that a pure gain may be preferred to a reduction in loss (Thaler 1985), as per Prospect theory's value function (Kahneman and Tversky 1979), a bonus pack will be perceived to be more attractive than a price discount (Diamond 1992).

In a similar spirit, Nunes and Park (2003) suggest that monetary benefits can be more easily integrated with product cost because both monetary benefits and prices are stated in the same terms ("currency"), thereby allowing consumers to integrate the benefits into the original price (i.e., as a reduction in loss). However, in the case of nonmonetary benefits, the use of different currencies may cause consumers to consider

them separately and perceive benefits as a gain. Similarly, Chadran and Morwitz (2006) demonstrated that free offers are likely to be processed independently of a product's price. Taken together, these findings suggest that a bonus pack can be considered as a type of promotion that highlights the potential benefits gained by consumers, whereas a price discount can be considered as one that highlights the potential losses incurred by consumers. The difference between bonus packs and price discounts in terms of the types of benefits offered has implications for how consumers choose between the two sales tactics. In particular, I argue that due to the differences in the benefits offered, consumer preferences for the two sales tactics may depend on their goal orientations.

Past research on regulatory focus theory provides convergent evidence that individuals' goal orientations moderate the effect of messages on persuasion (Aaker and Lee 2001; Kirmani and Zhu 2007; Lee and Aaker 2004; Wang and Lee 2006). For example, Wang and Lee (2006) argued that individuals' goal orientations play an important role in directing their attention to information that fits their goal orientation. Since an individual's processing capacity is limited and, thus, selectivity of information is often necessary (Payne, Bettman, and Johnson 1992), people are more likely to attend selectively to information that addresses their motivational concerns. Therefore, the more compatible a message is with one's goal orientation, the stronger its persuasive effect will be. Consistent with this view, I propose that consumers with a promotion orientation are more likely to perceive a bonus pack offer as being more attractive, whereas those with a prevention orientation are more likely to perceive a price discount offer as being more attractive. . This is because the type of benefits offered by a bonus

pack may be more compatible with a focus on maximizing gains, which is associated with a promotion orientation. Conversely, the type of benefits offered by a price discount may be more compatible with a focus on minimizing losses, which is associated with a prevention orientation. Therefore, I predict that:

H1: Consumers prefer sales tactics that are compatible with their goal orientations, such that those with a promotion orientation prefer nonmonetary sales offers (i.e., bonus packs) over monetary sales offers (i.e., price discounts) but the opposite holds true for those with a prevention orientation.

Before I present empirical evidence for this key prediction, I first utilize two pretests to verify the proposed compatibility between goal orientations and the two types of sale formats. After that, I provide a preliminary test of H1 using secondary data. Study 1 then examines H1 in a controlled lab setting by manipulating consumers' goal orientations. After I document supportive evidence for this key effect, I then explore theoretically defensible and managerially actionable boundary conditions for the effect.

PRETEST 1

The purpose of this pretest is to verify my expectation that price, a salient feature of a discount offer, is more compatible with a prevention orientation, while quantity, a salient feature of a bonus pack offer, is more compatible with a promotion orientation. Towards that end, pretest 1 examines the association between price/quantity and the two goal orientations using a word association task.

Ninety-three undergraduates participated in this pretest in exchange for course credit. They were asked to categorize ten words into two groups. Of the ten words, four were related to a promotion orientation, four were related to a prevention orientation, and the remaining two were 'price' and 'quantity'. The eight words related to regulatory focus were taken from Lockwood, Jordan and Kunda (2002, study 2), who used these words to prime regulatory focus. The four promotion-focus-related words were: *aspiration, strive, seek, and achieve*. The four prevention-orientation-related words were: *mistake, prevent, disappointing, and fiasco*. No hints were given with regard to how the two groups should be constructed; participants were only told that they should place the words into two groups of five words each, as they desired.

To test the associations between regulatory focus and price/quantity, I summed up each participant's responses across the four promotion (prevention)-related words to construct a promotion (prevention) scale. For example, if three promotion-related words and one prevention-related word were placed in the first group, then the value of the promotion scale would be 3 and that of the prevention scale would be 1. The reliability of the two scales was assessed using the proportional reduction in loss (PRL) measure developed by Rust and Cooil (1994) for categorical variables. PRL is a direct extension of, and thus is evaluated in a manner similar to, Cronbach's alpha. The PRL for the promotion and prevention scales was .93 and .91, respectively. Since the two scales were highly correlated ($r = -.96, p < .0001$), I used the difference between the two scales as the independent variable to avoid the problem of multicollinearity.

To test the association between regulatory focus and price/quantity, I ran two binary logistic regressions. The analysis on the word “price” revealed a negative effect for the difference score ($B = -.43$, $Wald \chi^2 = 21.7$, $p < .0001$), indicating that ‘price’ is more likely to be grouped with the prevention words. The word “quantity” was analyzed in a similar manner, and the results revealed a positive effect for the difference score ($B = .14$, $Wald \chi^2 = 5.02$, $p = .02$), indicating that ‘quantity’ is more likely to be grouped with the promotion words. Therefore, the results of this pretest confirmed my expectation that quantity (price) was more compatible with a promotion (prevention) orientation.

PRETEST 2

In this pretest, I verify the compatibility between goal orientations and price discount/bonus pack through an Implicit Association Test (IAT: Greenwald, McGhee, and Schwartz 1998). Whereas a word categorization task enables researchers to investigate the relationships among constructs, the IAT is better suited to capture individuals’ subconscious thoughts (Dimofte and Yalch 2007). Thus, the IAT is more useful in exploring individuals’ automatic associations among different constructs. In addition, in pretest 1 I presented the words ‘price’ and ‘quantity’ without specifying the valence of the constructs (i.e., increase or decrease); in this study, I specify the valence of the constructs of interest (i.e., price discounts and bonus packs) and expect that individuals will associate “bonus pack” with a promotion orientation and “price discount” with a prevention orientation.

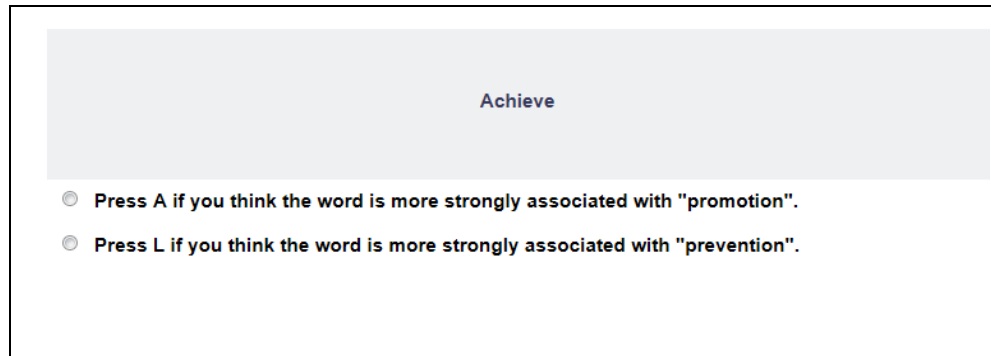
Forty undergraduate students participated in this study in exchange for course credit. I followed the standard procedures for the Implicit Association Test (IAT; Greenwald, McGhee, and Schwartz 1998). Before starting the IAT, participants were given an introduction, to help them understand the basic concepts of a promotion and a prevention orientation. Participants were instructed that a promotion orientation “makes people act in ways to achieve positive outcomes” and the sample words were “Gain”, “Triumph”, “Succeed”, and “Win”. Similarly, they were told that a prevention orientation “makes people act in ways to avoid negative outcomes” and the sample words were “Flunk”, “Avoid”, “Avert”, and “Rejection”. They were informed that they would be asked to classify a word into either the “promotion” or “prevention” category, as quickly as they could, while making as few mistakes as possible. They were informed that taking too much time or making too many mistakes would constitute an invalid result.

The IAT procedure consisted of three practice blocks and two main blocks (see Figure 4). In essence, I trained participants to associate letter “A” with promotion-related words and letter “L” with prevention-related words in the first practice block. Four promotion and four prevention words were presented, one at a time, in random order; these were the same eight words that were used in pretest 1 (*aspiration, strive, seek, and achieve* for promotion-related words; *mistake, prevent, disappointing, and fiasco* for prevention-related words). In the second practice block, I trained participants to associate letter “A” with “bonus pack” and letter “L” with “price discount”. Then in the first main block, I measured their response time when they were asked to associate each

of the promotion words with both “promotion” and “bonus pack” and each of the prevention words with both “prevention” and “price discount” (the compatible block). In the third practice block, I trained participants to associate letter “A” with “price discount” and left “L” with “bonus pack”. Finally, in the second main block I measured their response time when they were asked to associate the promotion words with both “promotion” and “price discount” and the prevention words with both “prevention” and “bonus pack” (the incompatible block). The IAT score was computed as the difference in response time between the compatible and incompatible blocks. Therefore, if ‘bonus pack’ is more compatible with a promotion orientation and ‘price discount’ is more compatible with a prevention orientation, then the response time will be shorter in the compatible than the incompatible block. Response time was measured in milliseconds and then log-transformed (Greenwald, McGhee, and Schwartz 1998). Following Messner and Vosgerau (2010), I counterbalanced the order of the two main blocks and their preceding practice blocks between subjects, to eliminate order effects.

FIGURE 4
An Illustration of the IAT Procedure in pretest 2

4A. An illustration of the first IAT block

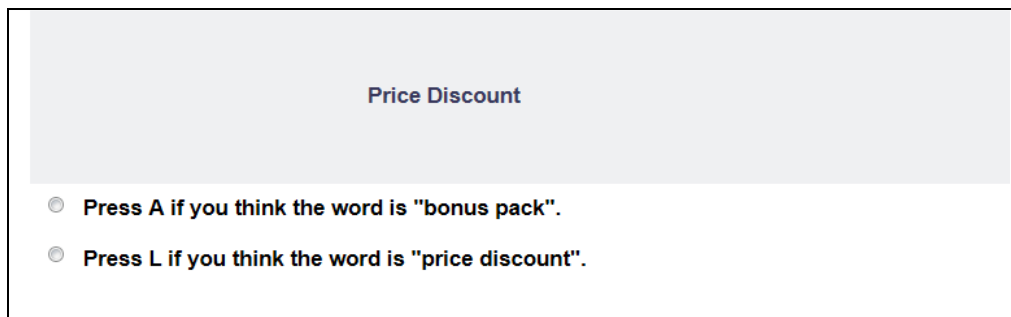


Achieve

- Press A if you think the word is more strongly associated with "promotion".
- Press L if you think the word is more strongly associated with "prevention".

* One of the eight words were presented in a random order: *aspiration*, *strive*, *seek*, and *achieve* (promotion-related words); *mistake*, *prevent*, *disappointing*, and *fiasco* (prevention-related words)

4B. An illustration of the second IAT block



Price Discount

- Press A if you think the word is "bonus pack".
- Press L if you think the word is "price discount".

* One of the two words were presented in a random order: *price discount* and *bonus pack*

4C. An illustration of the third IAT block

Aspiration

- Press A if you think the word is either "price discount" or a "promotion" word.
- Press L if you think the word is either "bonus pack" or a "prevention" word.

* One of the eight words were presented in a random order: *aspiration*, *strive*, *seek*, and *achieve* (promotion-related words); *mistake*, *prevent*, *disappointing*, and *fiasco* (prevention-related words)

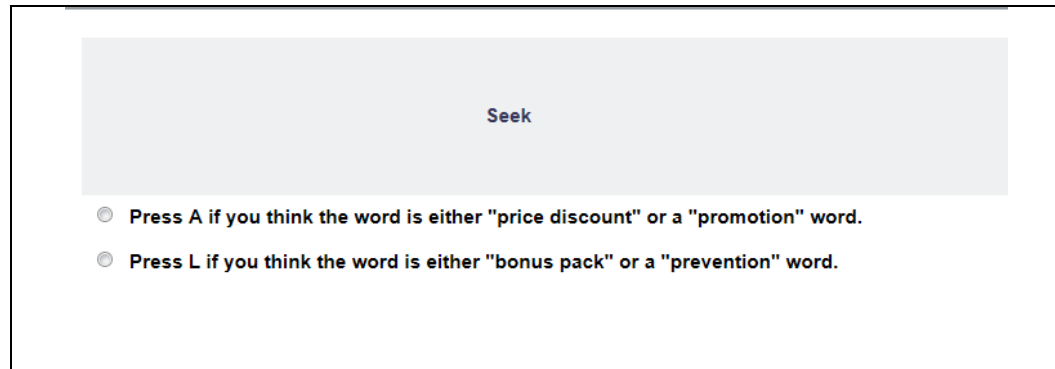
4D. An illustration of the fourth IAT block

Price Discount

- Press A if you think the word is "price discount".
- Press L if you think the word is "bonus pack".

* One of the two words were presented in a random order: *price discount* and *bonus pack*

4E. An illustration of the fifth IAT block



* One of the eight words were presented in a random order: *aspiration*, *strive*, *seek*, and *achieve* (promotion-related words); *mistake*, *prevent*, *disappointing*, and *fiasco* (prevention-related words)

A repeated measures ANOVA was performed on the log-transformed response time with compatibility as a within-subjects factor and order of the blocks as a between-subjects factor. As expected, the effect of compatibility was significant ($F(1, 38) = 4.02$, $p = .05$). The interaction effect between compatibility and order ($F(1, 38) = 2.83$, $p = .49$) and the effect of order were not significant ($F(1, 38) = .00$, $p = .94$). As expected, participants responded more rapidly in the compatible block than in the incompatible block ($M_{\text{compatible}} = 1.95 < M_{\text{incompatible}} = 2.20$), confirming my expectation that 'bonus pack' is more compatible with a promotion orientation while 'price discount' is more compatible with a prevention orientation.

PRELIMINARY STUDY

Having established the proposed compatibility between goal orientations and sales formats, I provide a preliminary test of H1 using a secondary dataset consisting of store-level consumer goods data: the Dominick's Finer Foods database (DFF). The DFF database is one of the most widely used data sets in the marketing literature (a list of published papers using this dataset, including more than two dozen in marketing journals, can be accessed at:

<http://research.chicagobooth.edu/marketing/databases/dominicks/papers.aspx>). This dataset contains the weekly prices for 29 categories of packaged consumer goods from 83 stores in the Dominick's grocery chain in the greater Chicago area, from 1989 to 1998. I conducted an analysis on 28 of these categories.⁶

To test H1, I utilized the "sales" variable in the movement data as a proxy for sales format. I focused on "bonus buys" and "simple price reductions" as proxies for bonus packs and price discounts, respectively. One caveat in regard to using this variable is that, as noted on the dataset's website, "this variable is not set by DFF on a consistent basis (i.e., if the variable is set it indicates a promotion, if it is not set, there still might be a promotion that week)." As a proxy for consumers' goal orientations, I used the % of White from store-specific demographic information. This is in accordance with prior research showing that Anglo-Saxons tend to be chronically promotion-oriented (Lee, Aaker and Gardner 2000). The dependent variable was quantity (number of units sold). I also included standard control variables in the model, including: Age9 (% Population

⁶ The cigarette category is excluded from the analysis because the products in the category are highly regulated (Chen et al. 2008; Besley and Rosen, 1999).

under Age 9), Age60 (% Population over Age 60), Education (% College Graduates), Ethnic (% Blacks & Hispanics), Income (Log of Median Income), Hval (Mean Household Value), Unemp (% of Unemployed), Week (Week Number), Price (Retail Price), and UPC (UPC number). Also included in the model were 26 dummy variables for product categories and price.

I regressed quantity on % White (% of population that is White), type of promotion (dummy coded: 1 = bonus pack, 0 = price discount), and its interaction term. All the control variables listed above were included in the model. The results showed that the interaction between sales tactics and the percentage of White was positive and significant ($B = .97, t = 3.31, p < .01$). Therefore, in support of H1, promotion-focused White consumers responded to bonus packs more favorably than to price discounts.

STUDY 1

Having obtained preliminary evidence for my key prediction, in this study I aim to provide a rigorous test of H1 in a controlled lab setting. Past research suggests that one's goal orientation can be situationally primed (Higgins et al. 1994). Therefore, in this study I manipulate participants' goal orientations through a priming task (Lee, Keller and Sternthal 2010) and test its effect on consumers' preferences for bonus packs and price discounts.

Method

Thirty-six undergraduates (30% male) participated in this study for course credit. This study consisted of three parts; each part was presented to participants as a series of unrelated studies with a separate introduction page. The first and third parts were the studies of interest and the second part was a filler task. First, goal orientations were manipulated via a writing task. Participants were randomly assigned to one of two conditions: the promotion and prevention orientation conditions. In the promotion condition, participants were asked to reflect on and list their most important hopes and aspirations in life. Then they were asked to write about an event in their past in which they tried to achieve something important and actually achieved it. In contrast, in the prevention condition, participants were asked to reflect on and list their most important duties and responsibilities in life. Then they were asked to write about an event in their past in which being cautious saved them from getting into trouble. This procedure was adopted from Lee, Keller and Sternthal (2010). Then participants responded to four manipulation check questions on a 7-point scale (1 = *Strongly Disagree*, 7 = *Strongly Agree*): 1) this writing task has made me think about the hopes and aspirations that I want to strive for in my day-to-day life, 2) this writing task has encouraged me to consider the hopes and aspirations that I want to pursue in my life, 3) because of this writing task, I am more convinced that it is important for me to take on my responsibilities, and 4) this writing task has caused me to think about the responsibilities that influence the decisions I make. The order of these four questions was randomized.

After that, participants completed a short sentence scramble task for approximately three minutes as a filler task. Then, they were informed about a store that sold various types of nuts by weight. As my key dependent measure, participants indicated whether they would choose a discount of 20% off of the regular price or would rather receive 25% more quantity at the regular price (0 = price discount; 1 = bonus pack).

Results and Discussion

Manipulation Check. The two items used to assess participants' promotion orientations were averaged ($r = .71, p < .0001$) to construct a promotion scale and the two items for assessing their prevention orientations were averaged ($r = .66, p < .0001$) to construct a prevention scale. An ANOVA on the promotion scale confirmed a significant main effect of goal orientation ($F(1, 34) = 5.05, p < .03; M_{\text{promo}} = 5.76 > M_{\text{preven}} = 4.97$). A similar ANOVA on the prevention scale also revealed a significant main effect of goal orientation ($F(1, 34) = 5.86, p = .02; M_{\text{promo}} = 4.58 < M_{\text{preven}} = 5.47$). Therefore, the manipulation was successful.

Hypotheses Testing. A logistic regression on offer choice revealed a significant effect of goal orientation ($B = .74, \text{Wald } \chi^2(1) = 4.13, p = .04$). As predicted, those in the promotion condition were more likely to choose the bonus pack (vs. the price discount) relative to those in the prevention condition ($M_{\text{promo}} = .58 > M_{\text{preven}} = .24$). Therefore, H1 was supported.

To quickly recap, the two pretests confirmed my expectation about the compatibility between goal orientations and the two types of sales formats. The analysis of DFF data and results from my first lab experiment combined provide converging

evidence for my key prediction that consumers are more responsive to a sales format that is compatible with their goal orientation, such that those with a promotion orientation prefer bonus packs whereas those with a prevention orientation prefer price discounts.

However, I do not expect those with a promotion orientation to prefer bonus pack offers over price discount offers under all conditions. Indeed, there are reasons to believe that consumer preferences for different sales tactics may also vary with different product and offer characteristics. For example, while a mental accounting of the benefits of these offers would predict an overall preference for bonus packs over price discounts (Diamond 1990; Diamond and Sanyal 1992), Mishra and Mishra (2011) find that the preference for bonus packs may hold only for virtue products; for vice products consumers may prefer price discounts as a way to alleviate their feelings of guilt. Similarly, Chen et al. (2012) find that the preference for bonus packs over price discounts is moderated by various offer and product characteristics including offer magnitude, calculation difficulty, perceived expensiveness of a product, and product familiarity.

In an effort to identify a boundary condition for my key effect, therefore, I first take into account the role of relative price level – i.e., how cheap or expensive consumers perceive a product to be. It seems plausible that consumers are more likely to be responsive to sales offers that are compatible with their goal orientations when a price is perceived as being expensive. This is because when a product is expensive, consumers may be more motivated to make a careful analysis of the pros and cons in their choice. Therefore, their goal orientation may come into play and its compatibility with the type

of benefits offered may affect consumer preferences. However, when a product is cheap, consumers may not be motivated to elaborate on the details of the sales offers, including their benefits, and therefore their goal orientation may have less of an impact on their preferences for sales format. Therefore, I predict that:

H2: Relative price levels interact with consumers' goal orientations to influence their preferences for sales formats. Specifically, for an expensive product, consumers with a promotion orientation will favor a monetary sales offer (i.e., a bonus pack) over an economically equivalent monetary sales offer (i.e., price discount), and consumers with a prevention orientation will show the opposite preference. In contrast, for a cheap product this pattern should be diminished.

In an additional effort to identify boundary conditions of my key effect, I further hypothesize that the effect proposed in H2 will not hold true for all types of products. Rather, since the benefits offered by price discounts and bonus packs are different, I argue that consumers' preferences for sales format may also depend on the compatibility between their goal orientation and the types of benefits sought from different kinds of products.

In their benefit congruency framework, Chandon, Wansink, and Laurent (2000) propose that consumers are affected by the compatibility between the type of benefit offered through a sale (e.g., monetary vs. non-monetary) and the type of product (e.g., utilitarian vs. hedonic). This effect is more pronounced for expensive products than for inexpensive ones; for cheaper products, the low price may be the primary reason for the purchase, and therefore the compatibility between the types of benefits and product type

may have less of an impact on consumer preferences. For expensive products, in contrast, I can predict that consumers should prefer a monetary sale for a utilitarian product and a non-monetary sale for a hedonic product. In other words, they should be influenced more by the compatibility between the benefits offered by a sale and product type when the purchase is costly.

Following this logic, I propose that the interactive effect between consumers' goal orientations and relative price on their preferences as proposed in H2 will be stronger for the consumption of hedonic products than for utilitarian products. Since consumers with a promotion orientation are more likely to be tempted by the hedonic benefits of a product (Chernev 2004), they will pay more attention to the gain-related aspects of the deal, resulting in a greater preference for a bonus pack over a price discount. On the other hand, in the case of utilitarian products, promotion-focused consumers' greater tendency to maximize their enjoyment of a product by purchasing more will be lessened, because their goal orientation and the utilitarian benefits of the product are incompatible, thereby mitigating the effect of goal orientation on sales format preferences. And consistent with my rationale for H2, in addition to following Chandon et al. (2000)'s argument, these differential effects should be stronger when a product is expensive than when it is cheap. In the latter case, compatibility should have less of an impact on consumers' preferences. Consequently, I predict that:

H3: Consumers' goal orientation, relative price level and product type interact to affect consumers' preferences among different sales formats, such that the effect in H2 should be stronger for hedonic products than for utilitarian products.

I test H2 and H3 in the following studies.

STUDY 2

To manipulate the perceived expensiveness of a product without introducing confounds, I followed Chen et al. (2012) and presented the unit price of the product in different units – oz. in the cheap price condition and lb. in the expensive price condition. In order to generalize my findings beyond a lab setting, I recruited sixty-five participants ($M_{\text{age}} = 30$ years; 35% male) who were U.S. residents and used Amazon's Mechanical Turk Service (<https://www.mturk.com/>) to participate in this study in exchange for a payment of \$0.50. Mturk has been used as a new source of data in recent behavioral studies in marketing and psychology (e.g., Bagchi and Li 2011; Mason and Suri 2011), and arguably provides data that are of similar quality to that of traditional lab studies (Buhrmester, Kwang, and Gosling 2011). The payment (\$/hour) is consistent with the usual practice on Mturk.

Since goal orientation can be characterized as a chronic tendency, I opted for measuring (instead of manipulating) participants' chronic goal orientations in this study. Supportive evidence for my predictions from this study would, therefore, enhance the generalizability of my results across different methodologies. The product used, coffee beans, is also different from the one utilized in study 1, to further generalize my findings.

Method

Participants were randomly assigned to one of the two price conditions and asked to imagine they were shopping for coffee beans. They were informed that two stores they frequent offer sales on coffee beans: store A offers a discount of 20% off the regular price and store B offers 25% more in quantity at the regular price. The regular price was the same for the two stores but varied according to which price condition participants were randomly assigned: \$.69/oz in the cheap condition and \$10.59/lb in the expensive condition. In a pretest, 37 participants from the same undergraduate population verified that coffee beans were perceived as being cheaper when the price was presented in oz, as \$.69/oz., rather than lb, as \$10.59/lb ($M_{\text{cheap}} = 4.31$ vs. $M_{\text{expensive}} = 5.47$; $F(1,36) = 8.68, p < .01$).

For my key dependent measure, participants were asked to indicate which store they planned to buy coffee beans from (1 = *prefer store A*, 4 = *indifferent toward the two stores*, 7 = *prefer store B*). Then, participants' chronic regulatory orientations were measured using the 10-item scale adopted from Haws et al. (2010) along with several demographic measures. Examples of the promotion orientation scale included "I feel like I have made progress toward being successful in my life" and "When I see an opportunity for something I like, I get excited right away." Examples of the prevention orientation scale included "I worry about making mistakes" and "I frequently think about how I can prevent failures in my life."

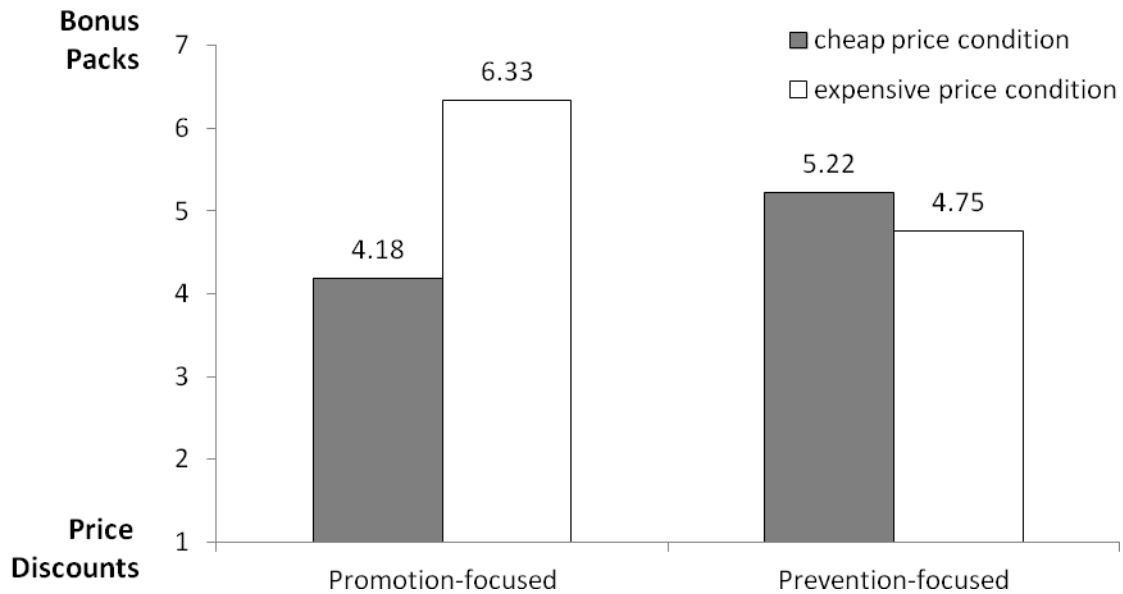
Results

I first constructed a promotion and a prevention orientation scale (Cronbach's $\alpha = .78$ for promotion, $.67$ for prevention).⁷ Then, I calculated the difference score between the promotion and prevention orientation scales and mean-centered it to reduce multicollinearity; this score was used as the independent variable.

Hypotheses Testing. A regression using the continuous chronic goal orientation scale and a price condition dummy variable (1 = *expensive*, 0 = *cheap*) was conducted on preference for sales format. The analysis revealed a marginally significant main effect of price ($B = .84$, $t(61) = 1.73$, $p = .08$), a non-significant main effect of goal orientation ($B = -.42$, $t(61) = -1.67$, $p = .12$), and a significant two-way interaction between price and goal orientation ($B = 1.01$, $t(61) = 2.65$, $p = .01$). The interaction effect is illustrated in Figure 5. Separate regressions for each price condition confirmed a significant positive effect of goal orientation on preference in the expensive price condition ($B = .64$, $t(31) = 2.31$, $p = .02$). This effect is not statistically significant in the cheap price condition ($B = -.42$, $t(30) = -1.46$, $p = .15$). These results support H2.

⁷ I removed one item from each scale and reported the results using 4-item scales in our analysis because the Cronbach's α was lower when using five items (Cronbach's $\alpha = .77$ for promotion, $.50$ for prevention with the five items). Both of the removed items were reverse-coded. In the process of developing their chronic regulatory focus scale, Haws et al. (2010) reported a Cronbach's α of $.74$ for the prevention orientation scale while using a much larger sample size ($N = 367$), but noted that it ranged from $.67$ to $.77$ in other studies. Hence, the reliability in our study seems to be in line with their numbers. Note that I obtained the same findings with the five items.

FIGURE 5
Preferences in Study 2



Discussion

Using adult consumers as study participants to measure chronic goal orientations, I obtain empirical support for H2. Specifically, I find that consumers with a promotion (prevention) orientation prefer a bonus pack (price discount), and this holds true only in the case of an expensive product, but not for a cheap one. In the next study, I examine H3 while utilizing different types of products. In addition, I manipulate participants' goal orientations, as I did in study 2.

STUDY 3

Method

One hundred forty-three undergraduates participated in this study for course credit. This experiment utilized a 2 (goal orientation: promotion vs. prevention) x 2 (price: cheap vs. expensive) x 2 (product types: hedonic vs. utilitarian) between-subjects design. Goal orientations were manipulated via the same writing task as in study 2. Participants were randomly assigned to one of two conditions (i.e., the promotion and prevention orientation conditions) and completed the essay task. Next, they completed the same sentence scramble filler task as in study 2, for approximately three minutes. Then relative price was manipulated in the same manner as in study 2, and product type was operationalized as chocolate (apple) for hedonic (utilitarian) products. The choice of products for this study was influenced by a consideration of whether both products are frequently subject to sales offers including price discounts and bonus packs. Participants were informed that the products were on sale in two stores that they frequent, which were the same distance from their home. Store A offered a price discount of 20% off the regular price, while store B offered 25% more quantity at the regular price. In addition, both stores sell the products by weight, so customers can buy as much, or as little, as they want. Participants indicated the extent to which they were likely to purchase from one of the stores on a 7-point scale (1 = *definitely buy from store A*, 4 = *indifferent toward the two stores*, 7 = *definitely buy from store B*). Lastly, I used the same manipulation check items for price and goal orientation.

Results

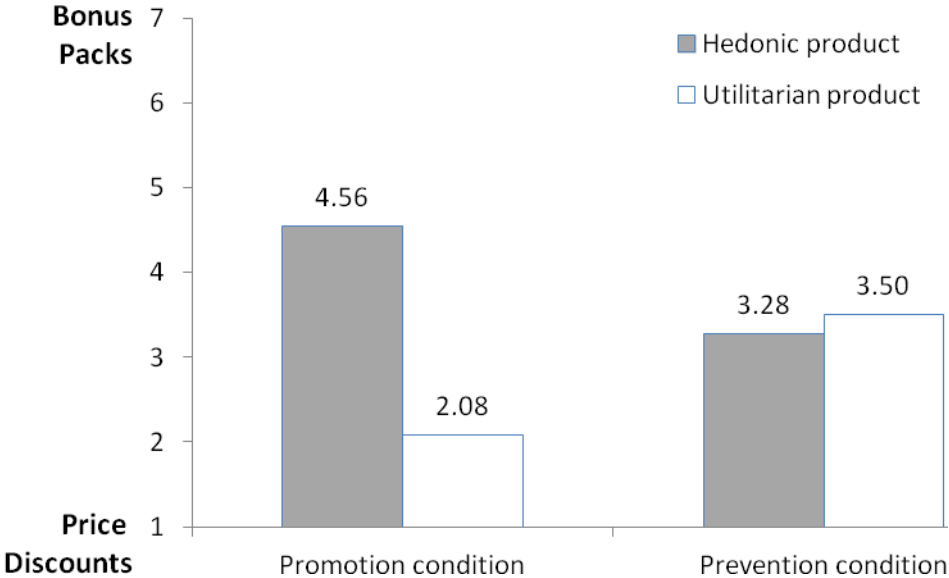
Manipulation Check. The two items used to assess participants' promotion orientation were averaged ($r = .60, p < .0001$) to construct a promotion scale and the two items for assessing their prevention orientation were averaged ($r = .41, p < .0001$) to construct a prevention scale. A 2 (goal orientation) x 2 (price) x 2 (product type) ANOVA on the promotion scale confirmed a significant main effect of goal orientation ($F(1, 135) = 8.48, p < .01: M_{\text{promo}} = 4.71 > M_{\text{preven}} = 4.15$). A similar ANOVA on the prevention scale also revealed a significant main effect of goal orientation condition ($F(1, 135) = 7.15, p < .01: M_{\text{promo}} = 3.96 < M_{\text{preven}} = 4.40$). Therefore, the manipulation was successful. No other effects were significant ($p > .10$).

A 2 (goal orientation) x 2 (price) x 2 (product type) ANOVA revealed a significant main effect of price ($F(1, 135) = 61.41, p < .0001: M_{\text{cheap}} = 4.60 < M_{\text{preven}} = 6.06$), indicating the price manipulation was successful. No other effects were significant ($p > .20$).

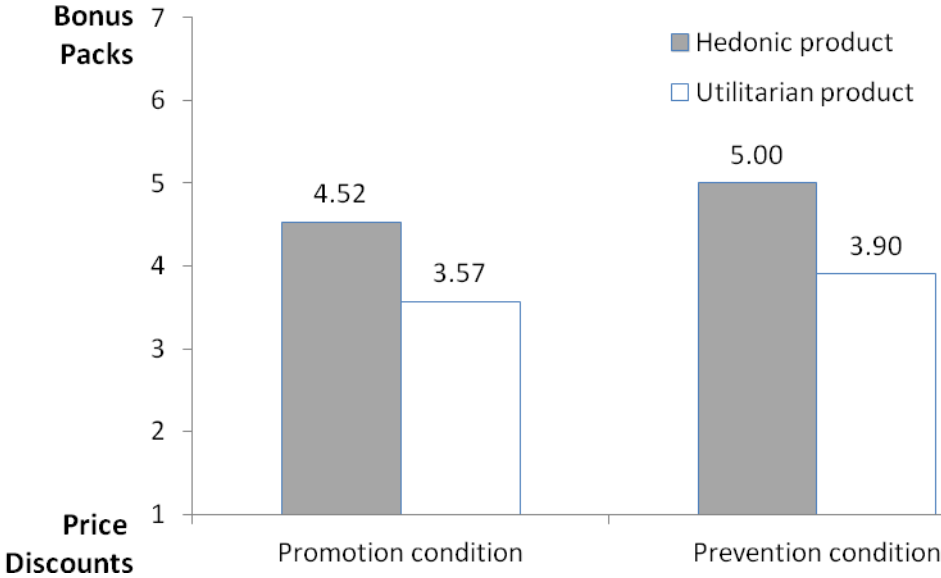
Hypotheses Testing. To test H3, I conducted a 2 (goal orientation) x 2 (price) x 2 (product type) ANOVA on store preference (1 = *prefer store A*, 4 = *indifferent toward the two stores*, 7 = *prefer store B*). The main effects of price ($F(1, 135) = 6.33, p = .01$) and product type ($F(1, 135) = 9.16, p < .01$) were significant. In addition, the two-way interaction between goal orientation and product type was marginally significant ($F(1, 135) = 3.21, p = .07$). More important, as predicted, the three-way interaction of goal orientation, price, and product type condition was significant ($F(1, 135) = 4.01, p < .05$; see Figure 6 for cell means).

FIGURE 6
Preferences in Study 3

6A. Expensive Price Condition



6B. Cheap Price Condition



To explore this interaction, two separate ANOVAs were conducted at each price level. When the price was perceived to be cheap, the two-way interaction between goal orientation and product type was not significant ($F(1, 135) = .02, p = .88$). When the price was perceived to be expensive, the two-way interaction was significant ($F(1, 135) = 7.03, p < .01$). Planned contrasts revealed that, in the expensive/vice condition, those in the promotion condition preferred the bonus pack than those in the prevention condition ($M_{\text{promo}} = 4.55$ vs. $M_{\text{preven}} = 3.28$; $F(1, 135) = 3.41, p = .06$). In the expensive/virtue condition, however, those in the promotion condition preferred the price discount than those in the prevention condition ($M_{\text{promo}} = 2.08$ vs. $M_{\text{preven}} = 3.50$; $F(1, 135) = 3.62, p = .05$). Taken together, the results provide empirical support for H3.

GENERAL DISCUSSION

Consumers' motivation, ability and opportunity to process information affect their perceptions and behaviors (Petty and Caccioppo 1986). Among these three factors, motivation may be of the utmost importance, as it provides a rationale for *why* a consumer is interested in a certain product or a sales tactic. In this research, I draw upon regulatory focus theory to explain *why* some consumers favor nonmonetary sales offers such as bonus packs while others favor monetary sales offers such as price discounts, and delineate conditions under which these preferences may or may not be observed. Through an analysis of a secondary dataset, a survey of adult consumers and multiple lab studies, I provide converging evidence for the proposition that consumers' goal orientations influence their preferred type of sales tactics. To quickly summarize, the

two pretests confirm the proposed compatibility between goal orientations and sales formats. The analysis of DFF data provides preliminary evidence for the proposed relationship between goal orientations and sales format preferences using consumer goods sales data from 27 product categories. The first study confirms this relationship by priming consumers' goal orientations in a controlled lab setting. The survey of adult consumers then identifies a boundary condition of this effect by showing that consumers prefer a bonus pack offer over a price discount only when a product is perceived to be expensive but not when the (same) product is perceived to be cheap. In my final lab experiment, I identify additional boundary conditions for my key effect by showing that promotion-oriented consumers prefer bonus packs over price discounts only for expensive, hedonic products. For cheap, hedonic products or for utilitarian products this preference is not observed.

This study makes several important contributions to the regulatory focus theory and marketing literature. First, prior research on regulatory focus theory has focused mainly on investigating why consumers have more favorable attitudes towards products having attributes that are compatible with their goal orientations. However, consumers decide which products to buy based on both the attractiveness of product attributes and the attractiveness of sales promotions. Yet, despite its importance, little is known about the role that consumers' motivation plays in their preferences for different sales tactics. Thus, my research sheds light on this issue and provides evidence that consumers' goal orientations can be an important factor in determining which sales promotions they favor.

Second, my research extends the marketing literature on sales tactics. While prior research provides insights into how consumers perceive different sales tactics (e.g., Chandon, Wansink and Laurent 2000; Hardesty and Bearden 2003) and suggests that a bonus pack may be perceived as a pure gain and thus preferred over a price discount that is perceived as a reduction in loss (Diamond 1992; Diamond and Sanyal 1990), recent studies have begun to explore boundary conditions of this preference (Chen et al. 2012; Mishra and Mishra 2011). My study builds upon this emerging stream of research, and by drawing upon a well-grounded and widely accepted theoretical framework, contributes to studies of consumer preferences for sales tactics, in general, and examinations of framing effects, in particular.

Methodologically, my research relies upon a combination of secondary, survey and laboratory data to test my hypotheses, thus enhancing the generalizability of my results, making it easier to rule out alternative explanations, and allowing me to provide compelling evidence for my theory (Zhang and Shrum 2009).

From a managerial perspective, marketers interested in customizing sales tactics at the store level or the individual-consumer level should be aware of how consumers' goal orientations influence their sales tactics preferences. In general, marketers could benefit from matching store-level demographic information to the type of sales tactic that is employed when, for example, determining the ethnic composition of their target market.

In addition, just as consumers' goal orientations can be manipulated easily in a lab setting, marketers can use the immediate shopping environment as a medium to

influence consumers' motivational orientations to boost sales. My results from study 3 seem to indicate that, for example, priming a promotion focus may increase the effectiveness of bonus packs on sales of expensive, hedonic products, whereas priming a prevention focus may increase the effectiveness of price discounts on sales of expensive, utilitarian products. These results are therefore of practical significance to marketers who are increasingly interested in implementing "shopper marketing" strategies (Ailawadi et al. 2009).

Furthermore, given that regulatory focus has been shown to correlate with age (Ebner, Freund and Baltes 2006; Lockwood, Chasteen and Wong, 2005), product type (Zhou and Pham 2004), decision context (individual vs. group, Aaker and Lee 2001), decision time frame (Mogilner, Aaker, and Pennington 2008), and gender through self-construal (Wood and Eagly 2010), the results of the current research have the potential to offer a rich set of managerially-actionable variables that marketers can leverage to match their sales tactics to the appropriate target market, product and purchase situation to boost sales.

Finally, my results may also have implications for other product attributes that can be framed as "more" or "less". Some obvious examples include "speed" vs. "time" for service, deliveries, or data transfer, data density vs. media size, servings/calories vs. calories/serving, and MPG vs. fuel consumption. My theory suggests methods by which marketers and public policy makers can expedite the adoption of certain products by framing their features appropriately depending on consumer demographics (e.g., age,

gender), product types (e.g., hedonic vs. utilitarian), decision contexts and decision time frames.

CHAPTER IV

SUMMARY

Consumers' motivation, ability and opportunity to process information affect their perceptions and behaviors (Petty and Caccioppo 1986). Among these three factors, motivation may be of the utmost importance, as it provides a rationale for *why* a consumer is interested in a certain product or a sales tactic. The two essays in my dissertation illuminate how consumers' goals influence their decision making that involves the trade-offs in choosing between merchandise of a lower price or better quality or the trade-offs in getting monetary vs. nonmonetary sales offers. In this dissertation, I provide important and meaningful insights into the regulatory focus, pricing, and sales promotion literature.

My first essay investigates the effects of consumers' goals on their sensitivity to product price and quality information. Product price and product quality are two important and oftentimes positively correlated factors in a purchase decision. As such, consumers may have to make trade-offs between the two factors in their purchase decisions. Drawing upon the regulatory focus theory and research in pricing, I predict that consumers with a promotion focus will be more sensitive to differences in product quality, while those with a prevention focus will be more sensitive to differences in product price. Utilizing my findings, companies can enhance the efficiency of their marketing campaigns by highlighting promotion- or prevention-related themes based on

their positioning in the market, thus influencing the amount of attention that consumers pay to price or quality.

In the second essay, I studied *why* some consumers favor a nonmonetary sales offer such as bonus packs while others favor a monetary sales offer such as price discounts, and delineate conditions under which these preferences may or may not be observed. Using the theoretical lens of regulatory focus, I explore the compatibility between consumers' goal orientations and different offers, the effect of the compatibility on consumer preferences, and boundary conditions for this effect. Consumers decide which products to buy based on both the attractiveness of product attributes and the attractiveness of sales promotions. Yet, despite its importance, little is known about the role that consumers' goal plays in their preferences for different sales tactics. Thus, my research sheds light on this issue and provides evidence that consumers' goal orientations can be an important factor in determining which sales promotions they favor as well as extends the marketing literature on sales tactics.

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