

REGULATORY ORIENTATION, MESSAGE FRAMING AND INFLUENCES
OF FIT ON CUSTOMER BEHAVIORS

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Existing literature on consumer behavior has argued that an individual's regulatory orientation interacts with message framing. If there is a match between regulatory orientation (promotion versus prevention) and message framing, this results in positive attitudes toward a given advertisement. Conversely, if there is a mismatch, the effect is opposite, i.e., attitudes toward that advertisement are less positive and less favorable. This research extends the term of compatibility by examining how regulatory focus moderates the impact of two aspects of message framing (attribute framing and risky choice framing) on customer perceptions. It also examines whether regulatory fit is created when there are interactions between individuals' regulatory orientation and message framing and how the fit changes customer perceptions about a message. Specifically, this dissertation provides answers to the following questions: (1) does regulatory fit take place when regulatory focus is compatible with two aspects of message framing (attribute and risky choice)?; (2) does regulatory fit take place when one aspect of message framing (attribute) is compatible with the other (risky choice)?; and (3) how do customer perceptions change if customers experience regulatory fit? The results show that the effects of utilitarian attributes and national brands are dominating and that both promotion- and prevention-oriented customers have higher perceptions of these attributes and brands. The findings of this study have both theoretical and practical implications. Theoretically, this study should enhance our understanding of regulatory focus theory. Practically, the results should provide marketers with more insights into the correlation between message framing and regulatory orientation and the effect of fit on message persuasion, enabling them to develop more effective marketing strategies.

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By

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CHAPTER 1

INTRODUCTION

Aquafresh and Colgate are two well-known toothpaste brands but marketing strategies that companies have employed to promote these brands are different. On Aquafresh's website (<http://www.aquafresh.com/>), Aquafresh White & Shine is advertised as "a minty fresh, sparkling gel that works in two ways to clean and polish your teeth." In comparison, on Colgate's website (<http://www.colgate.com/>), Colgate Total is advertised as follows "Colgate Total delivers 12-hour germ-fighting protection to help prevent many common oral health conditions."

The examples suggest that to promote their brands or products, marketers have applied two distinct methods of advertisement, one emphasizing the pursuit of a desired positive outcome and the other centering on the avoidance of an undesired negative outcome. The first advertisement implies that customers' teeth become whiter and their smile gets brighter if they choose to use the advertised product. Stated differently, the message of the advertisement aims at the achievement of positive outcomes and takes into account hedonic attributes of the product pertaining to "pleasure, fantasy, and fun" aspects (Weterbroch and Dhar 2000). However, the second message focuses on how to avoid a negative outcome, and stresses utilitarian attributes that are related to "instrumental" and "functional" features of the advertised products (Weterbroch and Dhar 2000). Each advertisement might have a different impact on customers' perceptions, depending on the fit between the messages and the audience's regulatory orientation.

Extant consumer research has extensively investigated the effects of message framing on decision making processes and customer persuasion (Tversky and Kahneman 1981; Maheswaran

and Meyers-Levy 1990; Rothman et al. 1999). Nonetheless, the results seem to be relatively inconsistent. Some agree that customers feel more persuaded when they are exposed to a negatively framed message than to a positively framed message while the others find the opposite, that is, customers feel more persuaded when they are exposed to a positively framed message than to a negatively framed message.

Disparities in relevant literature are apparently attributed to differences in operationalized definitions of message framing which are categorized into two groups: attribute framing, and risky choice framing (Levin et al. 1998). First, attribute framing is understood as the way of manipulating an object's attributes which are either positive versus negative, or hedonic versus utilitarian (Levin et al. 1998). For instance, Dhar and Wertenbroch (2000) investigate the customers' relative salience of hedonic versus utilitarian items and find that among two situations – forfeiture choices whereby customers choose which goods to give up and acquisition choices whereby customers choose which goods to acquire, customers tend to select hedonic goods over utilitarian goods in forfeiture choices than in acquisition choices. In the last experiment, the results show that relatively hedonic cars are more positively evaluated than relatively utilitarian cars.

Second, risky choice framing takes place when alternative message framings are created in response to various levels of risk. For instance, Tversky and Kahneman (1981) find that customers' perceptions toward risky options is contingent upon how those options are framed. Particularly, they tend to be more risk averse when exposed to risky alternatives framed as a gain while they tend to be more risk seeking when exposed to risky alternatives framed as a loss. These categorizations of message framing are consistent with regulatory focus theory (Higgins 1997). This theory proposes that individuals' motivational system is controlled by a mechanism

called regulatory orientation (hereafter regulatory orientation and regulatory focus are used interchangeably) which includes promotion and prevention focus. Promotion oriented people tend to engage in activities which enhance pleasure or positive outcomes. In comparison, prevention oriented people are more likely to engage in activities which reduce pain or negative consequences (Higgins 1997). Existing literature on consumer behavior has pointed out that an individual's regulatory orientation interacts with message framing (Aaker and Lee, 2006; Higgins 2000). If the interaction is compatible, there is a match between regulatory orientation (promotion versus prevention) and message framing, this results in positive attitudes toward the given advertisement. Conversely, if there is a mismatch, the effect is opposite, i.e. attitudes toward that advertisement are less positive and less favorable.

Various forms of compatibility are introduced in the decision literature. The term of compatibility has been developed to explain the principle of procedure invariance in choice (Tversky, Sattath, and Slovic 1988). Strategy compatibility is used to illustrate the match between the nature of decision tasks and the decision strategy induced (Fischer and Hawkins 1993). Scale compatibility takes place when an attribute is assessed in measurement units consistent to the units of the response scale. And as a consequence, this compatibility leads to higher weight in judgment (Slovic, Griffin, and Tversky 1990; Tversky et al. 1988).

Attribute-task compatibility is used to capture the relation between the type of attribute portraying choice alternatives and the nature of choice task (Nowlis and Simonson 1997). Goal-task compatibility has been recently developed to reflect the relation of the nature of choice task and the decision goals in which the most important attribute are more likely to have higher weight in tasks that differentiate options than in tasks that equate options (Fischer et al. 1999). More recently, goal-attribute compatibility has been introduced to the relation between

customers' goals and attributes reflecting choice options (Chernev 2004). In this relation, individuals' regulatory focus moderates attribute evaluations whereby the attribute compatible with regulatory focus is overweighed in choice.

Many researchers have studied the effect of regulatory orientation, message framing on consumer behaviors (Jain and Posavac, 2004; Jain et al., 2007; Chang and Chou, 2008; Ramanathan and Dhar, 2010; Yi and Baumgartner, 2009). But literature investigating the compatibility between regulatory focus and two aspects of message framing (attribute framing and risky choice framing) is underexplored. Drawing on regulatory focus theory and message framing literature, the current research extends the term of compatibility by examining how regulatory focus moderates the impact of two aspects of message framing (attribute framing and risky choice framing) on customer perceptions. It also examines whether regulatory fit is created when there are interactions between individuals' regulatory orientation and message framing and how the fit changes customer perceptions about a message. Specifically, this dissertation will provide answers to the following questions:

1. Does regulatory fit take place when regulatory focus is compatible with two aspects of message framing (attribute and risky choice)?
2. Does regulatory fit take place when one aspect of message framing (attribute) is compatible with the other (risky choice)?
3. How do customer perceptions change if customers experience regulatory fit?

In this study, regulatory fit is measured by the compatibility between a person's regulatory orientation and message framing, and message framing is manipulated by attribute framing, and risky choice framing. The results show that the effects of utilitarian attributes and national brands are dominating and that both promotion- and prevention-oriented customers have

higher perceptions of these attributes and brands. The findings of this study have both theoretical and practical implications. Theoretically, this study should enhance our understanding of regulatory focus theory. Practically, the results should provide marketers with more insights into the correlation between message framing and regulatory orientation and the effect of fit on message persuasion, enabling them to develop more effective marketing strategies.

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL DEVELOPMENT

Message Framing

Framing is thought of as a mental process where people conceptualize an issue and redirect their thinking about it (Chong and Druckman 2007). The conceptualization of framing theory originated from the traditional expectancy value model of attitude (Nelson et al. 1997; Ajzen and Fishbein 1980). In this model, an attitude that an individual has toward an object is calculated as the weighted summary of a series of evaluative beliefs. Specifically, the individual's attitude is summarization of a series of multiplications between the evaluation of the object on a single attribute (i), and the salience weight related to this attribute (where the total salience weight equals one).

Nelson and Oxley (1999) use a new housing development project as an example to illustrate the calculation of a personal attitude. A personal overall attitude (A) toward this development project is the sum of different evaluations (v_i) on a variety of factors (i), such as economy ($i = 1$) and environment ($i = 2$). A person has either positive or negative evaluations of attributes depending on how he or she thinks about the effects of the project on these attributes. Particularly, from his or her point of view, the effect of this project on economy is positive, and on environment negative. Therefore the overall attitude toward the housing development project is the relative magnitude of the individual's evaluations of economic (v_1) and environmental (v_2) factors multiplied by different weights associated with each influential factor.

Prospect theory developed by Kahneman and Tversky (1979) postulates the effects of framing on the human decision making processes in which people are engaging in making a choice among several alternatives. Two steps are associated with this process. The first step of

the decision making process involves considering all different choice alternatives, simplifying the choice set and transforming it into subjective format. This step is understood as the editing of the alternatives which takes place automatically without much effort employed. Subjective format is created in a form of reference anchor for assessing various alternatives to make a choice. Since reference anchors are used as a determinant for judging alternatives, these alternatives can be perceived differently, either as a gain or as a loss (as the second step), depending on the reference anchors.

The prospect theory views the value function of multiple alternatives as a sigmoid or "S" shape. In the graph of "S" shape function, concave represent gains while convex represents losses. Thus, alternatives are evaluated and judged on an asymmetrical basis. Psychology literature suggests that human perceptions are different when people evaluate gains and losses. Stated differently, gains are likely to be viewed more favorable than losses. Another key aspect of the prospect theory mentions that asymmetrical evaluation varies in association with an individual's value functions. In some conditions, value functions associated with losses might be deeper than those with gains. Therefore, when the individuals are exposed to information, they might react in different ways based on their perception of information as gains or losses (see Figure 1).

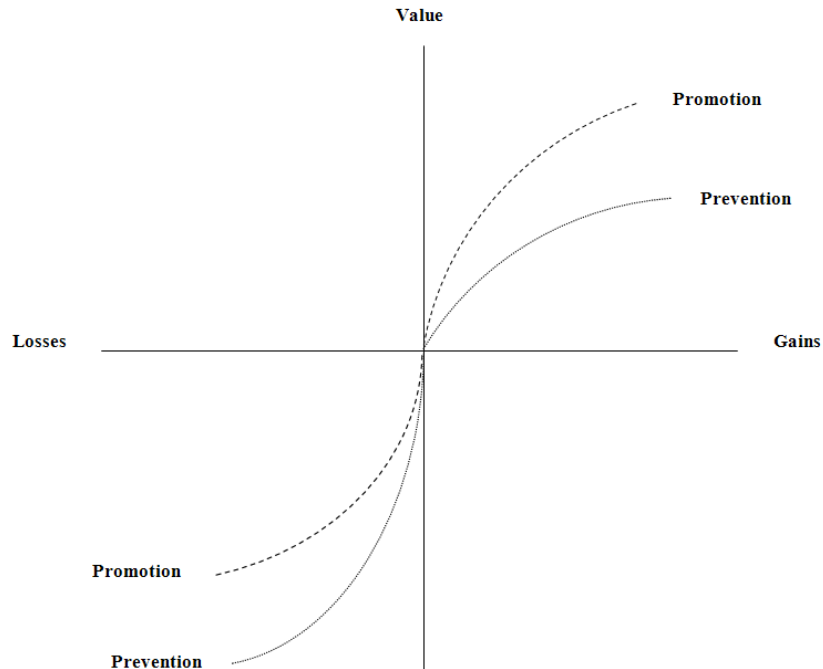
Drawing on the prospect theory, extensive consumer research has been done to explore how message framing changes customers' perceptions. The findings of these types of research are grouped into three main categories: negative framing, positive framing, and mix effect framing.

Negative Framing

The effects of message framing on consumer behaviors are mixed. Negatively framed

messages are found to have steeper utility function for losses in some literature. However, positively framed messages are supported in other literature. Among research focusing on negative framing are two noticeable studies.

FIGURE 1
The Value Function



Source: Chernev (2004)

First, Meyerowitz and Chaiken (1987) conduct a study in the health care context, particularly focusing on BSE. In this study, messages are framed differently. A message is framed in a positive way as "women who do BSE have an increased chance of finding a tumor in an early, more treatable stage of the disease." Another message is framed in a negative way as "women who do not do BSE have a decreased chance of finding a tumor in early, more treatable state of the disease." The authors find that a negatively framed message is more influential to patients than a positively framed message. Second, Yoav and Karsahi (1995) implement a field

experiment to investigate customers' evaluation of different methods of payment (cash, checks, credit cards) using various message framings. The study concludes that message framing influences customer attitude toward using credit card and that customers have a tendency to use more credit cards when they are exposed to a negatively framed message than to a positively framed message.

Positive Framing

Another stream of literature provides support for the effect of positive framing. In one study on foods, Levin and Gaeth (1988) find a link between steeper gain and positive framing. The authors select two ways of describing the same messages, one showing beef with 80% lean and the other showing beef with 20% fat. The results demonstrate that participants tend to evaluate positively the message framed as beef with 80% lean, illustrating the fact that the positively framed message has a stronger persuasiveness than the negatively framed one.

In several experiments conducted by Salovey and Williams-Piehota (2004), the results from two experiments, one designed to measure the intention to purchase mouthwash and the other using sunscreen, illustrate that the positive framing is perceived as more favorable. Similarly, in an experimental study, Buda (2003) attempts to examine the effects of framing, credibility and presentation order on consumers' various attitudes toward a position and find that the value of mean scores is higher when participants are exposed to positively framed messages. In other words, participants have higher attitudes toward the position in positively framed messages. Likewise, Orth et al. (2005) conduct a study with a focus on framing in different cultural contexts using two different products, apples and bottled water. Emotional, cognitive, and attitudinal measures are employed as dependent variables. The findings provide more evidence of the effects that the positively framed messages have on dependent variables. In a

study of teeth whitening products, Arora (2008) contrasts the effects derived from two message framings where positive framing refers to benefits and negative framing refers to detection and prevention of undesirable outcomes. The findings lend further support to the evidence that customers perceive the positively framed messages more favorable.

Mixed Effect Framing

Compared with two previous research streams (negative framing and positive framing), mixed effect framing research is the most extensive. A multitude of researchers have found that the effects of message framing are not significant or that message framing interacts with other variables. A causal model is proposed by Homer and Yoon (1992) in an attempt to examine the influence of framing, feeling and cognitive components of advertisements on intention. The results confirm that there is a significant relationship between feeling and advertisements, no matter how the advertisements are framed. However, cognitive components are found stronger in the negatively framed messages. In this study, a controversial issue emerges in relation with the way of examining the print advertisement. According to the prospect theory, information presented in the advertisements should be similar, only framing differs. Nonetheless, the information conveyed in the advertisements used in the study appears to be different. For example, the first few lines of a positively framed message are presented as "you can enjoy fresh breath if you practice good oral hygiene." In the negatively framed message, it is opened with "your mouth may be full of oral germs that cause smelling breath, plague, and gingivitis. And you do not want gingivitis. Gingivitis is a gum disease characterized by red swollen gums." Compared with the former, the latter apparently places a lot more emphasis on gingivitis and other negative signs. In essence, the content of the two messages is not the same. Therefore,

unequal amount of information embedded in these two messages may affect the results of the study. And therefore, the effects of message framing examined might be influenced.

An evidence of mixed effect of message framing is supported by Diamond and Lerch's (1992) study where the authors find that when information is presented in two forms, tabular or graphical, varying impacts of message framing are created. Particularly, the effect of message framing does not exist when tabular form is chosen to present information, but this effect is noticeable when graphical form is selected. In addition, the findings illustrate that message framing loses its effect when uneven amount of information is used. Similarly, Arora and Arora (2004) examine the effect of message framing and credibility to follow healthy eating guidelines. The results demonstrate that the effect of framing is not significant while that of credibility is significant.

To handle inconsistent findings related to the effect of message framing, a series of experiments are conducted by Shiv et al. (2004). The findings show that when the message is framed negatively, the framing has a significant effect, therefore higher mean attitudinal scores are obtained. Using detergent as a focal product, the authors also find a significant interaction between message framing and elaboration. While a positively framed message is more effective in the low interaction situation, a negatively framed message is more effective in the high interaction situation.

In a similar study on oral hygiene, Tsai and Tsai (2006) use framing and involvement as independent factors while framing is manipulated as positive or negative and involvement as high or low. The message is framed either positively as "brushing after eating is very helpful to dental health and it can reduce the chance of cavity" or negatively as "not brushing after eating is very bad for dental health ..." In the low involvement, the results support the positively framed

message. In contrast, in the high involvement, the findings support the negatively framed message.

As described above, message framing conceptually originated from the traditional expectancy value model of attitude and its impacts on consumer perceptions can be grouped into positive, negative and mixed effects. In addition, message framing can be understood through two aspects, attribute framing and risky choice framing. These two aspect of message framing are discussed in the following sections.

Attribute Framing

Hedonic and utilitarian dimensions are known to have two levels: product level and attribute level. At the product level, hedonic goods differ from utilitarian goods in that when people consume hedonic goods, they have a sensory and affective experience of fun, fantasy and aesthetic and sensual pleasure (Hirschman and Holbrook 1982) while they consume utilitarian goods, their experiences are more instrumental goal oriented and higher cognitive driven. This type of consumption is associated with a functional or practical task (Strahilevitz and Myers 1998).

Hedonic and utilitarian features are also manifest at attribute level. Chitturi, Raghunathan and Mahajan (2008) suggest that hedonic attributes are referred to aesthetic, experimental, and enjoyment driven features while utilitarian attributes are referred to functional, instrumental, and practical features. For example, a car's safety and fuel consumption are utilitarian attributes whereas luxurious upholstery and sunroof are hedonic attributes. Similarly, a cell phone's sound quality and battery life are utilitarian attributes while brand name, color and style are hedonic attributes.

These findings are aligned with those of Bazerman, Tenbrunsel, and Wade-Benzoni (1998) who divide customers' preferences into affective (want) and cognitive or reasoned (should) when making choices. The categorization of want and should is consistent with that of hedonic and utilitarian products in which products emphasizing hedonic attributes is generally referred to want preferences while products that are high on utilitarian attributes are referred to should preferences.

The link between customers' preference and these two attributes has been a promising area that draws attention from marketing researchers (Voss, Spangenberg and Grohmann 2003; Kivetz and Simonson 2002; Wertenbroch and Dhar 2000; and Chitturi, Raghunathan, and Mahajan 2008). Particularly, the roles of these two dimensions are reflected in both pre- and post-consumption decisions. Among research that examines the influence of hedonic and utilitarian attributes in the pre-consumption decision process, Kivetz and Simonson (2002) report that customers have associated a relative weight with utilitarian attributes if they do not think they are in position to earn "the right to indulge." Conversely, Chitturi, Raghunathan, and Mahajan (2008) argue that only when customers' expectation of functionality is met, hedonic attributes are preferred to utilitarian attributes.

On the other hand, an association between these dimensions and post-consumption experience is well documented. Chitturi, Raghunathan, and Mahajan (2008) suggest that customers have a greater promotion of cheerfulness and excitement when a product provides stronger hedonic benefits, but get a greater prevention of confidence and security when a product provides stronger utilitarian benefits. In this study, these post-consumption emotional feelings act as drivers for delight and satisfaction, respectively. The results illustrate that when customers

are delighted, customers are more likely to be more loyal by spreading more word of mouth than when customers are satisfied.

Chernev (2004) suggests that compatibility of customers' goals and attributes works as an antecedence that changes change customers' evaluation of a product or service. In particular, when a product's attributes match customers' regulatory orientation, these attributes are likely to be highly evaluated. The authors investigate the influence of goal orientation on consumers' evaluation in three sets of attributes, hedonic versus utilitarian, performance versus reliability, and attractive versus unattractive and find that promotion oriented customers attach higher weight to hedonic, performance, and attractive attributes while prevention oriented customer attach higher weight to utilitarian, reliability, and unattractive attributes.

What has not been investigated in the previous literature, however, is whether exposure to hedonic and utilitarian attributes emphasized in an ad affects customer perceptions of national and private brands. In the current study, attribute framing is manipulated by hedonic versus utilitarian attributes. The focus of this current research, motivated by the literature on regulatory orientation, is to examine a mechanism in which customers' promotion or prevention focus moderates the influences of hedonic versus utilitarian attributes as well as of a national brand versus a private brand on customer perceptions.

Risky Choice Framing

Private brands are used to refer to the "own" ones which are developed when visionary retail marketers possess strong proprietary portfolios and they have potentials to get better rewards from creating these brand offerings (Nair 2011). Over the last decade, European and US markets have seen unprecedented growth of private labels and store brands (hereafter called private brands). Sale volumes of private brands account for 15 percent of the total US market

sales (Quelch and Harding 1996). The figures are even higher in Europe where store brands are more popular. Sales of these brands reach the level of 18 - 23 percent in Netherlands, France and Belgium and a particularly high level of 34 percent at United Kingdom (Ashley 1998). Marketers are positive that the opportunity for these brands will be brighter in a near future.

Several reasons are attributable to the prosperity of private labels and store brands, such as, retailer concentration, store brands management and profitability drive (Narasimhan 1995; Dahr and Hoch 1997), bargaining power over producers, chain profitability, store loyalty and control over shelf space (Richardson et al. 1996). Private brands are also good choices for customers since they are usually offered at a lower price than national brands (Batra and Sinha 2000). When worldwide economy experiences recession, consumers are more price-sensitive when they go shopping. Recession may negatively affect a general market since customers are not willing to pay as easily as they were in the past, and therefore become more selective in choosing merchandizes. However, this challenge appears to be an opportunity for store brand manufacturers since it is probably a real time for them to produce brands and products at a more competitive price.

Customers' attitudes toward private brands have changed. In a study investigating apparel customers, Shapiro (2002) find that the number of shoppers who are willing to buy private brands is relative high, 58 percent of men's apparel customers, 56 percent of women's apparel customers, and 54 percent of children's apparel customers. Understanding the potential of this market is, a multitude of retailers and stores have invested technological and human resources to create a new image of the store brands, and produce higher quality products which compete directly with national brands. Their goals are to make private brands more appealing to customers and to differentiate these brands from other regular brands (Pitta and Kutsanis, 1995).

Financial reports from major department stores show that sales revenue from private brands account for a large portion of total sales. For instance, a national wide department store, Dillard, has been adding private brands into their product portfolio. In 2002 this selection contributed about 18 percent to the total sales of the company. Sales figures from other private brands such as I.N.C, Charter Club, Alfani, Style and Co. are also notable, accounting for 17.4 percent of the total sales in 2004. Another department store, Sears, is well known for owning a casual apparel store brand called Covington – a brand considered a “hit” since the revenue from this brand surpassed the company’s expectations in 2004. In addition, Sears are also known for its Land’s End line with \$1 billion sales in 2002 (Vahie and Paswan 2006).

Macy’s, run by Federated Department Stores, is leading in promoting store brands to different market segments. For example, Tasso Elba targets at urbane male clients while American Rag is designed for youth market from 15 to 24 years old. Federated Department Stores manufactures a wide array of apparel and textile products under store brands to satisfy the market demand, for instance, contemporary clothes under Alfani brand, sportswear under Style & Co brand, and casual and career fashion under I.N.C brand (Vahie and Paswan 2006).

Despite the promising development of private brands, customers are still skeptical of these brands (Nair 2011). From customers’ point of view, national brands are usually produced by well known manufacturers while private brands are produced either by department stores or retailers or by national brand manufacturers under the name of the stores or retailers (Nair 2011). Items and merchandizes under the store brands are generally perceived as lower in quality and less reliable (Batra and Sinha 2000). The decision to buy private brands involves more risk as compared to national brands. Because private brands are made by less well known manufacturers, private branded products are considered as low-tier substitutes for well

established brands. Briefly stated, national brands are perceived to be a less risky choice while private brands a riskier choice. Therefore, in the current study, risky choice framing is manipulated by two brand types: private brands and national brands.

In the following section, regulatory focus theory is discussed as a second theoretical framework to be applied in this research. Key aspects pertaining to regulatory focus, such as, regulatory types, influences, measurements, and fit, are also elaborated.

Regulatory Focus Theory

Regulatory focus theory suggests regulatory orientations help people self-regulate their behaviors to pursue their goals. It is accomplished through a motivational mechanism that changes people's thoughts, feelings, and actions (Higgins 1987, 1989, 2002). Individuals with promotion orientation tend to pursue their goals by performing actions to approach desired states while individuals with prevention orientation tend to achieve their goals by performing actions to avoid undesired end states. Motivated by distinct goals, promotion oriented people attempt to seek pleasurable and positive outcomes, while prevention oriented people attempt to avoid painful and negative consequences.

Regulatory focus theory develops from self-discrepancy theory (Higgins 1987, 1989) which argues that people tend to make self-evaluation based on two types of comparisons: comparison between actual self and ideal self and comparison between actual self and ought self. Two types of comparisons are different in that the features stressed in the former comparison are associated with audience's aspiration to accomplish, but those illustrated in the latter comparison usually remind the audience of obligations and duties.

People are more likely to choose one type over the other to make self-evaluation (Higgins et al. 1994). In other words, they like to choose the first option which is the comparison between actual self and ideal self (rather than ought self) or the second option which is the comparison between actual self and ought self (rather than ideal self). Diverse preferences associated with self comparisons are indeed a determinant of individuals' regulatory orientations. Those with actual-ideal comparison are inclined to self-evaluate using promotion focus that aims to achieve the positive outcomes; conversely, those with actual-ought comparison are inclined to self-evaluate using prevention focus that aims to avoid negative consequences.

Chronic versus Situational Regulatory Focus

Existing literature suggests that regulatory orientation can be either chronic or situational (Grewal et al. 2011, Shah and Higgins 1997). Regulatory orientation is chronic when it is related to personal characteristics, but it is situational when it is influenced by external factors. The following sections discuss more about each type of regulatory focus.

Chronic Regulatory Focus

Self-regulation can be seen at the early stage of children's development, they started learning how to self-regulate and adjust their behaviors through social interactions. Through interactions with others, they would develop a typical pattern of self-regulation and understand why their behaviors would generally receive certain reactions. When the children are well behaved, they receive a positive response from the babysitter, for instance, a smile or applause. In this case, the babysitter involves performing an action to advance promotion orientation. But when the children are poorly behaved, the signals they receive from the babysitter are negative, for instance, being upset or angry. It is easily recognized that the babysitter, in this case, is

performing an action that advances prevention orientation (Higgins 1989). In actuality, adults are getting involved in this process without intuitively knowing that their actions are either promotion- or prevention-oriented. As it can be seen in a family setting, a mother usually smiles when she sees her baby attempts to stand up and walks a few steps – a signal that pertains to promotion orientation.

Also, self-regulation is developed through social interactions. These socialization efforts fall into two groups. One group pertaining to advancement, accomplishment, and achievement is promotion oriented while the other related to duty, safety and responsibility is prevention oriented. These patterns of regulatory orientations are driven by needs. A promotion orientation, driven by a nurturance need, illustrates approach-oriented strategies while a prevention orientation, driven by safety need, illustrates avoidance-oriented strategies (Pham and Avnet 2009; Higgins 1997; Förster et al. 1998).

In addition, cultures are found to be associated with socialization practices. Independent and individual cultures are typical settings that embrace promotion orientation. But interdependent and collectivist cultures are good environments that are conducive to prevention orientation (Pham and Avnet 2004; Lee, Aaker and Gardner 2000). Independence could possibly be understood through the historical view. When European settlers volunteered for an adventure and discovered the new land in America, they hoped they would have a better life than they had been in their home countries. Their behaviors were motivated by promotion orientation. However, interdependent cultures which are seen more in other demographic groups, such as Asian, or Hispanic are dominated by prevention orientation (Kitayama et al. 2009).

Situational Regulatory Focus

Although previous literature indicated that regulatory orientations were more associated

with personal characteristics, more recent research has found the opposite by indicating that regulatory orientations could be triggered through priming or external factors—a phenomenon called situational regulatory focus. For example, an ad presented in a gain frame stimulates promotion orientation (e.g., an ad of grape juice focuses on energy). But a loss-framed ad leads audience to be more prevention-oriented (e.g. an ad of grape juice focuses on how to prevent diseases) (Zhou and Pham 2004; Shah and Higgins 1997; Lee and Aaker 2004).

Another example illustrating the situational effects on the patterns of regulatory orientation is the incentive programs commonly used by many retailers. Customers will be in the state of promotion orientation when incentives are presented in accomplishment format. But they will be in the state of prevention orientation when incentives are shown in the safety format (Shah, Higgins, and Friedman 1998). Marketers have used promotions to draw customers' attention to their products or services. For instance, some supermarkets have used cash reimbursements as incentives for loyal customers – a promotion oriented approach. Differently, other retailers have attempted to help their loyal customers avoid paying extra – a prevention oriented approach (Daryanto et al. 2010).

Regulatory Focus Influences

Regulatory Focus and Cognition

Regulatory orientation serves a “filter” that help people screen information, therefore it draws people's attention to a different type of information. Driven by the motivational goal of advancement, promotion oriented people are more sensitive to positive signs of a message. But motivated by safety goal, prevention oriented people are more sensitive to negative signs (Kirmani and Zhu 2007).

Regulatory orientation also has an impact on people's diagnosticity of a message (Pham

and Avnet 2004). People dominated by promotion orientation tend to make decision based more on intuition, and heuristics(Pham and Avnet 2009), or emotions, and affects (Novak and Hoffman 2009). Therefore, their decisions are more likely to be emotional and intuitive. Alternatively, people dominated by prevention orientation tend to make decision based more on logical and rational judgments. Their decisions are usually outcomes of a process in which a lot of factors are taken into consideration before a decision is made (Novak and Hoffman 2009).

In a different vein, extensive research has explored that there are two motivational channels associated with information processing (Friedman and Forster 2001; Forster and Higgins 2005). Those with promotion orientation are more inclined to be attracted by global, relational, and abstract concepts. They are more involved with creative processing. Differently, the attention of prevention oriented people is likely to be drawn by local, and detailed concepts. They look at things in an analytical and isolated way.

Other researchers have studied further on an association between regulatory focus and level of abstraction (Keller, Lee and Sternthal 2004). The findings are bound to consolidate the conclusions that promotion oriented people usually have perspectives at a higher level of abstraction (e.g., more general and more abstract) while prevention oriented people frequently center on a lower level (e.g., more concrete and more detailed). In addition, these motivational channels can be seen in their tendencies to view visual and verbal stimuli (Zhu and Meyers-Levy 2003).

Regulatory Focus and Emotions

Emotions are generated in relationship with regulatory orientations. The connection between personal feelings with regulatory orientations is shown in the way of customer's evaluating an ad (Pham and Avnet 2004). In actuality, it is usually seen that customers'

evaluations and decisions vary depending on their emotional experiences which are associated with regulatory orientations. A selection of a product and a merchandize, often driven by a personal need, is pertinent to emotional feelings (Chitturi, Raghunathan and Mahajan, 2007). The results of the study imply that when customers select products that satisfy hedonic needs, they go through an experience stimulating emotion—the affective state more associated with achievement of promotion goals, thereby increasing the customer’s delight.

Conversely, the experience obtained when products are selected to meet utilitarian needs provoke an emotion more associated with the pursuance of prevention goals, thereby leading to a higher level of the customer’s satisfaction. Likewise, regulatory orientations are found to affect the intensity of feelings and emotions evoked and the methods employed to control these emotional states. The influences are evidenced in the way the people prefer to use in self-serving explanation for successes and failures (Molden and Higgins 2008).

Aaker and Lee (2001) suggest that people’s regulatory orientations are determinants of how vulnerable people are to negative or positive information. In particular, emotional states correlated with cheerful and happy feelings are more frequently seen in those with promotion orientation. But emotional states represented by secured and trusty feelings are more prevailing in those with prevention orientation (Higgins et al. 1997). Customers’ relationship with the products or the services purchased is determined by the affective experiences (Fournier 1998). The more stable relationship is established when the products or services make customers feel secured or trusted. Moreover, research has suggested that personal confident and safe attitudes are a foundation for committed cooperation and best friendship to build on (Aaker and Lee 2001). Equally, the experiences that make people cheerful and happy can create pleasurable and enjoyable friendship (Aaker and Lee 2001). In addition, dominance of regulatory orientation

leads people to have different sentimental states. For instance, pleasurable feelings are more frequently experienced by promotion oriented people while relief feelings are more frequently seen in those with prevention oriented people.

Regulatory Focus and Behaviors

The effect of regulatory focus on consumer behaviors can be explained through the view of people's counterfactual thinking – a term that is referred to the human ability to reflect what people would have done if they had had a chance to do differently. These effects result in the typical way affective states are regulated. Those dominated by promotion orientation tend to think more about actions they plan to implement. But those dominated by prevention orientation tend to think more about actions they could avoid. The tendency is influenced by personal counterfactual mind-set. Driven by additive counterfactual thinking, the former tends to perform behaviors or actions that enable them to broaden conceptual attention and pursue creative generation tasks. In contrast, driven by subtractive counterfactual thinking, the latter is more likely to perform behaviors or actions that represent their relational processing styles and achieve the problem solving tasks (Markman et al. 2007). Herzenstein, Posavac and Brakus (2007) raise a similar view supporting the fact that regulatory orientations are a factor that can change people's mind-set and then behaviors. The authors argue that promotion oriented people are more likely to be open to change, sensitive to innovation and prone to buy new products than prevention oriented people.

The influence of regulatory focus on consumer behaviors varies. First, it can be indicated in how quick an action or behavior is performed. Prevention oriented people usually come up with a fast solution and take a quick action while their promotion counterparts seem to take time to work on their tasks which are generally procrastinated (Freitas et al. 2002). Explanations for

different approaches to reactions lie in how individuals perceive their goals. It is expected that the former is under more pressure of urgency than the latter, therefore prevention oriented people likely put these tasks on the priority list and try to get them done quickly. On the other hand, promotion oriented people do not suffer such the urgency, their tasks are not prioritized, they think they can finish those tasks later.

Second, variations can be illustrated by how frequently their behaviors are changed. Literature suggests the fact that the dominant state of promotion orientation enables people to change their behaviors easily. This change is accomplished due to their eagerness to reach the desired goals. However, the dominate state of prevention orientation is an influential factor that encourages people to stay long with their behaviors. This could be explained by underlying motivational state of avoidance and skepticism in the prevention oriented people's mind-set (Fuglestad, Rothman and Jeffery 2008). The findings are strengthened by Liberman et al.'s (1999) arguing that promotion oriented people are found to be able to break off and change activities easily as opposed to prevention oriented people.

Customer choice is another area reflecting how regulatory focus affects consumer behavior. When customers are exposed to various alternative choices, their regulatory orientation acts as a driver that leads customers to think differently about the attractiveness of the choices. Their decisions are affected by how attractive they think the choices are (Wang and Lee 2006). Hedonic attributes are found to be more sensitive to promotion oriented people while utilitarian attributes are more sensitive to prevention oriented people (Chernev 2004). Safer (1998) also finds that customers' intentions to buy a computer vary depending on their dominant regulatory orientations. In this study, the author argues that promotion oriented people are more sensitive to and concerned about innovation features than prevention counterparts. Nonetheless prevention

oriented people are more sensitive to and concerned about reliability features when they purchase a computer. In other words, innovation features are able to attract more attention from promotion oriented people while reliability features are able to attract more attention from prevention oriented people (Higgins 2002).

These findings provide evidences to support the view of goal – attribute compatibility where people are more motivated, and therefore, being more convinced when their regulatory orientation, as motivational goal, matches particular attributes or features emphasized in a message of an ad.

Chronic Regulatory Focus Measurement

As mentioned earlier, regulatory focus is defined as chronic and situational. Chronic regulatory focus is a major element that significantly affects people's thought, feeling and behavior. Several attempts have been made to operationalize personal chronic regulatory focus. Recent research has been conducted to provide more insights of different measurements. All are categorized into four groups which are further explained as follows.

Selves Questionnaire

In an attempt to operationalize chronic regulatory focus, Higgins et al. (1986) develop Selves Questionnaire which is essentially based on three types of selves: actual, ideal and ought. Actual selves are indicative of attributes that people believe to possess, ideal selves attributes that people aspire to possess and ought selves attributes that people should possess (Pham and Avnet 2004). Compatibility among selves constitutes the mechanism called regulatory focus (promotion and prevention). In particular, promotion focus is created when compatibility

between actual and ideal selves takes place and prevention focus is created when compatibility between actual and ought selves happens (Brockner et al. 2002).

The commonly used approach to capture chronic regulatory focus associated with Selves Questionnaire is that people are asked to describe six attributes at random. Those attributes can be something that people would like to possess, reflecting ideal attributes. After description of each attribute, they are instructed to rate the degree to which they would like to possess – a task called ideal rating. Or those attributes can be something that people think they should possess, reflecting ought attributes. Following the same procedure, they are instructed to rate the extent to which they should possess – a task called ought rating. Once all six attributes are written down, people are again requested to indicate the degree to which they presently possess at that time – a task called actual rating. Based on information about ideal, ought and actual ratings, differentiations among ratings of each attribute are created and summed up to measure regulatory focus. Put it differently, differentiations between actual and ideal rating are used to capture promotion focus and those between actual and ought rating are used to capture prevention focus (Pham and Avnet 2004; Higgins et al. 1997; Brocknet et al. 2002).

Self-Guide Strength Measure

Based on Self Questionnaire, this instrument is designed to evaluate people's ability to access to their ideals and oughts. In essence, the evaluation is contingent upon latencies of responses that people make when answering Self Questionnaire developed to assess strength of personal regulatory focus (Shah et al. 1998). The tasks consist of two steps: first, prompting ideal and ought attributes by defining their ideal selves and ought selves and describing three attributes associated with each self at random; and second, performing activities related to ideal, ought and actual ratings by expressing the degree to which they aspire to possess the attribute, the degree to

which they should possess the attribute, or the degree to which they actually possess the attribute, respectively. All activities are assisted by a computerized system set up to record the length of time each participant responds. This is followed by the summation of attribute and ratings latencies for a group of three ideal attributes and a group of three ought attributes separately, one at a time. The summation is to create one total assessment of ideals and one total assessment of oughts. The advantage of this approach is that one computerized session is used to perform both Selves Questionnaire and Self-Guide Strength Measure.

Regulatory Focus Questionnaire

Regulatory Focus Questionnaire is introduced by (Higgins et al. 2001) which has been most commonly applied in consumer behavior research. There are six reflective items designed to measure promotion focus and five reflective items to measure prevention focus. The items are designed to capture personal promotion and prevention success which are conceptualized via promotion and prevention pride. Promotion pride illustrates subjective past history of promotion where eagerness strategy is employed to pursue goals, whereas prevention pride is associated with subjective past history of prevention where vigilant strategy is used to obtain goals. Stated differently, promotion and prevention pride demonstrate how people react to the task goals related to successful history in the past when people pursue promotion and prevention goals. Slightly different scales are used to measure these items with the first eight items of the instrument using 5 point Likert scale from 1 (never or seldom) to 5 (very often), the ninth item using the scale from 1 (never true) to 5 (very often true), and the last two items using the scale from 1 (certainly false) to 5 (certain true).

Behavioral Inhibition System and Behavioral Activation System

Behavioral inhibition system (BIS) and behavioral activation system (BAS) are designed to measure negative and positive outcomes respectively. Drawing on regulating motivations (aversive versus appetitive) and regulatory systems (approach versus avoidance), Carver and White (1994) develop this scale to evaluate Gray's (1990) regulatory procedures. The former scale consists of 7 items to operationalize prevention focus. It is more vulnerable to negative occurrences and concerned about the possibility of the happening of these incidences. While the latter scale including 5 items is to operationalize promotion focus. It is reflective of positive occurrences and responsive to personal rewards. It taps into arousal and joyous experiences.

Regulatory Focus Manipulation

A multitude of methods have been used to manipulate regulatory orientations. These methods are divided into three groups: gain versus loss framing, ideal versus ought priming, and situational priming. First, the method of framing a task to emphasize success or failure by using gain versus loss strategy has been employed by several studies (Shah et al. 1998; Shah and Higgins 2001; Higgins et al. 1997; Forster et al. 2005). This method can be manipulated on the basis of task performance where individuals are assigned into two opportunities: promotion and prevention. Different tasks are given in response to typical opportunity (Higgins et al. 1997). The former is associated with the framing of task contingency to gain \$1. And people are explained that extra monetary rewards are granted on the basis of their performance of the memory task. If they succeed, they get money – a situation that represents a gain outcome. If they fail, they do not get money – a non-gain outcome. The latter is associated with the framing of task contingency to avoid losing \$1. And people are instructed that they are not going to lose money

on how they perform their memory task. If they succeed, they do not lose money – a non-loss outcome, but if they fail, they lose money – a loss outcome.

Another way of manipulation using this method is employed in Cesario et al. (2004) in which two strategies are used to prime regulatory orientations. The promotion scenario emphasizes energy and fulfillment that customers are expected to have after they eat fruits and vegetable while the prevention scenario emphasizes how to avoid unhealthy consequences after consumption. Messages are framed using two different strategies in each scenario: eager or vigilant strategy. Eager strategy is more associated with presence and absence of gain or non-gain while vigilant strategy is more associated with presence or absence of loss or non-loss.

Second, manipulation of regulatory orientations can be done through priming of ideals and oughts (Liberman et al. 2001; Liberman et al. 1999; Higgins et al. 1994; Higgins et al. 1986; Ramanathan and Dhar, 2010). Individuals being manipulated are sent to differently primed scenarios: promotion- or prevention- primed. They are asked to write their hopes and aspirations they had from their childhood in the former scenario and to report their duties and responsibilities which they think change over the times in the latter scenario. The results of the study show that people's regulatory orientations are generated in relation to the priming strategies (Higgins et al. 1994; Higgins et al. 1986). Recent research goes further with another way of priming by allocating people not only to promotion versus prevention scenario but also to pride versus non-pride (Camacho et al. 2003; Higgins et al. 2001). Promotion primed scenario is designed to illustrate success and achievement while prevention primed scenario is to illustrate trouble and misbehavior. The differences between sub-cases between promotion pride versus promotion non-pride priming are, in the former, participants are asked by questions related to how to obtain such successes or accomplishments while in the latter, participants are asked by

questions pertinent to their failure and inability to accomplish these outcomes. By contrary, in the sub-cases associated with prevention orientation, pride priming differs from non-pride priming in that, the former centers on how to avoid troubles and stop misbehaviors while the latter centers on description of the experiences participants get into troubles and are involved in misbehaviors.

Third, situational priming has been commonly used as a way of manipulation for regulatory orientations (Friedman and Forster 2001; Chernev 2004). For instance, Friedman and Forster (2001) use a paper and pencil maze game to create situational priming. Following instructions, participants are assigned into two situations: promotion priming and prevention priming. In the promotion priming, participants are given a maze in which a mouse is trapped and their jobs are to use pencil to draw the line that helps the mouse to reach a cheese placed in front of the exit. The authors suggest that by engaging in this drawing task, people are motivated by the way of seeking of nurturance. In the prevention priming, participants are given the same maze. Only one change is that the cheese is replaced by an owl that looks as if it flew on the top of the maze and attempted to catch the mouse. Similarly the jobs are to draw the line to take the mouse out of the maze and lead the mouse to the hole at the bottom of the wall, and ultimately save the mouse from the danger. Doing so is meant to prime the participants to the thought of seeking security and safety. The motivational goals in two situations are different: one by nurturance seeking and the other by safety seeking.

Regulatory Fit

Regulatory fit occurs as a result of the matching between individuals' regulatory orientation and strategies that they use to pursue the goals or the compatibility between

individuals' regulatory orientation (Aaker and Lee 2006) and the messages they receive, the contexts they involve and the decisions they make (Higgins 2002). The effects of regulatory fit are well documented in extant literature. Once regulatory fit occurs, not only have people started feeling right about what they have done, but their engagements in these activities have been enforced (Cesario et al. 2008). The fit also leads them to have a better feeling about the "rightness" of their behaviors and decisions they make (Freitas and Higgins 2002; Higgins 2000). The better feeling is translated into improved evaluations and higher willingness to pay (Higgins et al. 2003), more favorable valuations of target objects (Higgins et al. 2003; Avnet and Higgins 2003), more positive attitudes toward products (Cesario, Grant, and Higgins 2004; Aaker and Lee 2001), and more effective message persuasiveness (Lee and Aaker 2004; Cesario et al. 2008). Not only is regulatory fit a driver of better evaluation and reactions, but also it magnifies people's attitudes. When the first reaction is negative, regulatory fit is a catalyst that makes the overall reaction more severe, but when the first reaction is positive, it improves positivity of the overall reaction (Aaker and Lee 2001).

There are different ways to create regulatory fit and the effect of regulatory fit are different in various situations. In the following section, more insights into the methods to form regulatory fit are discussed.

Creating Regulatory Fit

Regulatory fit happens when the goals people attempt to achieve and the decisions they make are consistent with their regulatory orientations (Higgins 2000, 2002). A number of ways have been found in relevant literature to trigger the effects of regulatory fit which have recently been synthesized and elaborated in a meta-analysis by Grewal et al. (2011). Based on an examination of 202 studies over 13 years, the study provides in-depth understanding of

regulatory fit influences and groups all methods into five areas: sources of focus, focus prime, fit type, fit scope and fit match (Grewal et al. 2011).

1. Source of regulatory focus: There are two sources of regulatory focus that drive people's regulatory orientations: chronic and momentary. The former is associated with natural tendency of a person while the latter emerges as a consequence of prime. Particularly, source of focus is chronic when regulatory orientation is measured by measurement scales such as selves-questionnaires (Avnet and Higgins 2006), or the self-strength task (Evans and Petty 2003), or regulatory focus questionnaires (Hong and Lee 2008), or the Lockwood scale (Zhao and Pechmann 2007). And source of focus is momentary when regulatory orientation is induced by the context or task instructions. It can be either self-generated in writing about duties and obligations (prevention) versus hopes and aspirations (promotion) or situation generated in completing the word fragments: d_ty – duty (prevention) or e_g_r – eager (promotion).

2. Focus prime: How the regulatory focus is primed is another approach of creating regulatory fit. People's momentary regulatory orientation can be self- or situation-generated. The former happens when people are exposed to prime that reflects or is related to self while the latter emphasizes instances in which people are exposed to stimulus or context unrelated to the self. As earlier mentioned, the instances where people are asked to do some tasks (duties and responsibilities versus hopes and aspirations) as part of prime are self-generated. However, the instances where people are asked to do the maze task in which a mouse is reaching a cheese (promotion) or a mouse is escaping from an owl (prevention) are situation-generated (Zhang and Mittal 2007).

3. Fit type: Regulatory fit is generated when there is a match either between people's regulatory orientation and the process of goal pursuit or between regulatory orientation and the

outcome of that goal. The process-based fit is manifest in a situation where people are to perform an action or employ a strategy that are compatible with regulatory orientations, either promotion or prevention. For instance, the fit happens when promotion oriented people employ eagerness strategy (e.g., “to make sure everything goes right”) or when prevention oriented people employ vigilance strategy (e.g., “avoid anything that could go wrong”) (Freitas and Higgins 2002). Both cases illustrate how process-based fit is created when people use action plans or strategies consistent with their regulatory orientations.

On the other hand, the outcome based fit illustrates the situation in which there is a match between consequences of the actions or behaviors and people’s regulatory orientation. People with different regulatory orientations are sensitive to different outcomes (Aaker and Lee 2006). In a study about customer behavior in drinking grape juice, Lee and Aaker (2004) find that people with promotion orientation are more sensitive to benefits to be obtained while people with prevention orientation are more sensitive to risks to be avoided. The findings suggest that the sensitivity to the outcomes of the actions or behaviors performed by people depends on their regulatory orientation—an example of emphasize the outcome-based fit.

4. Fit scope: Regulatory fit can be divided into integral and incidental. Integral fit is created when it is manipulated by something that is integral to or within the actual message, while incidental fit is created entirely independent of, or prior to, the persuasive message itself (Cesario et al. 2008). The difference is the time of manipulation of regulatory fit. If manipulation takes places during the time of sending the message to be evaluated, integral fit is generated. But if manipulation takes place before or independent of the message to be evaluated, incidental fit occurs. An example of the former is when people are asked to evaluate the brand in ad, while the ad itself is used to manipulate regulatory fit. An example of the latter can be seen in the case

where people are asked to evaluate the message after they are primed by taking part in a mouse and cheese or owl game which is used as a manipulation.

5. Regulatory fit match: Fit match can be obtained through a numerous ways. It is common to use message framing. When a message is framed in a particular way that enables a person to feel right about the message or the information embedded in the message, regulatory fit starts to emerge (Lee and Aaker 2004; Cesario et al. 2004). Messages can be anything including, but not limited to, an ad, a promotional pamphlet, a notice or an announcement, or any source of information that deliver a message. The mode of presentation can be used to produce the fit match. When the mode of presentation is compatible with a person's regulatory focus (e.g., nonverbal behaviors of message sources), regulatory fit is likely to take place which in turn has an impact on the personal perception about the message, and ultimately, the message presented becomes more persuasive (Cesario and Higgins 2008).

The ways to generate regulatory fit are not limited to those just mentioned above. However, a number of ways have been explored in literature. Those are grouped into the major categories as follows: decision styles (attribute-based versus alternative-based) (Mourali and Pons 2009), strategies (eager versus vigilant) (Freitas and Higgins 2002), framing (gain versus loss) (Monga and Zhu 2005), attributes (hedonic versus utilitarian) (Chernev 2004), presentation modes (simultaneous versus sequential) (Wan et al. 2009), and self view (independent versus interdependent) (Aaker and Lee 2001). The list is apparently to continue and the effects of regulatory fit associated with each category are different.

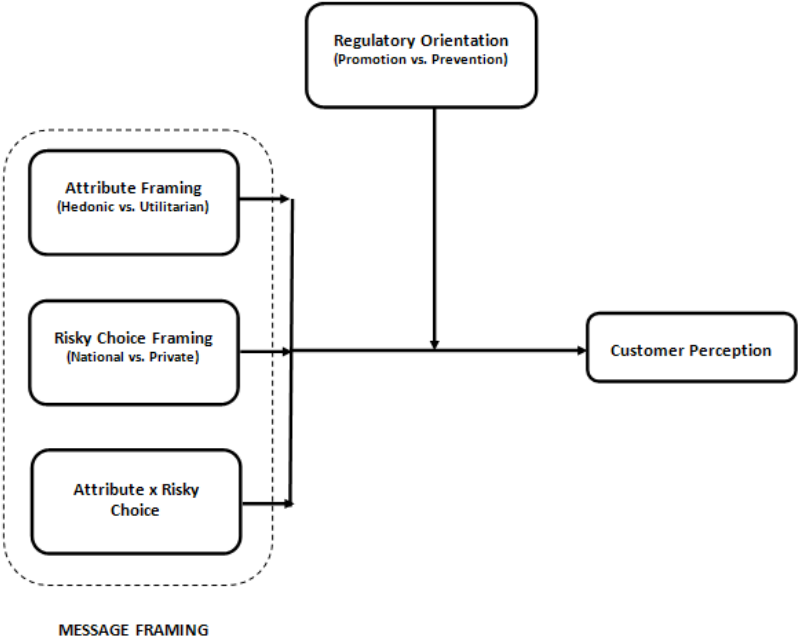
As noted above, regulatory fit can be generated through a number of ways and the influences of regulatory fit are various across the types of generating regulatory fit. And main reasons of disparities in these effects have yet to be investigated. This research is developed to

tap on this area and provide further insights to this domain. The current research focuses on two aspects of message framing (1) attribute framing (hedonic versus utilitarian) and (2) risky choice framing (national brand versus private brand). In the following section, the rationale for hypotheses development is discussed. There are four sets of hypotheses developed on the basis of the relations among regulatory focus, attribute framing and risky choice framing.

Hypotheses Development

Drawing on existing literature, the current research is to investigate how regulatory focus moderate the influence of two aspects of message framing, i.e., attribute framing and risky choice framing, and their interactions on customer perceptions including brand attitude, attitude toward the ad, purchase intention, and willingness to pay. The conceptual model is illustrated in Figure 2.

FIGURE 2
Conceptual Model



Regulatory Focus and Attribute Framing

A body of literature on regulatory focus has indicated that promotion focused people are more likely to seek enjoyment and pleasure (Higgins 1997; Higgins et al. 2001, Crowe and Higgins 1997). To make a choice among alternatives, they are more attracted by such special features of the products as fun and pleasurable, color and shape which constitute hedonic attributes. In this respect, their decisions are influenced by affect-driven factors that are associated more with hedonic than utilitarian features. This association is also supported by the view of regulatory fit that emphasizes fit enhances more positive attitudes (Chernev 2004; Aaker and Lee 2001). Therefore, it is anticipated that advertisements illustrating hedonic features are more effective in persuading promotion-focused customers than those illustrating utilitarian features.

Conversely, different reactions have been found in prevention-focused people. They tend to avoid undesirable outcomes and negative consequences (Higgins 1997; Higgins et al. 2001, Crowe and Higgins 1997). For them, functional, practical, and instrumental features of a product and a brand are more likely to be used to make judgment or evaluation. Those features, which are called utilitarian attributes, are more effective in convincing this group of people.

Particularly, prevention focused people are more interested in quality, lifespan and efficiency of a product. In line with regulatory fit perspective, if a fit occurs between prevention focus and utilitarian attribute, a more positive attitude is generated (Chernev 2004; Aaker and Lee 2001). Thus, it is anticipated that advertisements illustrating utilitarian features are more effective in persuading prevention-focused customers than those illustrating hedonic features. Taken together, I hypothesize

H1: Customers feel an ad to be more persuasive when attribute framings featured in an ad is compatible with their regulatory focus, such that

H1a: Promotion oriented customers feel an ad to be more persuasive when it features hedonic attributes than utilitarian attributes.

H1b: Prevention oriented customers feel an ad to be more persuasive when it features utilitarian attributes than hedonic attributes.

Regulatory Focus and Brand Types

Customers can use brands of products as outside cues that prompt their regulatory orientations. Zhou and Pham (2004) point out that in the context of financial decision making, customers generally associate products with either promotion or prevention focus over a period of time. Specifically, small business ownership and stocks are considered to be more promotion oriented while deposit certificates and bonds are considered to be more prevention oriented.

The reasons why customers judge products differently can be explained through two different perspectives. The first is related to perception of risk. In general, customers are making choices based on their own regulatory orientations. When customers adopt prevention orientation, their judgment is based more on low risk or safe choices (Aaker and Lee 2001; Liberman et al. 1999). But when customers adopt promotion orientation, customers' judgment is made based more on creative or risky choices (Aaker and Lee 2001; Friedman and Förster 2001; Liberman et al. 1999). In a recent study, Ramanathan and Dhar (2010) point out that less familiar brands are more associated with concepts pertaining to promotion orientation while famous brands are associated with concepts pertaining to prevention orientation.

The second view is related to perception of price. Before customers decide to buy a product, they usually rely on some subjective reference price to justify the tagged price of the product. Those who have experiences with a product tend to base the reference price of a product on their remembered price for that product and on external cues associated with the product at the time they purchase that product (Niedrich et al. 2001; Hardie et al. 1993). Several studies

regard brand as a signal for product quality (Grewal 1995). A brand is even viewed an important factor to justify product price and quality (Dodd and Monroe 1985; Jacoby et al. 1971).

The private brands, which are generally produced by small manufacturers, or stores, are perceived to have a lower quality and to be sold at a cheaper price than the national brands. These brands seem to be more attractive to prevention oriented people. Conversely, the national brands that are usually made by well-known manufacturers and companies who invest huge financial and human resources to promote these brands are viewed as superior in terms of quality and their prices are higher. Those brands are so compelling to promotion oriented customers.

Existing literature has explored interactions of various aspect of brand quality and found that customers have a propensity to prefer higher-tier brand (Nowlis and Simonson 1997; Carpenter et al. 1994). In a recent study, Love et al. (2010) has investigated the link between regulatory focus and brand preference and found that promotion oriented customers tend to expect a higher value of the benefits from a strong brand than prevention oriented customers. The authors also point out that those dominated by promotion focus are more sensitive to quality of brands than those dominated by prevention focus.

Together this means that while private brands indicate low quality and are also associated with low price. Hence if things go wrong, customers feel they experience little loss, i.e., low risk. Whereas national brands are more expensive, and customers expect more when they buy these brands. Hence, if things do not work as expected, they think they lose a lot, i.e. high risk. With this rationale, it is hypothesized that promotion focused individuals are more likely to be persuaded by ads promoting national brands, while prevention focused individuals are more likely to be persuaded by ads promoting private brands.

H2: Customers feel an ad to be more persuasive when a brand type in an ad is compatible with their regulatory focus, such that

H2a: Promotion oriented customers feel an ad to be more persuasive when it promotes a national brand than a private brand.

H2b: Prevention oriented customers feel an ad to be more persuasive when it promotes a private brand than a national brand.

Brand Types and Attribute Framing

A limited number of researchers have investigated regulatory fit among cues that are used as different ways of priming while regulatory focus is not directly involved. Most recently, in a study investigating the effects of sale promotion on the consumers' choice, Ramanathan and Dhar (2010) find two critical interactions worth mentioning: type of brand and coupon message savings as well as type of brand and expiration dates. Specifically, the first interaction showed that consumers are inclined to choose well known brands when coupons are framed as nonlosses while they tend to choose less familiar brands when coupons are framed as gains. The second interaction demonstrated that well known brands are selected when expiration date on the coupon is immediate while less familiar brands are preferred when the expiration date on the coupon is not immediate.

Lee and Aaker (2004) examine the moderation effect of message frame on the impact of perceived risks on message effectiveness. The results show that gain framed messages are more effective in the case of low perceived risks while loss framed messages are more effective in the case of high risks. Another research by Zhao and Pechmann (2007) sheds more light on the regulatory fit effect in antismoking advertisements by showing that promotion oriented people are more persuaded by a positive frame whereas prevention are more persuaded by a negative frame.

In an investigation on message framing and regulatory focus, Yi and Baumgartner (2009) summarize three types of message framing (a) the outcome focus of message (gain versus loss),

(b) the overall valence (positive versus negative), and (c) the type of benefit or harm (achievement versus security). The findings from data collected from 120 students showed that out of three interactions, there are two significant two way interactions; the first is the interaction between outcome focus (gain versus loss) and valence (positive versus negative) and the second is the interaction between outcome output (gain versus loss) and type of benefit or harm (achievement versus security). According to the findings, it is anticipated that

H3: Customers feel an ad to be more persuasive when brand types in an ad are compatible with attribute framings emphasized in the ad, such that

H3a: Customers feel an ad to be more persuasive when it promotes a national brand featuring hedonic attributes than utilitarian attributes.

H3b: Customers feel an ad to be more persuasive when it promotes a private brand featuring utilitarian attributes than hedonic attributes.

Regulatory Focus, Brand Types, and Attribute Framings

Drawing on the findings of previous literature on message framing, Yi and Baumgartner (2009) come to realize that there are three ways that people's regulatory focus interact with message framing: (a) the outcome output of message (gain versus loss), (b) the overall valence (positive versus negative), and (c) the type of benefit or harm (achievement versus security). From these findings, the authors take a further step to investigate these three aspects of message framing as well as their interactions on message persuasiveness. In addition, the authors also introduce people's regulatory focus as a moderator of these three factors.

The results indicated that a message is more persuasive when regulatory fit takes place as a result of people's regulatory focus and the valence of message (positive versus negative).

Although there is no significant effect in three way interaction, the study is one of the most

recent ones that take a pioneering approach to examining three way interactions among various factors associated with message framing.

Regulatory focus theory (Higgins et al. 2001) suggests that people with promotion focus have a higher tendency to approach positive outcomes that provide them with a sense of pleasure and fulfillment than to avoid negative consequences that are more associated with the absence of pleasure and fulfillment. Drawing on the rationale previously mentioned, it is anticipated that hedonic attributes are persuasive than utilitarian attributes in the ad of national brands. The proposition would be after exposure to the advertisement featuring hedonic attributes of a national brand, promotion oriented customers are more likely to be persuaded.

Conversely, those with prevention orientation are prone to be more sensitive to undesirable outcomes than the positive outcomes and find a solution to avoid those negative outcomes. The negative outcomes could be represented by the nonexistence of practical, functional and instrumental features while the positive outcomes can be referred to attainment of such features. Therefore, when prevention oriented people are exposed to an advertisement of a private brand, utilitarian attributes are more effective in convincing them than hedonic attributes. With this reasoning, it is proposed that after exposure to the advertisement featuring utilitarian attributes of a private brand, prevention oriented customers are more likely to be persuaded.

There, another hypothesis is formally created as follows

H4: Customers feel an ad to be more persuasive when brand types and attribute framings emphasized in an ad are consistent with their regulatory focus, such that

H4a: Promotion oriented customers feel an ad to be more persuasive when they see a national brand in the ad featuring hedonic attributes than when they see a national brand in the ad featuring utilitarian attributes

H4b: Prevention oriented customers feel an ad to be more persuasive when they see a private brand in the ad featuring utilitarian attributes than when they see a private brand in the ad featuring hedonic attributes

CHAPTER 3

METHODOLOGY

Measurement Scales

Regulatory focus questionnaires (Higgins, 2001): These scales were designed to measure respondents' chronic regulatory focus and consisted of six questions measuring their promotion orientation and five questions measuring prevention orientation.

The responses to the items were measured on a 7 point Likert scale. Although questions were designed to capture promotion versus prevention orientations, there were slight differences in scale anchors among questions. For questions 1 through 8, anchors were 1 for *never* and 7 for *very often*. For Question 9, 1 for *never true* and 5 for *very often true*. For Questions 10 and 11, 1 for *certainly false* and 5 for *certainly true*. An example of a question related to promotion focus is “do you often do well at different things that you try?” An example of a question related to prevention focus is “growing up, would you every “cross the line” by doing things that your parents would not tolerate?”

Following Higgins et al. (2001), the scores promotion and prevention focus question were averaged, then prevention focus scores were subtracted from promotion focus scores. The score differences were used to divide the respondents into two groups using median split. The group with higher score differences represents promotion oriented one and the group with lower scores represents prevention oriented group.

Regulatory focus questionnaires are used to measure chronic regulatory orientation which is used as an independent variable in the final study while brand attitude, ad attitude, purchase intention, and willingness to pay are used as dependent variables in all studies (see Table 6).

Brand attitude: The scale including 3 items was adapted from Lee and Aaker (2004). It was measured on three 7 point Likert-type scales anchored by 1 = *negative, unfavorable, bad*; 7 = *positive, favorable, good*. All scores of each item were averaged to calculate a mean score of brand attitude.

Attitude toward the ad: this reflected the persuasiveness of the message conveyed in the ad. It was evaluated on a Likert-type scale anchoring 1 as *not at all* and 7 as *very much*. It asked participants to indicate the degree to which they perceived the ad based on four adjectives: persuasive, convincing, effective, and coherent (Cesario et al. 2004). Attitude toward the ad was the mean score by averaging all scores recorded for four adjectives.

Purchase intention: the third dependent variable, using a Likert-type scale anchoring by 1 as *very unlikely* and by 7 as *very likely*, had two items. The first was “please indicate the extent to which you would consider buying the product soon” and the second was “please indicate the extent to which you would consider buying the product in the future” (Meyers-Levy & Maheswaran, 2004). In addition, participants were also asked “to buy this brand, how much are you willing to pay (in \$)” – the question that was later referred as “willingness to pay.”

Product Selection

The purpose of this stage was to keep only products whose attributes were distinctively different in terms of hedonic and utilitarian dimensions. In addition, this was undertaken to ensure that products and attributes are familiar and relevant for the target respondents, or students in this study. Although there are arguments about the use of student samples in research, students are a good choice for this context. Undergraduate students appropriately represent the general population in terms of perceptions about familiar products, i.e. shoes and shampoo, and

product attributes, i.e. hedonic and utilitarian. Moreover, student samples are more homogenous which is helpful in extracting theory and minimizing Type II error as opposed to a more heterogeneous sample (Calder et al. 1981).

In order to select the products which provided greatest distinction in attribute framing, 66 students at a state school in the southwest United States were asked to take part in a short survey. The respondents were given a list of ten different products (backpack, energy drink, laptop, refrigerator, shampoo, smart phone, sport shoes, toothpaste, TV Plasma, and winter jacket). Some of these products have been used in previous research, such as shampoo (Dhar and Wetenbroch, 2000; Chernev, 2004), and toothpaste (Wang and Lee, 2006; Chernev, 2004). Other products were selected on the basis of personal judgment of the products that students were most familiar with. Definitions of hedonic versus utilitarian attributes were provided to the respondents, i.e., “hedonic attributes refer to characteristics that emphasize aspects of pleasure, or fantasy. Benefits of these attributes are to provide intrinsic stimulation, fun, and self-esteem. While utilitarian attributes refer to characteristics that emphasize practical, instrumental and functional features. Benefits of these attributes are to help customer maximize the utility, efficiency, and economy.” In addition, a car was borrowed from existing literature (Lin 2007) as an example to show differences between two types of attributes, e.g., hedonic attributes for a car include luxurious leather seats, 12-speaker surround sound system, panoramic vista/sun roof, and DVD family entertainment system with two wireless headphones and utilitarian attributes include fuel consumption, interior comfortableness, flexibility of gear shifting, driving smoothness, speed, noise control.

Then participants were asked to write down four major hedonic attributes associated with a focal product and then four utilitarian attributes. They completed one product at a time until

they finished all ten products. This information was used to assess which product had the most distinct attributes (hedonic versus utilitarian). The products that provided such distinction were selected for the rest of the study. Finally, there were a few screening questions designed to make sure they understood and completed the task the way they were asked to do. For instance, respondents were asked to recall a pair of attributes that they had just described and select one pair from a given list of five options, i.e., “hedonic versus utilitarian,” “hedonic versus reliability,” “utilitarian versus performance,” “hedonic versus performance,” and “performance versus reliability.” Only those who chose “hedonic versus utilitarian” were kept for the next step. Based on the responses, two products, sport shoes and shampoo, were selected for further analysis. The attributes for those two products were clearly divided into hedonic and utilitarian groups, therefore, these attributes were used to develop the scenarios for the rest of the study (see Table 1). Other products were removed because the attributes overlapped, and therefore created confusions.

TABLE 1
Retained Hedonic and Utilitarian Attributes

	Hedonic Attributes	Utilitarian Attributes
Shoe Products	stylish fashion attractive cool colors	durable comfortable stability ventilation supported
Shampoo Products	beautiful fashionable attractive shiny appealing fragrance	clean healthy nourish reduce oily buildup strength

After focal products were selected, the first study was created on the basis of two products selected from this stage with a purpose to provide better insights into how individuals' regulatory focus moderates the influence of attribute framings on consumer perceptions.

Study 1

Design

The purpose of the experiment was to provide insights into how individuals' regulatory focus (promotion vs. prevention) moderates the influence of attribute framings (hedonic vs. utilitarian) on consumer perceptions. To do so, the study was conducted using a 2 (regulatory focus: promotion versus prevention) x 2 (attribute framing: hedonic versus utilitarian) between-subjects factorial design.

Procedures and Participants

Undergraduate business students at a Southern state university were selected as participants in an online survey for a partial course credit. There were 134 participants completing the questionnaires. Each participant was assigned into two regulatory focus primes in sequence. The first was called hope and duty primes and the second was related to academic experience. First, those who were primed into promotion oriented condition were asked to describe how their current hopes and aspirations have changed when they grew up by describing their 4 hopes and aspirations they had during their childhood and then describing 4 hopes and aspirations that they had at the present time. In contrast, those primed into prevention oriented condition were asked to describe how their current duties and responsibilities have changed when they grew up by describing their 4 duties and responsibilities they had during their

childhood and then describing 4 duties and aspirations that they had at the present time.

Then they were given the second primes pertaining to academic experience. Those who were exposed to the first promotion prime were asked to think about a course that they were taking in the current semester, list two positive academic outcomes that they would like to achieve in that course, and then describe the strategies they could adopt to successfully accomplish those outcomes. Conversely, those who were exposed to the first prevention prime were asked to think about a course that they were taking in the current semester, list two negative academic outcomes that they would like to avoid in that course, and then describe the strategies they could adopt to successfully prevent those outcomes from happening.

Those who were first exposed to a promotion oriented prime were also assigned to a promotion oriented prime in the second priming task and those who exposed to a prevention oriented prime were assigned to a prevention oriented prime in the second priming task. The reason to use two manipulations continuously was to set respondents into a stronger promotion versus prevention mindset.

Then the participants were randomly shown two ads, each emphasizing either hedonic attributes or utilitarian attributes. The products selected were shoe and shampoo. Two fictitious brands were used -- S&P for shoes and S&O for shampoo -- to avoid confounding effects of well known brands. For shoe product, typical key words (e.g. stylish, colors, attractive, cool, etc.) were used to emphasize hedonic attributes while different key words were employed to feature utilitarian attributes (e.g. durable, comfortable, stable, supported, ventilation, etc.). Similarly, for shampoo product, typical key words (e.g. beautiful, fashionable, attractive, silky, shiny, etc.) were used to emphasize hedonic attributes while different key words were employed to feature utilitarian attributes (e.g. clean, healthy, nourish, reduce oil buildup, strength, etc.). Those key

words were adapted from the results of the previous stage (see Appendix A, Ad 1 - 4).

After viewing a randomly assigned shoe ad, participants were asked a manipulation check question “the attributes highlighted in the ad that you have read are mostly ...?” It was measured using an item anchored by 1 as utilitarian and 7 as hedonic. This question was created to ensure that the ads were seen correctly as hedonic or utilitarian attributes by respondents. This was followed by questions pertaining to brand attitude, attitude toward the ad, purchase intention, willingness to pay. After the shoe ad, participants were shown a shampoo ad and the same list of questions as they saw in the shoe ad. Then they were asked a few filler questions, i.e., “what is your best movie,” “what do you do during leisure time?,” or “who is the best Chief Executive Officer you respected most? And why?” which were followed by demographic questions before they were thanked and debriefed.

Demographics

Out of a total of 134 completed responses, 68.4% were male and 31.6% were female. A majority of respondents were between 20 to 30 (85.7%), followed by 18 to 19 years old (9.0%), and more than 30 (5.4%). Regarding ethnicity, most respondents were non-Hispanic white (57.6%), followed by Hispanic or Latino (12.1%), Asian or Asian American (9.8%), Black or African American (8.3%), American Indian or Alaska Native (3.0%), and Hawaiian or Other Pacific Islander (0.8%). With respect to the time in college, most of the respondents had spent for 3 years (40.9%), 4 years (28.0%), the remaining (32%) had studied for 1, 2, or more than 4 years (see Table 2 for detailed demographic profile of respondents).

TABLE 2
Demographic Profile of Respondents (Study 1) (N = 134)

Gender	Age		
Male	68.4	18 -19	9.0
Female	31.6	20 -30	85.7
Ethnicity	Years in College		
American Indian or Alaska Native	3.0	31-40	3.8
Hawaiian or Other Pacific Islander	.8	41-50	.8
Asian or Asian American	9.8	More than 50	.8
Black or African American	8.3	1 year	3.0
Hispanic or Latino	12.1	2 years	15.9
Non-Hispanic White	57.6	3 years	40.9
Others	8.3	4 years	28.0
		More than 4 years	12.1

Data Analysis

Since there were more than one dependent variable, MANOVA was used to test the effect of independent variables and their interactions affect all dependent variables. A 2 (regulatory focus: promotion versus prevention) x 2 (attribute framing: hedonic versus utilitarian) between subject MANOVA was used to examine the effects of these main factors and their interactions on four dependent variables that constituted customer perceptions.

For shoe product category, the results of MANOVA indicated that none of the effects of two main factors (regulatory focus and attribute framing) and their interaction were significant [Wilks' lambda = .995, $F(4, 134) = 0.15, p > .05$; Wilks' lambda = .969, $F(4, 134) = 1.03, p > .05$; and Wilks' lambda = .995, $F(4, 134) = 0.16, p > .05$; respectively] (See Table 3).

TABLE 3
Multivariate and Univariate F Values (Study 1)

	MANOVA F Statistic	ANOVA F Statistic			
		Brand Attitude	Ad Attitude	Purchase Intention	Willingness to Pay
Shoes Product Category					
Regulatory focus (RF)	0.15	0.00	0.33	0.41	0.02
Attribute framing (AF)	1.03	0.62	3.15*	0.18	1.10
RF x AF	0.16	0.05	0.02	0.52	0.27
Shampoo Product Category					
Regulatory focus (RF)	0.18	0.01	0.08	0.05	0.33
Attribute framing (AF)	1.70	2.80*	6.57**	3.09*	0.19
RF x AF	1.02	0.48	0.06	1.04	0.87

Note:

*** $p < .01$; ** $p < .05$; * $p < .1$

In MANOVA, Wilk's Lambda is used to reflect F value

For shampoo product category, MANOVA analysis again showed no significant effects for regulatory focus, attribute framing and their interactions [Wilks' lambda = .994, $F(4, 134) = 0.18$, $p > .05$; Wilks' lambda = .949, $F(4, 134) = 1.70$, $p > .05$; and Wilks' lambda = .969, $F(4, 134) = 1.02$, $p > .05$; respectively]. Overall, the findings showed that there were no significant main effects as well as the interactions effects for the two product categories, shoes and shampoo.

However, the ANOVA results showed sporadic main effects. For the shoe ad, attribute framing had a marginally significant effect on ad attitude toward the shoe ad [$F(1,134) = 3.15$, $p < .1$, $M_H = 3.90$, $SD = 1.24$ vs. $M_U = 4.27$, $SD = 1.13$]. For the shampoo ad, attribute framing had marginally significant effects on brand attitude [$F(1,134) = 2.80$, $p < .1$, $M_H = 4.61$, $SD = 1.52$ vs. $M_U = 5.00$, $SD = 1.22$], and purchase intention [$F(1,134) = 3.09$, $p < .1$, $M_H = 2.84$, $SD = 1.49$ vs. $M_U = 3.33$, $SD = 1.71$], but a significant effect on ad attitude [$F(1,134) = 6.57$, $p < .01$, $M_H = 3.60$, $SD = 1.59$ vs. $M_U = 4.26$, $SD = 1.34$].

Regulatory Focus and Attribute Framing

The main objective of this study was to test (H1) whether people's regulatory focus (promotion versus prevention) moderate the effects of attribute framing (hedonic versus utilitarian) on consumer perceptions (brand attitude, ad attitude, purchase intention and willingness to pay).

Since there are two product categories involved, i.e. shoes and shampoo, data analyses were performed separately for each product category. For the shoe product category, four different ANOVA analyses were performed for four dependent variables: brand attitude, attitude toward the ad, purchase intention, and willingness to pay. The results showed that the interaction effects between regulatory focus and attribute framing were not significant across all four dependent variables, brand attitude, $F(1,134) = 0.05, p > .05$; attitude toward the ad, $F(1,134) = 0.02, p > .05$; purchase intention, $F(1,134) = 0.52, p > .05$; and willingness to pay, $F(1,134) = 0.27, p > .05$. Therefore, the findings for the shoe ad did not lend any support for H1a and H1b.

Similarly, the univariate analyses were implemented for four dependent variables for shampoo product category. The results showed that the interaction between regulatory focus and attribute framing was not significant across all four dependent variables, brand attitude, $F(1,134) = 0.48, p > .05$; attitude toward the ad, $F(1,134) = 0.06, p > .05$; purchase intention, $F(1,134) = 1.04, p > .05$; and willingness to pay, $F(1,134) = 0.87, p > .05$. Therefore, the findings from the shampoo ad did not lend any support for H1a and H1b.

In summary, the results across two product categories demonstrated that primed regulatory focus did not showed significant main effects (regulatory focus) and moderation effects (between regulatory focus and attribute framing) across all dimensions, even though the main effect of attribute framing was significant sporadically for shoe and shampoo ads. For the

shoe ad, attribute framing had a marginally significant effect on ad attitude. For the shampoo ad, it had marginally significant effects on brand attitude, and purchase intention and significant effect on ad attitude.

After looking at these results and the study process, it was concluded that perhaps in an online environment, two primes of regulatory focus were confusing. Hence, it was decided to use only one prime, i.e., academic achievement, in the next study. The academic achievement has been used in earlier studies for students (Wan, Hong and Sternthal 2009; Dutta, Biswas, and Grewal 2011) and should be relevant to the student sample.

Study 2

The purpose of the experiment was to see if one (instead of two) regulatory focus prime, i.e. academic achievement, moderates the influence of attribute framings on consumer perceptions. Everything else about Study 2 was identical to Study 1.

Procedures and Participants

Undergraduate business students at a Southern state university participated in this online survey for a partial course credit. There were 144 participants completing the questionnaires. As in Study 1, the participants were randomly assigned into two groups, one was exposed to a promotion oriented condition and the other to a prevention oriented condition. Since respondents were students, regulatory focus was manipulated using a method commonly used by previous literature (Wan, Hong and Sternthal 2009; Dutta, Biswas, and Grewal 2011) – a situational prime in which respondents were asked to describe their academic experience in the course they took. The group assigned to the promotion oriented prime were asked to answer two questions “think

about an important course which you are taking in the current semester. Write down a positive academic outcome you wish to achieve in this course” and “describe the strategies that you might use to achieve this outcome.” In contrast, the group assigned to the prevention oriented condition were given another set of questions “think about an important course which you are taking in the current semester. Write down a negative academic outcome that you want to avoid in this course” and “describe the strategies you would use to avoid this outcome.”

Again, as in Study 1, the participants were next randomly shown two ads, each emphasizing either hedonic attributes or utilitarian attributes. And the products selected were shoe (brand name used was S&P) and shampoo (brand name used was S&O). The ads for shoe and shampoo were identical to the ads used in Study 1 (see Appendix A).

After viewing randomly assigned ads, participants were asked a manipulation check question “the attributes highlighted in the ad that you have read are mostly ...?” It was measured using an item anchored by 1 as utilitarian and 7 as hedonic. This was followed by questions pertaining to brand attitude, attitude toward the ad, purchase intention, willingness to pay, filler questions, and demographic questions before they were thanked and debriefed. This was similar to Study 1.

Demographics

Out of a total of 144 respondents, 68.8% were female and 31.3% were male. Since the sample was made of college students, the majority of respondents were aged from 20 to 30 (95.1%). Regarding ethnicity, most respondents were non-Hispanic white (61.1%), followed by Black or African American (15.3%), Hispanic or Latino (10.4%), and Asian or Asian American (6.3%), and American Indian or Alaska Native (1.4%). With respect to the time in college, most

of the respondents had spent for 4 years (59.%) and 3 years (18.1%), the remaining had studied for 1, or 2, or more than 4 years (see Table 4)

TABLE 4
Demographic Profile of Respondents (Study 2) (N = 144)

Gender		Age	
Male	31.3	18 - 19	1.4
Female	68.8	20 - 30	95.1
Ethnicity		31 - 40	2.8
American Indian or Alaska Native	1.4	41 - 50	.7
Hawaiian or Other Pacific Islander	.0	More than 50	.0
Asian or Asian American	6.3	Years in College	
Black or African American	15.3	1 year	.7
Hispanic or Latino	10.4	2 years	.7
Non-Hispanic White	61.1	3 years	18.1
Others	5.6	4 years	59.0
		More than 4 years	21.5

Data Analysis

The analysis procedure used in Study 2 was similar to the one used in Study 1. MANOVA was used to test the effect of independent variables and their interactions on the dependent variables. A 2 (regulatory focus: promotion versus prevention) x 2 (attribute framing: hedonic versus utilitarian) between-subjects MANOVA was used to examine the effects of these main factors and their interactions on four dependent variables that constituted customer perceptions.

With respect to shoe product category, the results of MANOVA indicated that none of the main factors (regulatory focus and attribute framing) and their interaction had any significant effects [Wilks' lambda = .952, $F(4, 144) = 1.737, p > .05$; Wilks' lambda = .979, $F(4, 144) = 0.732, p > .05$; and Wilks' lambda = .982, $F(4, 144) = 0.633, p > .05$; respectively].

Regarding shampoo product category, MANOVA analysis showed that one main factor, attribute framing, had a marginally significant effect [Wilks' lambda = .938, $F(4, 144) = 2.262$, $p < .1$]. However, the other main factor, study prime, and its interaction did not have significant effects [Wilks' lambda = .987, $F(4, 144) = 0.462$, $p > .05$; and Wilks' lambda = .970, $F(4, 144) = 1.060$, $p > .05$; respectively] (see Table 5).

Overall, the findings showed that there were no significant main effects as well as the interaction effects for two product categories, shoes and shampoo (except the marginally significant effect that attribute framing (hedonic versus utilitarian) had on dependent variables for shampoo).

The ANOVA results indicated that for shoe product category, only regulatory focus had a marginally significant effect on willingness to pay [$M_{\text{PRO}} = 38.45$ vs. $M_{\text{PRE}} = 44.33$]. For shampoo product category, attribute framing had a marginally significant effect on ad attitude [$M_{\text{H}} = 3.98$ vs. $M_{\text{U}} = 4.42$], and significant effect on purchase intention [$M_{\text{H}} = 3.31$ vs. $M_{\text{U}} = 4.09$].

TABLE 5
Multivariate and Univariate F Values (Study 2)

	MANOVA F Statistic	ANOVA F Statistic			
		Brand Attitude	Ad Attitude	Purchase Intention	Willingness to Pay
Shoes Product Category					
Regulatory Focus (RF)	1.737	0.168	0.760	0.002	3.625*
Attribute framing (AF)	0.732	0.110	0.208	0.524	0.037
RF x AF	0.633	0.502	1.219	1.016	2.355
Shampoo Product Category					
Regulatory Focus (RF)	0.462	0.048	0.320	0.731	0.522
Attribute framing (AF)	2.262*	0.977	2.791*	7.546**	0.002
RF x AF	1.060	0.110	0.514	0.665	1.548

Note:

*** $p < .01$; ** $p < .05$; * $p < .1$

In MANOVA, Wilk's Lambda is used to reflect F value

Regulatory Focus and Attribute Framing

Like Study 1, the objective of this study was to test whether one regulatory focus prime (i.e. academic achievement) moderates the effects of attribute framing (hedonic versus utilitarian) on consumer perception (brand attitude, ad attitude, purchase intention and willingness to pay). This study was similar to Study 1 except only one change, i.e., instead of two manipulations, only one manipulation pertaining to academic achievement was used.

This study focused on one product category at a time. For shoe product category, four different ANOVA analyses were performed for four dependent variables: brand attitude, attitude toward the ad, purchase intention, and willingness to pay. The results for interaction effects between regulatory focus and attribute framing were similar to those of Study 1. No significant effects were found for all four dependent variables, brand attitude [$F(1,144) = 0.50, p > .05$], attitude toward the ad [$F(1, 144) = 1.22, p > .05$], purchase intention [$F(1, 144) = 1.02, p > .05$], and willingness to pay, $F(1, 144) = 2.36, p > .05$. Therefore, the results showed that H1a and H1b were not supported for shoe product category.

Similarly, for shampoo product category, the results illustrated that the interaction between regulatory focus and attribute framing did not show significant effects across all four dependent variables, brand attitude [$F(1,144) = 0.110, p > .05$], attitude toward the ad [$F(1,144) = 0.514, p > .05$], purchase intention [$F(1,144) = 0.665, p > .05$], and willingness to pay, $F(1,144) = 1.548, p > .05$. Therefore, the results showed that H1a and H1b were not supported for shampoo product category.

In summary, the results of Studies 1 and 2 suggested regulatory focused primes aimed at inducing situational regulatory focus did not work. A possible explanation could be that since these studies were done in an online environment, the respondents, students in this case, did not

take the study tasks seriously. Further, it is possible that a scenario based prime does not induce a strong regulatory orientation in online environment. Hence, it was decided to use a measurement scale to measure respondents' chronic regulatory focus and use this to test the hypothesized relations between regulatory focus, attribute framing, and risky choice framing on consumer perceptions. In the next study, risky choice framing was manipulated by national brand versus private brand.

Final Study

The purpose of this experiment was to investigate the influence of regulatory fit among three factors: regulatory focus, brand types, and attribute framing, on consumer perceptions of two products advertised in a face-to-face environment. In this final study, the regulatory focus was measured using a measurement scale.

Design

A 2 (regulatory focus: promotion versus prevention) x 2 (brand types: national versus private) x 2 (attribute framing: hedonic versus utilitarian) between-subjects factorial design was used and dependent variables chosen were the same as the previous studies.

Procedures and Participants

Undergraduate business students at a Southern state university participated in this face-to-face study for a partial course credit. A total of 430 participants completed the questionnaires. After a brief instruction, respondents completed a list of eleven questions adapted from regulatory focus questionnaires (Higgins et al. 2001). These scale items were designed to

measure respondents' chronic regulatory focus and consisted of six questions measuring their promotion orientation and five questions measuring prevention orientation (see Table 6 more details)

After answering regulatory focus questionnaires, respondents were randomly assigned to one of four ads. These ads were created based on the combination of brand types (national and private) and attribute framing (hedonic and utilitarian), i.e. private brand and hedonic attribute, private brand and utilitarian attribute, national brand and hedonic attribute, and national brand and utilitarian attribute. Each respondent was exposed to two ads of two products featuring one of attribute framings (hedonic versus utilitarian) and one of brand types (national versus private brands). A shoe ad was followed by a shampoo ad.

For shoe product category, Starter was selected for private brand and Nike for national brand. For shampoo product category, CVS was chosen for private brand while Head & Shoulders for national brand. With respect to attribute framing, hedonic attributes versus utilitarian attributes were similar to the previous studies. For instance, the advertisement featuring private brand and hedonic attribute was framed as follows

Stay One Step Ahead of Fashion. Want to be stylish, try Starter sport shoes. These shoes come in an assortment of colors to complement whatever you wear. With an attractive and stylish design, these shoes put your best foot forward. With Starter, you will feel cool.

A picture of a pair of Starter shoes and a logo were placed in the middle of the advertisement. It was easy to see several words signaling hedonic attributes, such as, fashion, stylish, colors, attractive, cool, etc. (see Appendix B, Ad 1)

On the other hand, the advertisement featuring private brand and utilitarian attribute was framed as

Gain Comfort with Durable Shoes. Want to be comfortable, try Starter sport shoes. These shoes enhance cushioning and stability, and provide maximum ventilation. With phylon midsole and rubber outsole, the shoes offer lightweight cushioning and optimal durability. With Starter, your feet are supported.

Like the previous advertisement, a picture of a pair of Starter shoes and a logo were placed in the center of the advertisement. However, several words in the advertisement were adapted from the previous stage to signal utilitarian attributes, such as, durable, comfortable, stability, ventilation, supported, etc. (see Appendix B, Ad 3)

In advertisements presenting national brand, there was only one change in the ad: private brand – Starter shoes – was replaced by Nike shoes, while all the rest was kept the same. In other words, descriptions of hedonic attributes or utilitarian attributes were similar to those used in the ads featuring private brands. A similar approach was also applied for shampoo with CVS representing private brand while Head & Shoulders presented national brand.

After each advertisement, brief explanation of national brand (versus private brand) was given, for instance, “national brand refers to the brand name of a product that is distributed nationally under a brand name owned by the large producer or manufacturer, while private brand is the brand owned the retailer who can make the brand itself or have it made by other manufacturers under the brand name of the retailer.” It was followed by short definitions of hedonic versus utilitarian attributes – the same definitions used in the selection stage. After instructional information, there were two manipulation check questions, one for brand types and the other for attribute framing. Then the participants answered all questions pertaining to dependent variables followed by a few filler questions and demographic questions.

CHAPTER 4

DATA ANALYSIS AND RESULTS

Measurement Assessment

The scale items used were first subject to the test of reliability and validity (convergent and discriminant) using Cronbach's alpha and inter item correlation (Churchill 1979). Table 6 presents the scale items and their anchors and Cronbach's alpha obtained. For regulatory focus questionnaires (Higgins, 2001), Cronbach's α for promotion and prevention focus was .59 and .80, respectively; for brand attitude, Cronbach's α for sport shoes and shampoo were .89 and .94, respectively; attitude toward the ad, Cronbach's α for sport shoes and shampoo were .89 and .91, respectively; and for purchase intention, Cronbach's α for sport shoes and shampoo were .93 and .96, respectively.

The relationship among different dependent variables for both shoe and shampoo product category was investigated using Pearson correlation coefficient. There was a strong, positive correlation among brand attitude, ad attitude, purchase intention, and willingness to pay. For instance, for shoe product category, a strong, positive correlation between brand attitude and purchase intention, $r = .59$, $n = 426$, $p < .001$, with high brand attitude associated with high purchase intention. Also, the same held true for shampoo product category, there was a strong, positive correlation between ad attitude and willingness to pay, $r = .22$, $n = 407$, $p < .001$ with high ad attitude associated with high willingness to pay (see Table 7).

The inter-item correlation matrix showed that the items are measuring the same underlying characteristics. Specifically, items that are supposed to measure the same construct are highly correlated. For instance, for shoe product category, a higher correlation is shown between RFQ1 and RFQ3 (value = .14) than between RFQ1 and RFQ2 (value = .04).

TABLE 6
Item Statistics for Key Variables

Construct	Item	Scale	Shoe Product Category			Shampoo Product Category				
			Alpha	Mean	SD	CITC*	Alpha	Mean	SD	CITC*
RFQ's Promotion Focused Items (Higgins et al. 2001)	1. Compared to most people, are you typically unable to get what you want out of life? (Reverse)	1 - Never ... 7 - Very often		4.86	1.33	0.57				
	3. How often have you accomplished things that got you "psyched" to work even harder?	1 - Never ... 7 - Very often		5.40	1.07	0.53				
	7. Do you often do well at different things that you try?	1 - Never ... 7 - Very often		5.24	1.04	0.52				
	9. When it comes to achieving things that are important to me, I find that I don't perform as well as I ideally would like to do. (Reverse)	1 - Never true ... 7 - Very often true		4.64	1.42	0.52				
	10. I feel like I have made progress toward being successful in my life.	1 - Certainly false ... 7 - Certainly true		5.58	1.05	0.51				
	11. I have found very few hobbies or activities in my life that capture my interest or motivate me to put effort into them. (Reverse)	1 - Certainly false ... 7 - Certainly true		4.63	1.71	0.59				
										The same as shoe's
RFQ's Prevention Focused Items (Higgins et al. 2001)	2. Growing up, would you ever "cross the line" by doing things that your parents would not tolerate? (Reverse)	1 - Never ... 7 - Very often		3.71	1.66	0.74				
	4. Did you get on your parents' nerves often when you were growing up? (Reverse)	1 - Never ... 7 - Very often		3.92	1.64	0.73				
	5. How often did you obey rules and regulations that were established by your parents?	1 - Never ... 7 - Very often	0.80	5.05	1.28	0.81				
	6. Growing up, did you ever act in ways that your parents thought were objectionable? (Reverse)	1 - Never ... 7 - Very often		3.85	1.45	0.74				
	8. Not being careful enough has gotten me into trouble at times. (Reverse)	1 - Never ... 7 - Very often		3.71	1.59	0.79				
Brand Attitude Lee and Aaker (2004)	1. Do you think this brand is ... ?	1 - Negative ... 7 - Positive		5.23	1.40	0.71				
	2. Do you think this brand is ... ?	1 - Unfavorable ... 7 - Favorable	0.89	4.80	1.68	0.84	0.94	5.21	1.43	0.87
		1 - Bad ... 7 - Good		4.80	1.59	0.81		4.92	1.58	0.89
Attitude toward the ad (Cesario et al. 2004)	1. Please indicate the degree to which you perceive the ad displayed above	1 - Not at all persuasive ... 7 - very much persuasive		3.50	1.36	0.83		3.91	1.31	0.85
	2. Please indicate the degree to which you perceive the ad displayed above	1 - Not at all convincing ... 7 - very much convincing		3.58	1.35	0.85		3.82	1.30	0.86
	3. Please indicate the degree to which you perceive the ad displayed above	1 - Not at all effective ... 7 - very much effective	0.89	3.66	1.42	0.83	0.91	4.01	1.33	0.84
	4. Please indicate the degree to which you perceive the ad displayed above	1 - Not at all coherent ... 7 - very much coherent		4.40	1.42	0.55		4.54	1.23	0.61
Purchase Intention (Meyers-Levy & Maheswaran, 2004)	1. Please indicate the extent to which you would consider buying the product soon	1 - Very unlikely ... 7 - Very likely)		2.72	1.73	0.87		3.18	1.83	0.93
	2. Please indicate the extent to which you would consider buying the product in the future	1 - Very unlikely ... 7 - Very likely)	0.93	3.14	1.89	0.87	0.96	3.32	1.86	0.93

CITC*: Corrected Item-Total Correlation

TABLE 7
Correlations

	1	2	3	4
Shoe Product Category				
1. Brand Attitude	0.89	0.62**	0.593**	0.521**
2. Attitude toward the Ad		0.89	0.625**	0.452**
3. Purchase Intention			0.93	0.657**
4. Willing to Pay				-
Shampoo Product Category				
1. Brand Attitude	0.94	0.665**	0.57**	0.185**
2. Attitude toward the Ad		0.91	0.603**	0.22**
3. Purchase Intention			0.96	0.22**
4. Willing to Pay				-

*Note: ** Correlation is significant at the 0.01 level (2-tailed)*
Cronbach's alphas in bold on diagonal

The reason is that RFQ1 and RFQ3 are two items that measure promotion orientation while RFQ2 is measuring prevention orientation. Likewise, BA1 has a stronger correlation with BA2 (value = .7) than with AA3 (value = .47) because BA1 and BA2 are both measuring brand attitude while AA3 is an item measuring ad attitude.

The same trend is present for shampoo product category. Particularly, a higher correlation is shown between RFQ1 and RFQ3 (value = .13) than between RFQ1 and RFQ2 (value = .04). Similarly, BA1 has a stronger correlation with BA2 (value = .84) than with AA3 (value = .56). The reasons are the same as in the case of shoe which means RFQ1 and RFQ3 are two items that measure promotion orientation while RFQ2 is measuring prevention orientation and BA1 and BA2 are both measuring brand attitude while AA3 is an item measuring ad attitude.

It's inferred from the inter-item correlation matrix that the items correlate highly with other items that are supposed to measure the same construct, but not correlate highly with other

items that are supposed to measure a different construct. Therefore, the results show the evidence of convergent and discriminant validity (Churchill 1979) (see Tables 9 and 10).

Final Study

Demographics

Of the 430 respondents, 55% were male and 45% were female. Since the sample was made of college students, the majority of respondents were aged from 20 to 30 (89.6%), followed by the group of 30 to 40 years old (5%), 18 to 19 years old (4.2%), over 40 years old (1.2%). Regarding ethnicity, most respondents were non-Hispanic white (54.4%), followed by Hispanic or Latino (18.8%), Black or African American (11.9%) and Asian or Asian American (10%), American Indian or Alaska Native (1%) and Hawaiian or Other Pacific Islander (.7%). With respect to the time in college, most of the respondents had spent for 4 years (37.2%) and 3 years (31.2%), the remaining (31.6%) had studied for 1, or 2, or more than 4 years (see Table 8).

TABLE 8
Demographic Profile of Respondents (Final Study) (N = 430)

Gender		Age	
Male	55.2	18 - 19	4.2
Female	44.8	20 - 30	89.6
		31 - 40	5.0
		41 - 50	.7
		More than 50	.5
Ethnicity		Years in College	
American Indian or Alaska Native	1.0	1 year	.9
Hawaiian or Other Pacific Islander	.7	2 years	9.8
Asian or Asian American	10.0	3 years	31.2
Black or African American	11.9	4 years	37.2
Hispanic or Latino	18.8	More than 4 years	20.9
Non-Hispanic White	54.4		
Others	3.3		

TABLE 9
Inter-Item Correlation Matrix for Shoe

	RFQ1	RFQ3	RFQ7	RFQ9	RFQ10	RFQ11	RFQ2	RFQ4	RFQ5	RFQ6	RFQ8	BA1	BA2	BA3	AA1	AA2	AA3	AA4	PI1	PI2	WP
RFQ1	1.00																				
RFQ3	0.14	1.00																			
RFQ7	0.14	0.38	1.00																		
RFQ9	0.25	0.19	0.23	1.00																	
RFQ10	0.19	0.41	0.31	0.23	1.00																
RFQ11	0.11	0.15	0.17	0.20	0.17	1.00															
RFQ2	0.04	-0.04	-0.06	-0.01	0.02	-0.02	1.00														
RFQ4	0.06	0.01	0.00	0.00	0.00	0.08	0.61	1.00													
RFQ5	-0.05	0.05	-0.02	0.01	0.09	0.01	0.40	0.41	1.00												
RFQ6	0.06	-0.01	-0.08	0.06	-0.03	0.07	0.57	0.57	0.36	1.00											
RFQ8	0.06	0.03	-0.01	0.12	-0.02	0.03	0.40	0.45	0.28	0.49	1.00										
BA1	0.04	0.07	0.08	-0.11	0.12	-0.01	0.05	0.03	0.25	0.07	0.11	1.00									
BA2	0.06	0.00	0.07	-0.06	0.05	-0.04	-0.02	0.02	0.14	0.00	0.09	0.70	1.00								
BA3	0.12	0.03	0.08	-0.02	0.06	-0.04	0.00	0.04	0.11	0.01	0.07	0.65	0.82	1.00							
AA1	0.02	0.06	-0.01	-0.05	-0.02	-0.03	-0.03	0.00	0.06	-0.06	-0.02	0.46	0.53	0.49	1.00						
AA2	-0.03	-0.01	-0.03	-0.08	-0.07	-0.06	-0.04	0.00	0.05	-0.07	0.00	0.45	0.53	0.50	0.84	1.00					
AA3	0.02	0.01	-0.03	-0.06	-0.03	-0.04	-0.07	0.00	0.04	-0.09	-0.03	0.47	0.57	0.53	0.82	0.82	1.00				
AA4	-0.01	0.06	-0.01	-0.11	-0.03	0.00	-0.07	-0.09	0.05	-0.14	0.00	0.41	0.46	0.40	0.50	0.53	0.53	1.00			
PI1	-0.02	0.02	0.02	-0.05	0.05	-0.07	-0.03	0.00	-0.01	-0.01	0.01	0.44	0.56	0.50	0.60	0.60	0.62	0.29	1.00		
PI2	0.01	0.02	0.03	-0.04	0.07	-0.05	0.00	0.04	0.01	0.00	0.01	0.47	0.58	0.55	0.59	0.59	0.60	0.36	0.87	1.00	
WP	0.02	-0.04	0.05	-0.03	0.07	-0.01	-0.01	0.02	0.02	0.02	-0.03	0.43	0.51	0.46	0.43	0.45	0.46	0.26	0.60	0.65	1.00

Note: RFQ: Regulatory Focus Questionnaire; BA: Brand Attitude; AA: Ad Attitude; PI: Purchase Intention; WP: Willingness to Pay

TABLE 10
Inter-Item Correlation Matrix for Shampoo

	RFQ1	RFQ3	RFQ7	RFQ9	RFQ10	RFQ11	RFQ2	RFQ4	RFQ5	RFQ6	RFQ8	BA1	BA2	BA3	AA1	AA2	AA3	AA4	PI1	PI2	WP	
RFQ1	1.00																					
RFQ3	0.13	1.00																				
RFQ7	0.13	0.37	1.00																			
RFQ9	0.26	0.19	0.25	1.00																		
RFQ10	0.20	0.39	0.29	0.23	1.00																	
RFQ11	0.10	0.13	0.16	0.21	0.15	1.00																
RFQ2	0.04	-0.06	-0.05	-0.02	0.03	-0.01	1.00															
RFQ4	0.06	-0.02	0.00	0.00	0.01	0.09	0.62	1.00														
RFQ5	-0.04	0.07	0.01	-0.01	0.11	0.02	0.39	0.39	1.00													
RFQ6	0.06	-0.03	-0.08	0.06	-0.03	0.07	0.56	0.56	0.35	1.00												
RFQ8	0.05	0.01	0.00	0.11	-0.02	0.03	0.39	0.43	0.27	0.48	1.00											
BA1	0.07	0.15	0.08	0.05	0.08	-0.08	0.10	0.07	0.12	0.01	0.04	1.00										
BA2	0.03	0.12	0.05	0.03	0.07	-0.09	0.10	0.07	0.12	0.02	0.06	0.84	1.00									
BA3	-0.01	0.15	0.06	0.05	0.08	-0.07	0.08	0.06	0.12	0.00	0.02	0.83	0.87	1.00								
AA1	-0.07	0.03	-0.06	-0.01	0.02	-0.10	0.13	0.14	0.16	0.05	0.03	0.54	0.61	0.60	1.00							
AA2	-0.03	0.05	-0.03	0.03	0.04	-0.07	0.14	0.12	0.13	0.05	0.00	0.54	0.58	0.60	0.86	1.00						
AA3	0.00	0.04	-0.01	0.05	0.05	-0.11	0.12	0.10	0.09	-0.01	0.04	0.56	0.62	0.60	0.80	0.82	1.00					
AA4	0.00	0.04	0.04	-0.03	0.07	-0.10	0.01	-0.04	0.10	-0.10	0.00	0.46	0.43	0.49	0.56	0.57	0.61	1.00				
PI1	-0.06	0.08	0.03	0.05	0.07	-0.08	0.04	0.04	0.03	-0.03	0.02	0.45	0.55	0.54	0.59	0.56	0.57	0.34	1.00			
PI2	-0.07	0.07	0.02	0.05	0.09	-0.04	0.06	0.04	0.02	-0.03	0.00	0.47	0.56	0.55	0.57	0.57	0.57	0.37	0.92	1.00		
WP	-0.01	-0.13	-0.06	-0.01	0.03	-0.04	-0.01	0.00	-0.03	-0.01	0.01	0.17	0.18	0.18	0.21	0.20	0.18	0.18	0.20	0.23	1.00	

Note: RFQ: Regulatory Focus Questionnaire; BA: Brand Attitude; AA: Ad Attitude; PI: Purchase Intention; WP: Willingness to Pay

Manipulation Check

Manipulation checks were performed to make sure that two manipulations, the first for brand types (national versus private brands) and the second for attribute framings (hedonic versus utilitarian attributes) worked the way they were designed to be. With the first manipulation check for brand types, after being exposed to the ads of two products: sport shoes and shampoo, participants were given a short instruction about differences between national brand and private brand as follows

National brand refers to the brand name of a product that is distributed nationally under a brand name owned by the large producer or manufacturer, while private brand is the brand owned the retailer who can make the brand itself or have it made by other manufacturers under the brand name of the retailer.

After reading the instruction, they were asked by a question “The brand you have just seen in the ad is mostly” with 1 representing national brand and 2 private brand. The Chi-square test for independence was used to determine whether two categorical variables, brand type prime and manipulation check for brand type, were related. For shoe product category, the numbers in the crosstabulation for shoe showed that after exposed to a national brand, 95.3% of respondents indicated that brand was national, while 4.7% indicated that brand was private. On the other hand, after exposed to a private brand, 68.3% of respondents indicated that brand was national, while 31.7% indicated that brand was private. The finding meant that the ad promoting the national brand truly reflected the national brand while the ad promoting the private brand was a little confused (see Table 11). [The results of the Chi Square test indicated that significant association between brand types and manipulation check for shoe product, $\chi^2(1, n = 408) = 45.84, p = 0.00, \phi = .34$].

TABLE 11
BrandTypePrime * BrandTypeCheck Crosstabulation for Shoe

			BrandTypeCheck		
			1 National	2 Private	Total
BrandTypePrime	1.00	Count	181	9	190
	National	% within BrandTypePrime	95.3%	4.7%	100.0%
		% within BrandTypeCheck	54.8%	11.5%	46.6%
		% of Total	44.4%	2.2%	46.6%
	2.00	Count	149	69	218
	Private	% within BrandTypePrime	68.3%	31.7%	100.0%
% within BrandTypeCheck		45.2%	88.5%	53.4%	
% of Total		36.5%	16.9%	53.4%	
Total	Count	330	78	408	
	% within BrandTypePrime	80.9%	19.1%	100.0%	
	% within BrandTypeCheck	100.0%	100.0%	100.0%	
	% of Total	80.9%	19.1%	100.0%	

For shampoo product category, the chi-square test indicated the existence of association between brand types and manipulation check for shampoo product [$\chi^2(1, n = 397) = 142.60, p = 0.00, \phi = .60$] (see Table 12). The numbers of the crosstabulation for shampoo showed that after exposed to a national brand, 86.5% of respondents indicated that brand was national, while 13.5% indicated that brand was private. On the other hand, after exposed to a private brand, 26.3% of respondents indicated that brand was national, while 73.7% indicated that brand was private. The finding meant that the ads promoting the national brand and the private brand worked effectively.

Therefore, the results showed that the first manipulation check for both shoe and shampoo was indeed successful in which the manipulation effect was stronger for shampoo than shoes.

TABLE 12
BrandTypePrime * BrandTypeCheck Crosstabulation for Shampoo

			BrandTypeCheck			
			1 National	2 Private	Total	
BrandTypePrime	1.00	Count	166	26	192	
		National	% within BrandTypePrime	86.5%	13.5%	100.0%
			% within BrandTypeCheck	75.5%	14.7%	48.4%
		% of Total	41.8%	6.5%	48.4%	
	2.00	Count	54	151	205	
		Private	% within BrandTypePrime	26.3%	73.7%	100.0%
			% within BrandTypeCheck	24.5%	85.3%	51.6%
		% of Total	13.6%	38.0%	51.6%	
	Total		Count	220	177	397
		% within BrandTypePrime	55.4%	44.6%	100.0%	
		% within BrandTypeCheck	100.0%	100.0%	100.0%	
		% of Total	55.4%	44.6%	100.0%	

The second manipulation check was done for attribute framings (hedonic versus utilitarian). After reading the definition of hedonic versus utilitarian attributes which were borrowed from existing literature (Leclerc et al. 1994; Dhar and Wertenbroch 2000), the respondents answered a single question “please indicate the degree to which you perceive the ad displayed above using the scale below” on a 7 point semantic differential scale, anchored by 1 as utilitarian and 7 as hedonic. A one-way between groups analysis was conducted to test if the perception about the ad matched the attribute featured in the ad.

For shoe products, the results illustrated that there was a statistical difference between the groups exposed to the hedonic and utilitarian ad [$F(1, 404) = 59.75, p < .001$]. The mean scores for the group exposed to the hedonic featured ad ($M_H = 4.16, SD = 1.86$) was significantly different from the utilitarian group ($M_U = 2.83, SD = 1.61$).

TABLE 13
Manipulation Check on Attribute Framings and Brand Types

		Mean	SD	F value
Attribute Framings				
Shoe	Hedonic	4.16	1.86	59.76***
	Utilitarian	2.83	1.61	
Shampoo	Hedonic	4.36	1.74	30.99***
	Utilitarian	3.36	1.82	

*Note: *** $p < .01$*

The second manipulation check was also successful for shampoo ads [$F(1, 393) = 30.99$, $p < .001$]. The mean scores for the group exposed to the hedonic featured ad ($M_H = 4.36$, $SD = 1.74$) was significantly different from the utilitarian group ($M_U = 3.36$, $SD = 1.82$). Together, these meant that the manipulation check for the ads promoting hedonic versus utilitarian attributes of sport shoes and shampoo were indeed successful.

Data Analysis

MANOVA was used to get an overview of how independent variables and their interactions affect several dependent variables. A 2 (regulatory focus: promotion versus prevention) x 2 (attribute framing: hedonic versus utilitarian) x 2 (brand types: national versus private) between-subjects design was used to examine the effects of these three main factors (regulatory focus, brand type, and attribute framing) and their interactions (two-way and three-way) on four dependent variables that constituted customer perceptions. The results of MANOVA and ANOVA were presented in Table 14.

For shoe product category, the results of MANOVA indicated that two main factors, brand type [$Wilks' \lambda = .58$, $F(4, 398) = 73.67$, $p < .001$], and attribute framing [$Wilks'$

lambda = .97, $F(4, 398) = 3.54, p < .01$], had significant effects while regulatory focus did not yield a significant main effect, [Wilks' lambda = .01, $F(4, 398) = .49, p > .05$].

TABLE 14
Multivariate and Univariate F Values (Final Study) (N = 430)

	MANOVA F Statistic	ANOVA F Statistic			
		Brand Attitude	Ad Attitude	Purchase Intention	Willingness to Pay
Shoes Product Category					
Regulatory focus (RF)	0.49	0.01	0.37	0.11	1.04
Brand type (BT)	73.67***	132.33***	45.56***	133.16***	229.79***
Attribute framing (AF)	3.54***	2.88*	13.40***	1.26	1.07
RF x AF (H1)	0.22	0.62	0.28	1.45	0.40
RF x BT (H2)	3.83***	9.44***	5.53**	12.57***	7.21***
BT x AF (H3)	0.39	0.64	0.02	0.02	0.04
RF x AF x BT (H4)	0.80	2.00	1.18	0.00	0.00
Shampoo Product Category					
Regulatory focus (RF)	1.47	0.03	1.24	0.82	0.21
Brand type (BT)	24.89***	65.99***	43.58***	70.00***	11.23***
Attribute framing (AF)	2.42**	1.98	4.03**	7.45***	3.93**
RF x AF (H1)	2.74**	0.00	4.64**	5.93**	0.00
RF x BT (H2)	1.06	0.75	1.14	0.00	1.54
BT x AF (H3)	0.90	0.01	0.79	1.71	0.14
RF x AF x BT (H4)	0.97	0.01	0.13	0.91	0.11

Note:

*** $p < .01$; ** $p < .05$; * $p < .1$

In MANOVA, Wilk's Lambda is used to reflect F value

Only a two-way interaction between regulatory focus and brand type was statistically significant, [Wilks' lambda = .96, $F(4, 398) = 3.83, p < .01$]. All other interaction effects were not significant [for instance, regulatory focus x attribute framing -- Wilks' lambda = .10, $F(4, 398) = .22, p > .05$, brand type x attribute framing -- Wilks' lambda = .10, $F(4, 398) = .39, p > .05$, and regulatory focus x attribute framing x brand type -- Wilks' lambda = .99, $F(4, 398) = .80, p > .05$].

For shampoo product category, MANOVA provided similar results as far as main effect go, but different results for interaction effects. Two main factors, brand type [Wilks' lambda = .80, $F(4, 395) = 24.89, p < .001$], and attribute framing [Wilks' lambda = .98, $F(4, 395) = 2.42, p$

< .05] had significant effects while regulatory focus did not yield a significant effect [Wilks' lambda = .99, $F(4, 395) = 1.47$, $p > .05$].

Once again, only a two-way interaction between regulatory focus and attribute framing was statistically significant [Wilks' lambda = .97, $F(4, 395) = 2.74$, $p < .05$]. Other interactions were not significant [regulatory focus x brand type -- Wilks' lambda = .99, $F(4, 395) = 1.06$, $p > .05$; brand type x attribute framing -- Wilks' lambda = .99, $F(4, 395) = .90$, $p > .05$; and regulatory focus x attribute framing x brand type -- Wilks' lambda = .99, $F(4, 395) = .971$, $p > .05$]. One thing worth noting, however, is the interaction between regulatory focus and attribute framing was statistically significant for shampoo product category while the interaction between regulatory focus and brand type was statistically significant for shoe product category.

Test of Hypotheses

Regulatory Focus and Attribute Framing

This is to test H1 which proposes that people's regulatory focus (promotion versus prevention) moderates the effects of attribute framing (hedonic versus utilitarian) on consumer perceptions (brand attitude, ad attitude, purchase intention and willingness to pay).

The results showed that the interaction effects between regulatory focus (promotion and prevention) and attribute framing (hedonic and utilitarian) were not significant across four dependent variables. Therefore, for shoe product category, H1a and H1b were not supported.

For shampoo product category, among four dependent variables, attitude toward the ad [$F(1,427) = 4.64$, $p < .05$], and purchase intention [$F(1,427) = 5.93$, $p < .05$] illustrated significant effects of interaction between regulatory focus and attribute framing while brand attitude [$F(1,427) = 0.00$, $p > .05$], and willingness to pay [$F(1,427) = 0.00$, $p > .05$] did not show significant effects.

Follow-up contrasts were employed to shed light on consumers perception among different chronic regulatory foci and indicated that people with promotion focus had significant lower perceptions when exposed to hedonic attributes in the advertisements than when exposed to utilitarian attributes for attitude toward the ad ($M_H = 3.829$, $SD = 1.159$ vs. $M_U = 4.223$, $SD = 1.226$, $F(1,214) = 5.777$, $p < .05$); purchase intention ($M_H = 2.967$, $SD = 1.835$ vs. $M_U = 3.739$, $SD = 1.9$, $F(1,213) = 9.007$, $p < .05$); but not significant for brand attitude ($M_H = 4.992$, $SD = 1.521$ vs. $M_U = 5.121$, $SD = 1.581$, $F(1,212) = .363$, $p > .05$); and willingness to pay ($M_H = 4.851$, $SD = 3.79$ vs. $M_U = 5.868$, $SD = 6.136$, $F(1,207) = 2.174$, $p > .05$) (see Table 15 and Figures 3-6). Although consumer perceptions tend to be lower when customers were exposed to hedonic attributes than when exposed to utilitarian attributes, effects were significant for attitude toward the ad and purchase intention, but not for brand attitude and willingness to pay (see Figures 3 - 6 for details). The findings also showed that while H1a was not supported, the direction was opposite to what was hypothesized.

On the other hand, people with prevention focus, the effects of attribute framing were not significant for brand attitude [$F(1,210) = 1.265$, $p > .05$], attitude toward the ad [$F(1,211) = .001$, $p > .05$], purchase intention [$F(1,211) = .137$, $p > .05$], and willingness to pay [$F(1,199) = 1.570$, $p > .05$]. Therefore, because of lack of significance, H1b was not supported.

TABLE 15
Results of Testing Hypotheses

H1a (Promotion)								
	Shoe				Shampoo			
	F	p	MH	MU	F	p	MH	MU
BA	0.53	0.47	4.80	4.95	0.36	0.55	4.99	5.12
AA	5.04	0.03	3.58	3.96	5.78	0.02	3.83	4.22
PI	0.01	0.92	2.89	2.91	9.01	0.00	2.97	3.74
WP	0.08	0.78	42.86	44.03	2.17	0.14	4.85	5.87

H1b (Prevention)								
	Shoe				Shampoo			
	F	p	MH	MU	F	p	MH	MU
BA	2.30	0.13	4.81	5.10	1.27	0.26	4.98	5.18
AA	8.40	0.00	3.51	3.97	0.00	0.98	4.14	4.15
PI	2.34	0.13	2.76	3.10	0.14	0.71	3.16	3.25
WP	0.96	0.33	40.36	44.43	1.57	0.21	5.06	6.09

H2a (Promotion)								
	Shoe				Shampoo			
	F	p	MN	MP	F	p	MN	MP
BA	112.77	0.00	5.84	4.10	34.00	0.00	5.63	4.49
AA	40.19	0.00	4.33	3.35	25.34	0.00	4.40	3.62
PI	119.11	0.00	4.12	1.88	30.10	0.00	3.99	2.65
WP	194.78	0.00	66.45	24.43	2.49	0.12	5.82	4.74

H2b (Prevention)								
	Shoe				Shampoo			
	F	p	MN	MP	F	p	MN	MP
BA	37.01	0.00	5.52	4.47	33.62	0.00	5.57	4.64
AA	10.25	0.00	4.03	3.53	15.67	0.00	4.44	3.87
PI	32.29	0.00	3.57	2.38	36.51	0.00	3.89	2.56
WP	68.91	0.00	58.01	28.56	9.32	0.00	6.88	4.42

H3a (National Brand)								
	Shoe				Shampoo			
	F	p	MH	MU	F	p	MH	MU
BA	3.64	0.06	5.50	5.81	0.83	0.36	5.53	5.69
AA	5.96	0.02	3.95	4.35	0.67	0.41	4.36	4.48
PI	0.64	0.42	3.72	3.92	0.70	0.40	3.84	4.05
WP	0.43	0.51	60.55	63.37	2.73	0.10	5.70	7.07

H3b (Private Brand)								
	Shoe				Shampoo			
	F	p	MH	MU	F	p	MH	MU
BA	0.45	0.50	4.21	4.33	1.19	0.28	4.46	4.66
AA	7.94	0.01	3.20	3.62	4.58	0.03	3.58	3.91
PI	0.63	0.43	2.04	2.19	9.40	0.00	2.29	2.94
WP	0.72	0.40	25.32	27.27	1.56	0.21	4.19	5.00

H4a (Promotion x National)								
	Shoe				Shampoo			
	F	p	MH	MU	F	p	MH	MU
BA	0.03	0.87	5.82	5.86	0.46	0.50	5.56	5.75
AA	0.82	0.37	4.21	4.42	4.93	0.03	4.21	4.68
PI	0.00	0.97	4.11	4.12	4.64	0.03	3.67	4.45
WP	0.06	0.81	65.71	67.03	2.65	0.11	5.39	6.47

H4b (Prevention x Private)								
	Shoe				Shampoo			
	F	p	MH	MU	F	p	MH	MU
BA	0.02	0.90	4.45	4.48	0.73	0.39	4.53	4.73
AA	2.80	0.10	3.33	3.69	0.99	0.32	3.76	3.97
PI	1.41	0.24	2.19	2.52	2.20	0.14	2.34	2.76
WP	0.98	0.32	26.66	29.98	1.54	0.22	4.06	4.72

Note: MH, MU, MN, MP are means of dependent variables (DVs) associated with hedonic - utilitarian attributes, national - private brands, respectively; BA: brand attitude; AA: ad attitude; PI: purchase intention; WP: willingness to pay

FIGURE 3
Regulatory Focus and Attribute Framing Interaction Effect on Brand Attitude for Shampoo

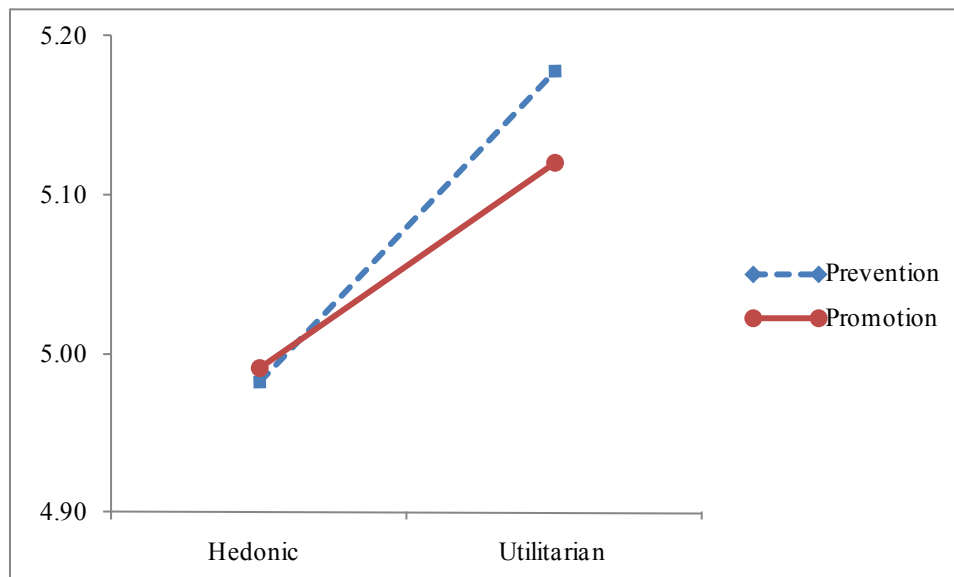


FIGURE 4
Regulatory Focus and Attribute Framing Interaction Effect on Ad Attitude for Shampoo

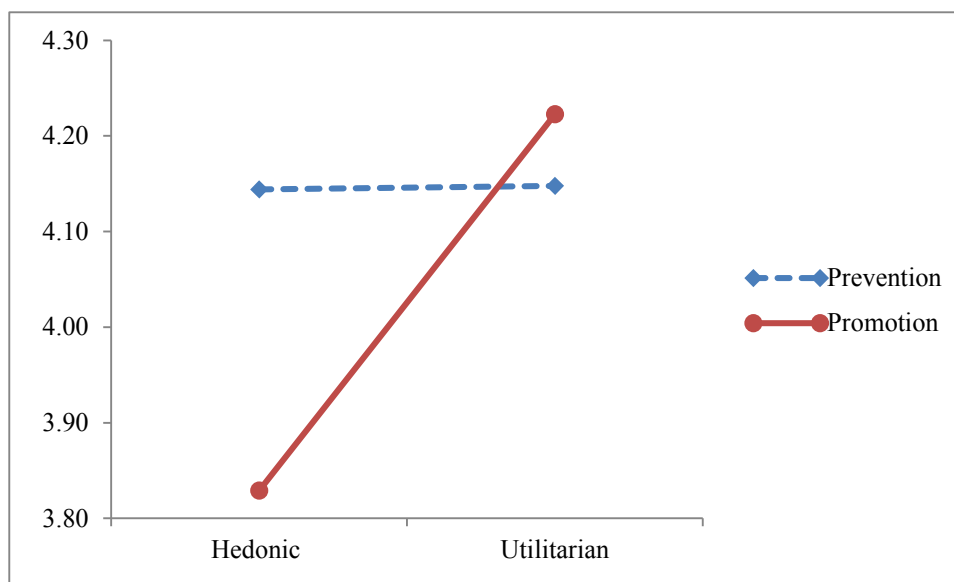


FIGURE 5
Regulatory Focus and Attribute Framing Interaction Effect on Purchase Intention for Shampoo

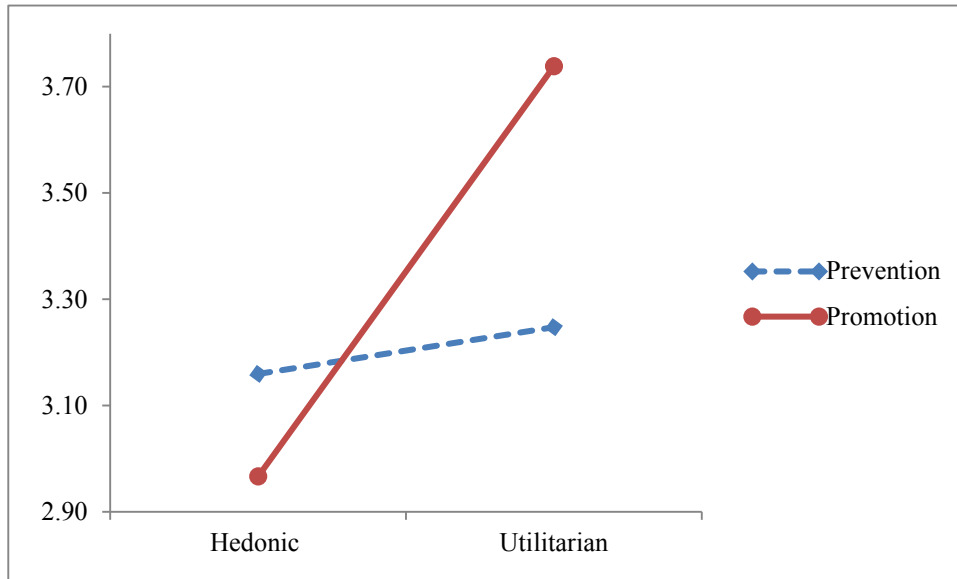
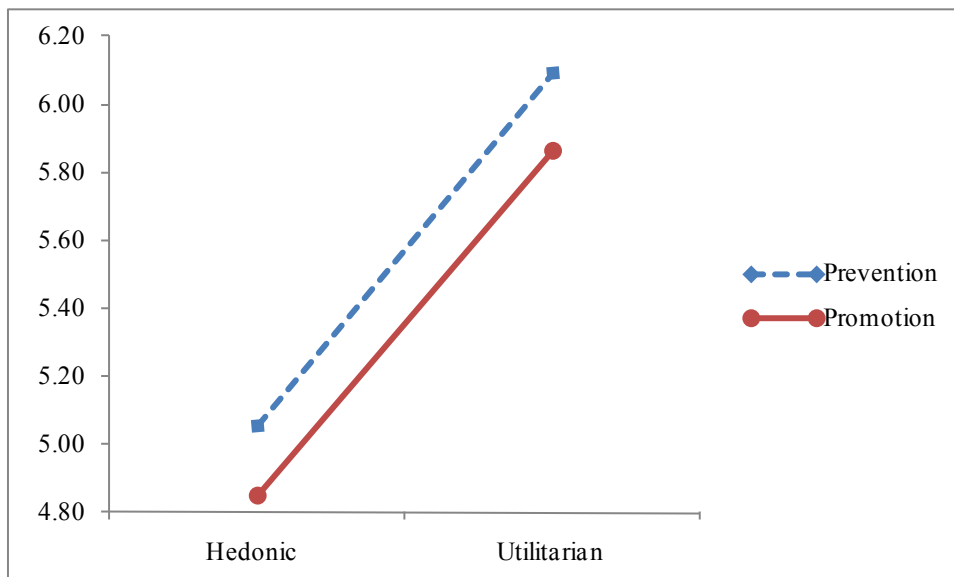


FIGURE 6
Regulatory Focus and Attribute Framing Interaction Effect on Willingness to Pay for Shampoo



Regulatory Focus and Brand Type

This is to test H2 which proposes that people's regulatory focus moderates the impacts that brand type has on consumer perceptions. For shoe product category, the univariate analysis for brand attitude, attitude toward the ad, purchase intention, and willingness to pay was used and the results showed significant interaction effects between regulatory focus (promotion and prevention) and brand types (national and private) across four dependent variables. Particularly, brand attitude, $F(1,427) = 9.44, p < .01$, attitude toward the ad, $F(1,429) = 5.53, p < .05$, purchase intention, $F(1,428) = 12.55, p < .001$, and willingness to pay, $F(1,409) = 7.21, p < .01$.

Follow-up contrasts were employed to shed light on consumers perception among different chronic groups of people and indicated that people with promotion focus had significantly higher perceptions when exposed to national brands in the advertisements than when exposed to private brands for brand attitude ($M_N = 5.842, SD = 1.086$ vs. $M_P = 4.096, SD = 1.286, F(1,214) = 112.774, p < .001$); attitude toward the ad ($M_N = 4.334, SD = 1.117$ vs. $M_P = 3.345, SD = 1.16, F(1,215) = 40.192, p < .001$); purchase intention ($M_N = 4.117, SD = 1.761$ vs. $M_P = 1.880, SD = 1.232, F(1,214) = 119.114, p < .001$); and willingness to pay ($M_N = 66.452, SD = 26.474$ vs. $M_P = 24.431, SD = 16.415, F(1,206) = 194.777, p < .001$). Therefore, H2a was supported across all four dependent variables in shoe product category.

Surprisingly, in contrast to H2b, for people with prevention focus, the results show a similar trend. People with prevention focus had significantly higher perceptions when exposed to national brands in the advertisements than when exposed to private brands for brand attitude, specifically, brand attitude ($M_N = 5.52, SD = 1.16$ vs. $M_P = 4.47, SD = 1.33, F(1,211) = 37.01, p < .001$); attitude toward the ad ($M_N = 4.03, SD = 1.15$ vs. $M_P = 3.56, SD = 1.12, F(1,212) = 10.26, p < .01$); purchase intention ($M_N = 3.57, SD = 1.59$ vs. $M_P = 2.38, SD = 1.45, F(1,212) =$

32.29, $p < .001$); and willingness to pay ($M_N = 58.00$, $SD = 31.73$ vs. $M_P = 28.56$, $SD = 17.06$, $F(1,201) = 68.91$, $p < .001$ (see Figures 7 – 10).

The results demonstrated that although the effects of brand types were significant for prevention oriented people, the direction of effects was opposite to H2b, therefore H2b was not supported. Taken together, the findings indicated that customers perceived more positively toward national brand than private brand, no matter whether they were promotion or prevention oriented. Therefore, for shoe product category, H2a was supported while H2b was not.

FIGURE 7
Regulatory Focus and Brand Type Interaction Effect on Brand Attitude for Shoe

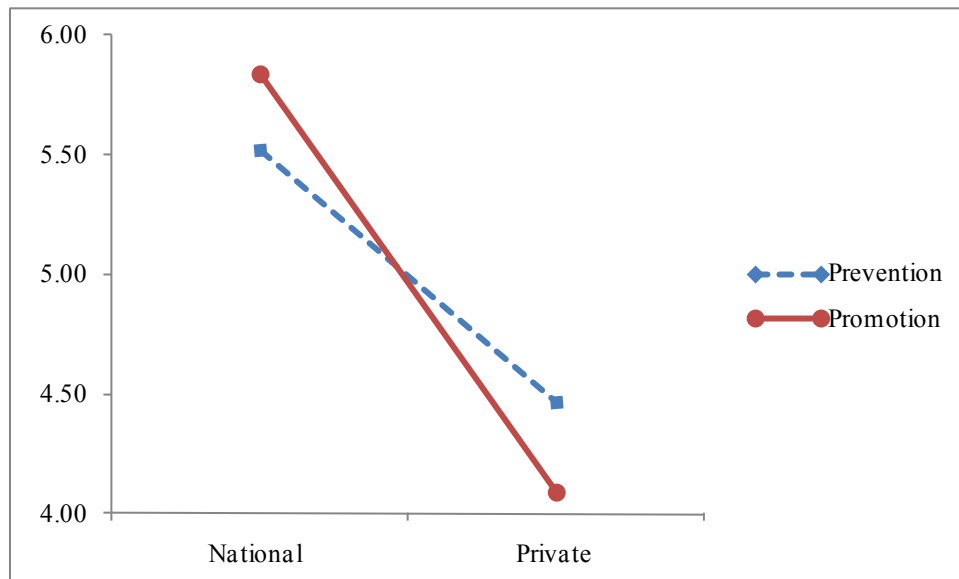


FIGURE 8
Regulatory Focus and Brand Type Interaction Effect on Ad Attitude for Shoe

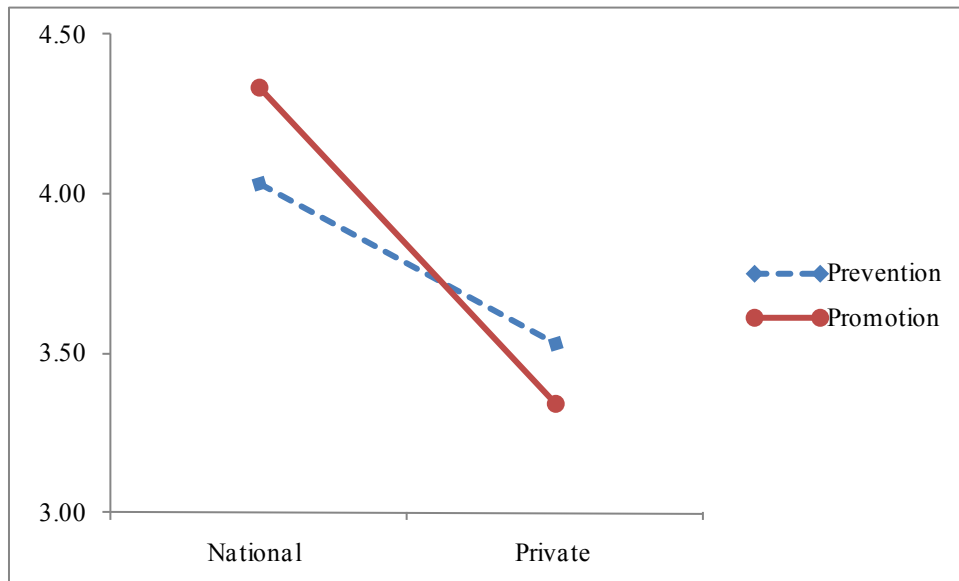


FIGURE 9
Regulatory Focus and Brand Type Interaction Effect on Purchase Intention for Shoe

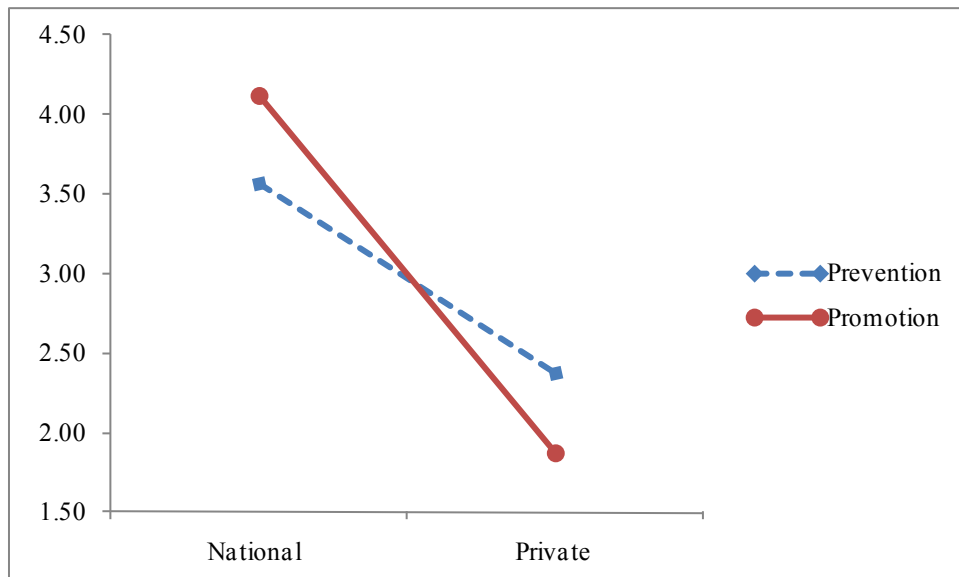
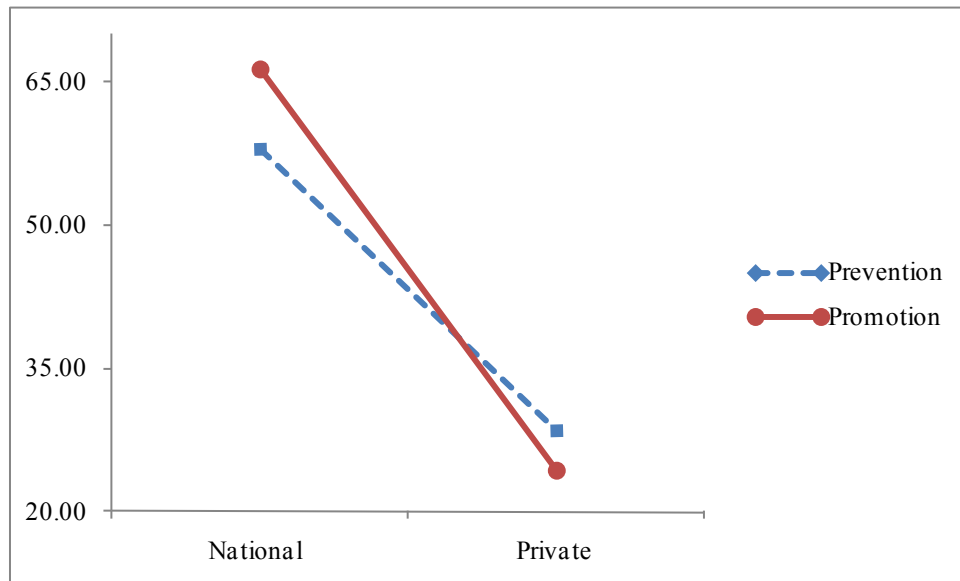


FIGURE 10
Regulatory Focus and Brand Type Interaction Effect on Willingness to Pay for Shoe



For shampoo product category, the univariate analysis for brand attitude, attitude toward the ad, purchase intention, and willingness to pay was applied and the results showed that interaction effects between regulatory focus (promotion and prevention) and brand types (national and private) were not significant across four dependent variables. Therefore, H2a and H2b were not supported for shampoo product category.

Brand Type and Attribute Framing

This is to test H3 which proposes that there is an interaction effect between brand type and attribute framing on consumer perception. Particularly, customers feel an ad more persuasive when they are exposed to a national brand in an ad featuring hedonic attributes than in an ad featuring utilitarian attributes (H3a) while they feel an ad more persuasive when they are

exposed to a private brand in an ad featuring utilitarian attributes than in an ad featuring hedonic attributes (H3b).

The findings revealed that the interaction effects between brand type and attribute framing were not significant for both shoe and shampoo product category. Therefore, H3a and H3b were not supported for both product categories.

Regulatory Focus, Brand Type, and Attribute Framings

This was to test whether three-way interactions among people's regulatory focus, brand types, attribute framing had significant impact on consumer perceptions. Particularly, promotion oriented customers feel an ad more persuasive when they see a national brand in the ad featuring hedonic attributes than when they see a national brand in the ad featuring utilitarian attributes (H4a) while prevention oriented customers feel an ad more persuasive when they see a private brand in the ad featuring utilitarian attributes than when they see a private brand in the ad featuring hedonic attributes.

For shoe product category, the findings revealed that for promotion oriented people, their perceptions were not significantly different, no matter when they saw a national brand in the ad featuring hedonic attributes or in an ad featuring utilitarian. The same hold true for prevention oriented people, their perceptions were not significantly different, no matter whether they saw a private brand in the ad featuring utilitarian attributes or in an ad hedonic attributes. Therefore, H4a and H4b were not supported for shoe product category.

For shampoo product category, the findings for shampoo product category revealed that for promotion oriented people, their perceptions were not significantly different, no matter when they saw a national brand in the ad featuring hedonic attributes or in an ad featuring utilitarian. The same hold true for prevention oriented people, their perceptions were not significantly

different, no matter when they saw a private brand in the ad featuring utilitarian attributes or in an ad hedonic attributes. Therefore, H4a and H4b were not supported for shampoo product category. All findings were summarized in Table 16.

Post-Hoc Analysis

To get better insights into the finer nuances of the results, follow-up contrasts were also used for non-significant effects. The results are next presented in the order of hypotheses number.

H1: The results demonstrate that there are no significant interaction effects between regulatory focus and attribute framing (H1) for shoe product category. Follow up contrasts indicate that promotion oriented customers feel an ad to be more persuasive (only for ad attitude as dependent variable) when it features utilitarian attributes than hedonic attributes which is opposite to the effect direction hypothesized in H1a (therefore H1a is not supported) while prevention oriented customers feel an ad to be more persuasive (only for ad attitude as dependent variable) when it features utilitarian attributes than hedonic attributes, therefore H1b is partially supported for shoe.

For shampoo product category, the results demonstrate that there are significant interaction effects between regulatory focus and attribute framing (H1). Follow up contrasts indicate that promotion oriented customers feel an ad to be more persuasive (for both ad attitude and purchase intention as independent variables) when it features utilitarian attributes than hedonic attributes which is opposite to the effect direction in H1a (therefore H1a is not supported for shampoo) while no significant effects are found for prevention oriented people, therefore H1b is not supported for shampoo. It seems that, in general, irrespective of the regulatory focus,

respondents feel more positive about ads featuring utilitarian attributes, than hedonic attributes (see Table 16 for details).

H2: The results demonstrate that there are significant interaction effects between regulatory focus and brand type (H2) for shoe product category. Follow up contrasts indicate that promotion oriented customers feel an ad to be more persuasive (measured by all dependent variables) when it promotes a national brand than a private brand (H2a is supported) while prevention oriented customers feel an ad to be more persuasive (measured by all dependent variables) when it promotes a national brand than a private brand which is opposite to the direction proposed in H2b, therefore H2b is not supported for shoe.

For shampoo product category, the results demonstrate that there are no significant interaction effects between regulatory focus and brand type (H2) . Follow up contrasts indicate that promotion oriented customers feel an ad to be more persuasive when it promotes a national brand than a private brand (H2a is supported) while prevention oriented customers feel an ad to be more persuasive (for all dependent variables) when it promotes a national brand than a private brand which is opposite to the direction proposed in H2b, therefore H2b is not supported for shampoo. In summary, in general, irrespective of the regulatory focus, respondents feel more positively towards national brands.

TABLE 16
Hypotheses Confirmation

Hypotheses	Shoe	Shampoo
H1: Customers feel an ad is more persuasive when attribute framings featured in an ad is compatible with their regulatory focus, such that	non	<u>sig</u>
H1a: Promotion oriented customers feel an ad to be more persuasive when it features hedonic attributes than utilitarian attributes.	<u>r</u>	<u>r</u>
H1b: Prevention oriented customers feel an ad to be more persuasive when it features utilitarian attributes than hedonic attributes.	<u>s</u>	n
H2: Customers feel an ad is more persuasive when a brand type in an ad is compatible with their regulatory focus, such that	sig	non
H2a: Promotion oriented customers feel an ad to be more persuasive when it promotes a national brand than a private brand.	s	<u>s</u>
H2b: Prevention oriented customers feel an ad to be more persuasive when it promotes a private brand than a national brand.	r	r
H3: Customers feel an ad is more persuasive when brand types in an ad are compatible with attribute framings emphasized in the ad, such that	non	non
H3a: Customers feel an ad to be more persuasive when it promotes a national brand featuring hedonic attributes than utilitarian attributes.	<u>r</u>	n
H3b: Customers feel an ad to be more persuasive when it promotes a private brand featuring utilitarian attributes than hedonic attributes.	<u>s</u>	<u>s</u>
H4: Customers feel an ad is more persuasive when brand types and attribute framings emphasized in an ad are consistent with their regulatory focus, such that	non	non
H4a: Promotion oriented customers feel an ad more persuasive when they see a national brand in the ad featuring hedonic attributes than when they see a national brand in the ad featuring utilitarian attributes	n	<u>r</u>
H4b: Prevention oriented customers feel an ad more persuasive when they see a private brand in the ad featuring utilitarian attributes than when they see a private brand in the ad featuring hedonic attributes	<u>s</u>	n

Note:

- sig: significant interaction effects appear on all dependent variables (DVs); non: no significant interaction;
- s: supported (independent variables (IVs) have significant effects on dependent variables (DVs)); n: not supported; r: reverse effects (directions of effects on DVs are opposite to those of hypotheses).
- underlined signs: significant effects on some (not all) DVs (i.e. s); non-underlined signs: significant effects on all DVs (i.e. s)

H3: The results demonstrate that there are no significant interaction effects between attribute framing and brand type (H3) for shoe product category. Follow up contrasts indicate that customers feel an ad to be more persuasive (for brand attitude and ad attitude as dependent variables) when it promotes a national brand featuring utilitarian attributes than hedonic attributes which is opposite to the effect direction hypothesized in H3a (therefore H3a is not supported) while customers feel an ad to be more persuasive (for ad attitude as DV) when it promotes a private brand featuring utilitarian attributes than hedonic attributes, therefore H3b is partially supported for shoe.

For shampoo product category, the results demonstrate that there are no significant interaction effects between attribute framing and brand type (H3). Follow up contrasts indicate that customers do not feel an ad to be more persuasive when it promotes a national brand featuring hedonic attributes than utilitarian attributes. Therefore, H3a is not supported for shampoo. However, customers feel an ad to be more persuasive (for ad attitude and purchase intention as DV) when it promotes a private brand featuring utilitarian attributes than hedonic attributes. Therefore H3b is partially supported for shampoo. In summary, ads featuring utilitarian attributes seem to be seen in a more favorable light than the ones promoting hedonic attributes, irrespective of the type of brand.

H4: The results demonstrate that there are no significant interaction effects among regulatory focus, attribute framing and brand type (H4) for shoe product category. Follow up contrasts indicate that promotion oriented customers do not feel an ad more persuasive when they see a national brand in the ad featuring hedonic attributes than when they see a national brand in the ad featuring utilitarian attributes, therefore H4a is not supported for shoe. However, prevention oriented customers feel an ad more persuasive (for ad attitude as DV) when they see a

private brand in the ad featuring utilitarian attributes than when they see a private brand in the ad featuring hedonic attributes, therefore H4b is partially supported for shoe.

For shampoo product category, the results do not show significant interaction effects among regulatory focus, attribute framing and brand type (H4). Follow up contrasts indicate that promotion oriented customers feel an ad more persuasive (for ad attitude and purchase intention as DV) when they see a national brand in the ad featuring utilitarian attributes than when they see a national brand in the ad featuring hedonic attributes which is opposite to the effect direction in H4a, therefore H4a is not supported for shampoo. However, prevention oriented customers do not feel an ad more persuasive when they see a private brand in the ad featuring utilitarian attributes than when they see a private brand in the ad featuring hedonic attributes, therefore H4b is not supported for shampoo.

Taken all together, the results support (partially or fully) H1b for shoe, H2a for shoe and shampoo, H3b for shoe and shampoo, and H4b for shoe. However, the results show opposite directions in some other hypotheses, such as, H1a for shoe and shampoo, H2b for shoe and shampoo, H3a for shoe, and H4a for shampoo. Some other hypotheses are not supported, i.e., H1b for shampoo, H3a for shampoo, H4a for shoe, and H4b for shampoo. For hypotheses that show opposite direction, a possible explanation could be some attributes (utilitarian) or brands (national) have a strong impact on customer perceptions, therefore, customers have higher evaluations when exposed to this information regardless of their regulatory orientation.

CHAPTER 5

DISCUSSION

The current research examines how the interactions among regulatory orientation, attribute framing and risky choice framing influence consumer perceptions. Based on marketing and psychology literature, four sets of hypotheses are proposed to reflect the effects of three main factors: regulatory orientation, attribute framing and risky choice framing and their interactions on consumer perceptions of a variety of brands and products advertised. The first hypothesis captures the interaction effect between regulatory orientation and attribute framing, the second between regulatory orientation and risky choice framing, the third between attribute framing and risky choice framing, and the fourth among regulatory orientation, attribute framing and risky choice framing.

Three experimental studies were conducted to test these hypotheses. The first two were conducted online with situational primes of regulatory focus while the last was implemented using chronic regulatory focus measurement in a face-to-face environment. In this study, regulatory orientation is operationalized as promotion versus prevention orientation, attribute framing as hedonic versus utilitarian attributes, and risky choice framing as private and national brands. The results showed significant interactions between regulatory focus and attribute framing for shampoo (H1) and between regulatory focus and risky choice framing for shoe (H2). But the other interactions were not significant.

Regarding significant interactions, the results indicated that customers' regulatory orientations partially moderate the effects of attribute framing on consumer perceptions of a shampoo ad (i.e., only for the attitude towards the ad and the purchase intention; but not for the brand attitude and willing to pay a certain price). However, the directions of the effects are

opposite to the hypothesized direction. Particularly, when looking at a shampoo ad, promotion oriented customers have a higher attitude toward the ad and a higher purchase intention (interaction effects for brand attitude and willingness to pay were not significant) if the ad featured utilitarian attributes than hedonic attributes (which is opposite to the direction proposed in H1a). For prevention oriented customers, the effects are not significant on customer perceptions, no matter whether they look at hedonic or utilitarian attributes.

The results also illustrate that customers' regulatory orientations partially moderate the effects of risky choice framing on consumer perceptions of a shoe ad. Specifically, promotion oriented customers feel a shoe ad to be more persuasive (higher brand attitude, ad attitude, purchase intention and willing to pay higher price) when the ad promote a national brand than a private brand. Thus, H2a was supported. For prevention oriented customers, the effects are significant on customer perceptions. However, the directions of effects are opposite, i.e. they have higher evaluation when exposed to national brands than private brands which is opposite to the hypothesized direction of effects.

With respect to non-significant interactions, follow up contrasts show that H1b for shoe, H2a for shampoo, H3b for shoe and shampoo, and H4b for shoe are all supported (see Table 16) while the others are either unsupported or in an opposite direction.

In summary, the findings suggest that customers have higher evaluations when looking at utilitarian attributes than hedonic attributes, no matter whether they are promotion or prevention oriented (Table 16, H1a, H1b), or when looking at national brands than private brands (Table 16, H2a, H2b), or when looking at private brands advertised with an emphasis on utilitarian attributes than hedonic attributes (Table 16, H3b), or when prevention oriented customers look at

private brands advertised with an emphasis on utilitarian attributes than hedonic attributes (Table 16, H4b for shoe).

Possible explanations of why utilitarian attributes are dominating are that two products (shoe and shampoo) selected in the current study are considered utilitarian products which provide function- or performance-related benefits to the users, therefore when those products are evaluated, utilitarian attributes seem to outweigh hedonic attributes. As a result, these attributes have a stronger impact on customer perceptions, regardless of regulatory orientation.

The same holds true for customers' preference of national brands as opposed to private brands. In this study, national brands (Nike for shoe and Head and Shoulders for shampoo) are preferred to private brands (Starter for shoe and CVS for shampoo) and the effect is so strong that it outweighs the effects of other factors, such as regulatory orientation.

Nonetheless, a close examination of interaction between regulatory orientation and risky choice framing shows a certain level of interaction. Promotion oriented customers have higher evaluations of national brands than prevention oriented customers while prevention oriented customers have higher evaluations of private brands than promotion oriented customers (Figures 7-10). These findings are not inconsistent with those of extant research (Love et al. 2010; Noort et al. 2008) that suggests prevention oriented customers, who are more risk averse, are more likely to choose a safe alternative by selecting private brands. Since they are more concerned about cost saving factors, they tend to evaluate private brands favorably since they believe that those brands are cost effective. Therefore, private brands present a better choice for prevention oriented people.

Theoretical Implications

The current research provides better insights into marketing literature which focuses on regulatory focus and attribute framing. Prior literature argues that message is more persuasive when promotion oriented customers are exposed to the message featuring hedonic attributes or when prevention oriented customers are exposed to the message featuring utilitarian attributes. In other words, previous results find the regulatory fit either between promotion and hedonic or between prevention and utilitarian (Chernev 2004; Chitturi et al. 2008).

However, the findings from the current research show something different. Regulatory fit tends to occur when prevention oriented customers are presented with utilitarian attributes which is consistent with the existing literature. Nonetheless, it seems regulatory fit does not take place for a combination of promotion and hedonic. Stated differently, when promotion oriented customers are exposed to the ad featuring hedonic attributes, as opposed to utilitarian attributes, they do not have higher perceptions. In contrast, they feel the ads of shoe and shampoo to be more persuasive when looking at utilitarian attributes – the result that is contradictory to the previous literature.

The observations are probably attributed to the fact that in comparison to hedonic attributes, utilitarian attributes are more influential specially for shoe and shampoo which are perceived by students to be more associated with utilitarian products (than hedonic products). Therefore, customers have higher perceptions when looking at utilitarian attributes, regardless of regulatory orientation.

The findings also illustrate that customers prefer national brands to private brands, no matter whether they are promotion or prevention oriented. Although a significant interaction is found for the shoe ads, follow up contrasts indicate that both promotion- and prevention-oriented customers have higher evaluations of national brands advertised. However, the magnitude of preference of each type of brand is different. Promotion oriented customers tend to have higher evaluations of national brands than prevention oriented customers while prevention oriented customers tend to have higher evaluations of private brands than promotion oriented customers (Figures 7-10).

These findings provide a new perspective different from extant literature (Love et al. 2010; Ramanathan and Dhar 2010). According to the previous studies, regulatory orientation moderates customer attitude toward brand types. Particularly, promotion oriented customers are more sensitive to the quality of brands and expect a higher value of the benefits from a strong brand than prevention oriented customers (Love et al. 2010), or promotion oriented customers prefer to choose less familiar brands than prevention oriented customers (Ramanathan and Dhar 2010). However, the current study shows that promotion and prevention oriented customers both have higher evaluations of national brands than private brands. Differently stated, regulatory orientation does not have a significant moderation effect on the relationship between brand types and customer perceptions.

Extensive research in consumer psychology and marketing has been conducted to investigate the relationship between people's regulatory focus and product attributes or between people's regulatory focus and brand perception (Chernev, 2004; Ramanathan and Dhar 2010). However, not many researchers have substantially explored regulatory fit among personal regulatory focus, attribute framing and brand types and explored how the fit of these factors

influences customer perceptions. The current research bridges this gap by bringing these three factors together and investigating the interaction effects of these factors on consumer perceptions.

The current research furthers prior literature by providing greater insights into regulatory fit and mechanism of message persuasiveness. Several researchers find the effect of regulatory compatibility between message content and individuals' regulatory focus on the message persuasiveness (Lee and Aaker 2004; Lee et al. 2010). If the content of the message is compatible to regulatory focus, the message is more influential (Cesario et al. 2004; Aaker and Lee 2004). These findings are aligned with the results from the present research in the case of interaction between regulatory focus and brand types for the shoe ads.

The current research contributes to marketing literature on two grounds. First, it extends existing literature by pointing out the impact of regulatory fit on message persuasiveness and consumer behaviors as well as shedding light on an effect of attribute framing, brand types, regulatory focus and message persuasiveness. Second, the present research also investigates the moderation effect of regulatory focus on the persuasiveness of a message or an advertisement of different brands and products.

Managerial Implications

Although the results of the study show that national brands are positively evaluated by customers, private brands are also preferred if these brands are advertised with an focus on utilitarian attributes (H3b). From the management perspective, an effective branding strategy by introducing private brands is very important for several retailers and manufacturers. After allocating a huge amount of resources into the new business, companies realize that a success of

a new brand would determine the companies' direction for the further development of this brand as well as overall business directions.

For them, how to create a persuasive message is a key. When a private brand is about to launch, marketers should understand that among different ways of advertising private brands, the advertisement of a private brand that emphasizes utilitarian attributes is more persuasive, therefore it is preferably chosen by customers. This is easy to understand because customers usually view private brands as something that provides functional and basic benefits. Therefore, a combination of private brands and utilitarian attributes would enhance the effectiveness of the advertisement.

Understanding the mechanism in which attribute framing moderates the impacts of brand types on customer perceptions should help marketers develop appropriate marketing strategies to effectively draw customers' attention to the focal brands and convince them by employing appropriate framing messages.

It is also important to know that customer perceptions of two products selected are not the same. While shampoo products are more associated with private consumption, shoe products are more associated with public consumption (Ratner and Kahn 2002; Graeff 1996). When customers purchase shampoo, they buy these products for private use and the benefits from these products that customers obtain through using those products are private (i.e. better hair). However, when customers purchase shoes, they tend to use the products for private use. But like several fashion merchandizes, shoes are usually used in a public environment (i.e. in running or sports) and many people are selective in choosing shoes since those products are closely related to their characteristics and fashion styles. From the management stand point, it is critical to distinguish different products based on whether those products belong to private or public

consumption group because this differentiation might be a crucial driver that determines whether an advertisement campaign is successful or not.

Limitations and Future Research

The current research, despite its contributions, suffers from several limitations that must be taken into consideration. The first limitation is related to application of chronic regulatory focus which is measured by Regulatory Focus Questionnaire (RFQ – Higgins et al. 2001). Although the scale has been used extensively by current marketing and psychology literature, it is recommended to use alternative methods and scales, for instance, situational priming in face to face environment (i.e. paper and pencil mouse maze by Fiedman and Forster 2001; Chernev 2004). Future research should take into account this method as an alternate way to manipulate regulatory focus

The second limitation inherent in any similar type of research which uses college student sample is lack of generalizability. Despite that fact that collecting data from student sample is financially viable, the data from this sample do not represent the feedbacks from the whole population, therefore external validity is relatively restricted. The results of the study would be more representative if customers are included in the survey, in addition to the student sample.

Next, in order to serve the purpose of experimental design, two ads are created utilizing students' opinions about special features of brands. These ads are not professional because they are not created by professionals, instead, by the researcher. This subjectivity might cause confounding effects in this study.

Also, two product categories chosen (shoes and shampoo) are questionable with respect to their representativeness of the real products available in the market. In spite of the fact that

those two products are developed to test hypotheses, a typical product might have a certain impact on consumer perception. Therefore, customer evaluations of these two products do not reflect the true customer evaluations of different types of products sold on the shelves of stores.

APPENDIX A
ADS FOR STUDY 1 AND 2

Stay One Step Ahead of Fashion



Want to be stylish, try S&P sport shoes.
These shoes come in an assortment of colors to
complement whatever you wear. With an attractive
and stylish design, these shoes put your best foot forward

With S&P, you will feel cool



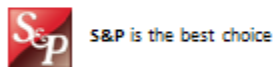
S&P is the best choice

Gain Comfort with Durable Shoes



Want to be comfortable, try S&P sport shoes.
These shoes enhance cushioning and stability, and
provide maximum ventilation. With phylon midsole and rubber
outsole, the shoes offer lightweight cushioning and optimal durability

With S&P, your feet are supported




Want to Have Beautiful, Fashionable Hair?



Want attractive hair, try S&O shampoo. Its unique moisturizing formula will leave your hair feeling silky and shiny. This natural aromatic shampoo will leave your hair with an appealing fragrance

**With S&O, your hair will look beautiful
and fashionable**


 S&O is the best choice

Want to Have Clean and Healthy Hair?



Want healthier hair, try S&O shampoo. Its unique cleaning formula will nourish your hair and reduce oily buildup. Maintain your natural hair strength. Its all natural proteins will make your hair healthy and strong

With S&O, your hair will be clean and healthy

 S&O is the best choice

APPENDIX B
ADS FOR MAIN STUDY

Stay One Step Ahead of Fashion



Want to be stylish, try Starter sport shoes.
These shoes come in an assortment of colors to
complement whatever you wear. With an attractive
and stylish design, these shoes put your best foot forward

With Starter, you will feel cool

Stay One Step Ahead of Fashion



Just Do It

Want to be stylish, try Nike sport shoes.
These shoes come in an assortment of colors to
complement whatever you wear. With an attractive
and stylish design, these shoes put your best foot forward

With Nike, you will feel cool

Gain Comfort with Durable Shoes



The Shoes for You

Want to be comfortable, try Starter sport shoes. These shoes enhance cushioning and stability, and provide maximum ventilation. With phylon midsole and rubber outsole, the shoes offer lightweight cushioning and optimal durability

With Starter, your feet are supported

Gain Comfort with Durable Shoes



Just Do It

Want to be comfortable, try Nike sport shoes. These shoes enhance cushioning and stability, and provide maximum ventilation. With phylon midsole and rubber outsole, the shoes offer lightweight cushioning and optimal durability

With Nike, your feet are supported

Want to Have Beautiful, Fashionable Hair?



CVS The Shampoo for You

Want attractive hair, try CVS. Its unique moisturizing formula will leave your hair feeling silky and shiny. This natural aromatic shampoo will leave your hair with an appealing fragrance

With CVS, your hair will look beautiful and fashionable

Want to Have Beautiful, Fashionable Hair?



Want attractive hair, try Head & Shoulders. Its unique moisturizing formula will leave your hair feeling silky and shiny. This natural aromatic shampoo will leave your hair with an appealing fragrance

**With Head & Shoulders, your hair will look
beautiful and fashionable**

Want to Have Clean and Healthy Hair?



CVS The Shampoo for You

Want healthier hair, try CVS. Its unique cleaning formula will nourish your hair and reduce oily buildup. Maintain your natural hair strength. Its all natural proteins will make your hair healthy and strong

**With CVS, your hair will be fresh
and manageable.**

Want to Have Clean and Healthy Hair?



The Shampoo for You

Want healthier hair, try Head & Shoulders. Its unique cleaning formula will nourish your hair and reduce oily buildup. Maintain your natural hair strength. Its all natural proteins will make your hair healthy and strong

With Head & Shoulders, your hair will be fresh and manageable.

REFERENCES

- Aaker, Jennifer L, and Angela Y Lee. 2006. "Understanding Regulatory Fit." *Journal of Marketing Research*. 43 (1): 15.
- Aaker, Jennifer L., and Angela Y. Lee. 2001. "'I' Seek Pleasures and 'We' Avoid Pains: The Role of Self-Regulatory Goals in Information Processing and Persuasion." *Journal of Consumer Research*. 28 (1): 33-49.
- Ajzen, Icek, and Martin Fishbein. 1980. *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, N.J.: Prentice-Hall.
- Arora R. 2008. "Price Bundling and Framing Strategies for Complementary Products." *Journal of Product and Brand Management*. 17 (7): 475-484.
- Arora, Raj, and Alisha Arora. 2004. "The Impact of Message Framing and Credibility Finding for Nutritional Guidelines." *Services Marketing Quarterly*. 26 (1): 35-53.
- Arora, Raj, Charles Stoner, and Alisha Arora. 2006. "Using Framing and Credibility to Incorporate Exercise and Fitness in Individuals' Lifestyle." *Journal of Consumer Marketing*. 23 (4): 199-207.
- Ashley, Susan R. 1998. "How to Effectively Compete Against Private-Label Brands." *Journal of Advertising Research*. 38 (1): 75.
- Avnet, Tamar, and E. Tory Higgins. 2006. "How Regulatory Fit Affects Value in Consumer Choices and Opinions." *Journal of Marketing Research*. 43 (1): 1-10.
- Avnet, Tamar, and E Tory Higgins. 2003. "Locomotion, Assessment, and Regulatory Fit: Value Transfer from "How" to "What." *Journal of Experimental Social Psychology*. 39 (5): 525.
- Batra, R., and I. Sinha. 2000. "Consumer-Level Factors Moderating the Success of Private Label Brands." *Journal of Retailing*. 76 (2): 175-191.
- Bazerman, M. H., A. E. Tenbrunsel, and K. Wade-Benzoni. 1998. "Negotiating With Yourself and Losing: Making Decisions With Competing Internal Preferences." *Academy of Management Review*. 23 (2): 225-241.
- Berkowitz, Eric N., and John R. Walton. 1980. "Contextual Influences on Consumer Price Responses: An Experimental Analysis." *Journal of Marketing Research*. 17 (3): 349-358.
- Briley, D. A., and J. L. Aaker. 2006. "When Does Culture Matter? Effects of Personal Knowledge on the Correction of Culture-Based Judgments." *Journal of Marketing Research*. 43 (3): 395-408.

- Brockner, J., E. T. Higgins, and M. B. Low. 2004. "Regulatory Focus Theory and The Entrepreneurial Process." *Journal of Business Venturing*. 19 (2): 203-220.
- Brockner, Joel, Srikanth Paruchuri, Lorraine Chen Idson, and E. Tory Higgins. 2002. "Regulatory Focus and the Probability Estimates of Conjunctive and Disjunctive Events." *Organizational Behavior and Human Decision Processes*. 87 (1): 5-24.
- Buda, Richard. 2003. "The Interactive Effect of Message Framing, Presentation Order, and Source Credibility on Recruitment Practices." *International Journal of Management*. 20 (2): 156.
- Camacho, Christopher J., E. Tory Higgins, and Lindsay Luger. 2003. "Moral Value Transfer from Regulatory Fit: What Feels Right is Right and What Feels Wrong is Wrong." *Journal of Personality & Social Psychology*. 84 (3): 498-510.
- Carpenter, Gregory S., Rashi Glazer, and Kent Nakamoto. 1994. "Meaningful Brands from Meaningless Differentiation: The Dependence on Irrelevant Attributes." *Journal of Marketing Research*. 31 (3): 339-350.
- Carver, Charles S. 1994. "Cognitive Processes and Self-regulation: Determinants of Concentration and Distraction." *Applied Psychology*. 43 (3): 387-391.
- Carver, Charles S., and Teri L. White. 1994. "Behavioral Inhibition, Behavioral Activation, and Affective Responses to Impending Reward and Punishment: The BIS/BAS Scales." *Journal of Personality and Social Psychology*. 67 (2): 319-333.
- Cesario, J., E. T. Higgins, and A. A. Scholer. 2008. "Regulatory Fit and Persuasion: Basic Principles and Remaining Questions." *Social and Personality Psychology Compass*. 2 (1): 444-463.
- Cesario, Joseph, Heidi Grant, and E. Tory Higgins. 2004. "Regulatory Fit and Persuasion: Transfer From "Feeling Right."." *Journal of Personality and Social Psychology*. 86 (3): 388-404.
- Chang, Chung-Chau, and Yu-Jen Chou. 2008. "Goal Orientation and Comparative Valence in Persuasion." *Journal of Advertising*. 37 (1): 73-87.
- Chen, Shin-Fen S, Kent B Monroe, and Yung-Chien Lou. 1998. "The Effects of Framing Price Promotion Messages on Consumers' Perceptions and Purchase Intentions." *Journal of Retailing*. 74 (3): 353.
- Chernev, Alexander. 2004. "Goal Orientation and Consumer Preference for the Status Quo." *Journal of Consumer Research*. 31 (3): 557-565.
- Chitturi, Ravindra, Rajagopal Raghunathan, and Vijay Mahajan. 2008. "Delight by Design: The Role of Hedonic Versus Utilitarian Benefits." *Journal of Marketing*. 72 (3): 48-63.

- Chong, D., and J. N. Druckman. 2007. "Framing Theory." *Annual Review of Political Science*. 10: 103-126.
- Crowe, Ellen, and E. Tory Higgins. 1997. "Regulatory Focus and Strategic Inclinations: Promotion and Prevention in Decision-Making." *Organizational Behavior and Human Decision Processes*. 69 (2): 117.
- Daryanto A., de Ruyter K., Wetzels M., and Patterson P.G. 2010. "Service Firms and Customer Loyalty Programs: A Regulatory Fit Perspective of Reward Preferences in A Health Club Setting." *Journal of the Academy of Marketing Science*. 38 (5): 604-616.
- Della Bitta, Albert J., Kent B. Monroe, and John M. McGinnis. 1981. "Consumer Perceptions of Comparative Price Advertisements." *Journal of Marketing Research*. 18 (4): 416-427.
- Dennis A. Pitta, and Lea Prevel Katsanis. 1995. "Understanding Brand Equity for Successful Brand Extension." *Journal of Consumer Marketing*. 12 (4): 51.
- Dhar, Ravi, and Klaus Westenbroch. 2000. "Consumer Choice Between Hedonic and Utilitarian Goods." *Journal of Marketing Research*. 37 (1): 60.
- Dhar, Sanjay K., and Stephen J. Hoch. 1997. "Why Store Brand Penetration Varies by Retailer." *Marketing Science*. 16 (3): 208-227.
- Diamond, L., and F. J. Lerch. 1992. "Fading Frames: Data Presentation and Framing Effects." *Decision Sciences*. 23 (5): 1050.
- Diamond, William D. 1992. "Effects of Format and Expertise on the Decision Rules Used to Evaluate Supermarket Sales Promotions." *Journal of Business and Psychology*. 6 (4): 465-481.
- Dodds, William B., Kent B. Monroe, and Dhruv Grewal. 1991. "Effects of Price, Brand, and Store Information on Buyers' Product Evaluations." *Journal of Marketing Research*. 28 (3): 307-319.
- Evans, Lisa M., and Richard E. Petty. 2003. "Self-Guide Framing and Persuasion: Responsibly Increasing Message Processing to Ideal Levels." *Personality and Social Psychology Bulletin*. 29 (3): 313-324.
- Fournier, Susan. 1998. "Consumers and Their Brands: Developing Relationship Theory in Consumer Research." *Journal of Consumer Research*. 24 (4): 343-373.
- Freitas, A. L., and E. T. Higgins. 2002. "Enjoying Goal-Directed Action: The Role of Regulatory Fit." *Psychological Science*. 13 (1): 1-6.
- Friedman, Ronald S., and Jens Förster. 2001. "The Effects of Promotion and Prevention Cues on Creativity." *Journal of Personality and Social Psychology*. 81 (6): 1001-1013.

- Friedman RS, and J Forster. 2001. "The Effects of Promotion and Prevention Cues on Creativity." *Journal of Personality and Social Psychology*. 81 (6): 1001-13.
- Förster, Jens, Nira Liberman, and E. Tory Higgins. 2005. "Accessibility from Active and Fulfilled Goals." *Journal of Experimental Social Psychology*. 41 (3): 220-239.
- Fuglestad P.T., Rothman A.J., and Jeffery R.W. 2008. "Getting There and Hanging on: The Effect of Regulatory Focus on Performance in Smoking and Weight Loss Interventions." *Health Psychology*. 27 (3 SUPPL.): S260-S270.
- Fuglestad, Paul T., Alexander J. Rothman, and Robert W. Jeffery. 2008. "Getting There and Hanging On: The Effect of Regulatory Focus on Performance in Smoking and Weight Loss Interventions." *Health Psychology*. 27 (3, Suppl): S260-S270.
- Ganzach, Y., and N. Karsahi. 1995. "Message Framing and Buying Behavior: A Field Experiment." *Journal of Business Research*. 32 (1): 11.
- Gendall, Philip, Janet Hoek, Tracy Pope, and Karen Young. 2006. "Message framing effects on price discounting." *Journal of Product & Brand Management*. 15 (7): 458-465.
- Gray, Jeffrey. 1990. "Brain Systems that Mediate both Emotion and Cognition." *Cognition & Emotion*. 4 (3): 269-288.
- Grewal, Dhruv. 1995. "Product Quality Expectations: Towards an Understanding of Their Antecedents and Consequences." *Journal of Business and Psychology*. 9 (3): 225-240.
- Grewal, D, Motyka, S, Puccinelli, N, Roggeveen, A, Daryanto, A, de Ruyter, K, and Wetzels, M. 2011. "Understanding How to Achieve Competitive Advantage Through Regulatory Fit: a Meta-Analysis." *Marketing Science Institute Research Report*. 10-117.
- Hardie, Bruce G. S., Eric J. Johnson, and Peter S. Fader. 1993. "Modeling Loss Aversion and Reference Dependence Effects on Brand Choice." *Marketing Science*. 12 (4): 378-394.
- Herzenstein, M., S. S. Posavac, and J. J. Brakus. 2007. "Adoption of New and Really New Products: The Effects of Self-Regulation Systems and Risk Salience." *Journal of Marketing Research*. 44 (2): 251-260.
- Higgins, E. T., R. S. Friedman, R. E. Harlow, L. C. Idson, O. N. Ayduk, and A. Taylor. 2001. "Achievement Orientations from Subjective Histories of Success: Promotion Pride versus Prevention Pride." *European Journal of Social Psychology*. 31: 3-24.
- Higgins, E. Tory. 1987. "Self-Discrepancy: A Theory Relating Self and Affect." *Psychological Review*. 94 (3): 319-40.

- Higgins, E. Tory. 2002. "How Self-Regulation Creates Distinct Values: The Case of Promotion and Prevention Decision Making." *Journal of Consumer Psychology*. 12 (3): 177-191.
- Higgins, E. Tory, Ronald S. Friedman, Robert E. Harlow, Lorraine Chen Idson, Ozlem N. Ayduk, and Amy Taylor. 2001. "Achievement Orientations from Subjective Histories of Success: Promotion Pride versus Prevention Pride." *European Journal of Social Psychology*. 31 (1): 3-23.
- Higgins, E. Tory, Christopher J. R. Roney, Ellen Crowe, and Charles Hymes. 1994. "Ideal Versus Ought Predilections for Approach and Avoidance Distinct Self-Regulatory Systems." *Journal of Personality and Social Psychology*. 66 (2): 276-286.
- Higgins, E. Tory, Lorraine Chen Idson, Antonio L. Freitas, Scott Spiegel, and Daniel C. Molden. 2003. "Transfer of Value From Fit." *Journal of Personality and Social Psychology*. 84 (6): 1140-1153.
- Higgins, E. Tory, Ronald N. Bond, Ruth Klein, and Timothy Strauman. 1986. "Self-Discrepancies And Emotional Vulnerability: How Magnitude, Accessibility, And Type Of Discrepancy Influence Affect." *Journal of Personality and Social Psychology*. 51 (1): 5-15.
- Higgins ET. 1997. "Beyond Pleasure and Pain." *The American Psychologist*. 52 (12): 1280-300.
- Higgins ET. 2000. "Making a Good Decision: Value from Fit." *The American Psychologist*. 55 (11): 1217-30.
- Higgins ET. 1989. "Continuities and Discontinuities in Self-Regulatory and Self-Evaluative Processes: A Developmental Theory Relating Self and Affect." *Journal of Personality*. 57 (2): 407-44.
- Higgins ET, RN Bond, R Klein, and T Strauman. 1986. "Self-Discrepancies and Emotional Vulnerability: How Magnitude, Accessibility, and Type of Discrepancy Influence Affect." *Journal of Personality and Social Psychology*. 51 (1): 5-15.
- Holbrook, Morris B., and Elizabeth C. Hirschman. 1982. "The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun." *Journal of Consumer Research*. 9 (2).
- Homer, Pamela M., and Sun-Gil Yoon. 1992. "Message Framing and the Interrelationships among Ad-Based Feelings, Affect, and Cognition." *Journal of Advertising*. 21 (1): 19-33.
- Hong J., and Lee A.Y. 2008. "Be Fit and Be Strong: Mastering Self-Regulation Through Regulatory Fit." *Journal of Consumer Research*. 34 (5): 682-695.

- Jacoby, Jacob, Jerry C. Olson, and Rafael A. Haddock. 1971. "Price, Brand Name, and Product Composition Characteristics as Determinants of Perceived Quality." *Journal of Applied Psychology*. 55 (6): 570-579.
- Jain, Shailendra Pratap, and Steven S Posavac. 2004. "Valenced Comparisons." *Journal of Marketing Research*. 41 (1): 46.
- Jain, Shailendra Pratap, Charles Lindsey, Nidhi Agrawal, and Durairaj Maheswaran. 2007. "For Better or For Worse? Valenced Comparative Frames and Regulatory Focus." *Journal of Consumer Research*. 34 (1): 57-65.
- Kahneman, Daniel, and Amos Tversky. 1984. "Choices, Values, and Frames." *American Psychologist*. 39 (4): 341-350.
- Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica: Journal of the Econometric Society*. 47 (2): 263-292.
- Kirmani, Amna, and Rui (Juliet) Zhu. 2007. "Vigilant Against Manipulation: The Effect of Regulatory Focus on the Use of Persuasion Knowledge." *Journal of Marketing Research*. 44 (4): 688-701.
- Kitayama S., Park H., Sevincer A.T., Karasawa M., and Uskul A.K. 2009. "A Cultural Task Analysis of Implicit Independence: Comparing North America, Western Europe, and East Asia." *Journal of Personality and Social Psychology*. 97 (2): 236-255.
- Kivetz, Ran, and Itamar Simonson. 2002. "Self-Control for the Righteous: Toward a Theory of Precommitment to Indulgence." *Journal of Consumer Research*. 29 (2): 199-217.
- Leclerc, France, Bernd H. Schmitt, and Laurette Dubé. 1994. "Foreign Branding and Its Effects on Product Perceptions and Attitudes." *Journal of Marketing Research*. 31 (2): 263-270.
- Lee A.Y., Sternthal B., and Keller P.A. 2010. "Value From Regulatory Construal Fit: The Persuasive Impact of Fit Between Consumer Goals and Message Concreteness." *Journal of Consumer Research*. 36 (5): 735-747.
- Lee AY, JL Aaker, and WL Gardner. 2000. "The Pleasures and Pains of Distinct Self-Construals: The Role of Interdependence in Regulatory Focus." *Journal of Personality and Social Psychology*. 78 (6): 1122-34.
- Lee AY, and JL Aaker. 2004. "Bringing the Frame into Focus: The Influence of Regulatory Fit on Processing Fluency and Persuasion." *Journal of Personality and Social Psychology*. 86 (2): 205-18.
- Levin, Irwin, Sandra Schneider, and Gary Gaeth. 1998. "All Frames Are Not Created Equal: A Typology and Critical Analysis of Framing Effects." *Organizational Behavior and Human Decision Processes*. 76 (2): 149.

- Levin, Irwin P., and Gary J. Gaeth. 1988. "How Consumers are Affected by the Framing of Attribute Information Before and After Consuming the Product." *Journal of Consumer Research*. 15 (3): 374-378.
- Liberman N, DC Molden, LC Idson, and ET Higgins. 2001. "Promotion and Prevention Focus on Alternative Hypotheses: Implications for Attributional Functions." *Journal of Personality and Social Psychology*. 80 (1): 5-18.
- Liberman, Nira, Lorraine Chen Idson, Christopher J. Camacho, and E. Tory Higgins. 1999. "Promotion and Prevention Choices between Stability and Change." *Journal of Personality and Social Psychology*. 77 (6): 1135-1145.
- Love E., Staton M., Chapman C.N., and Okada E.M. 2010. "Regulatory Focus as a Determinant of Brand Value." *Journal of Product and Brand Management*. 19 (7): 512-517.
- Maheswaran, Durairaj, and Joan Meyers-Levy. 1990. "The Influence of Message Framing and Issue Involvement." *Journal of Marketing Research*. 27 (3): 361-367.
- Markman, Keith, Matthew Lindberg, Laura Kray, and Adam Galinsky. 2007. "Implications of Counterfactual Structure for Creative Generation and Analytical Problem Solving." *Personality and Social Psychology Bulletin*. 33 (3): 312-324.
- Messinger, Paul R., and Chakravarthi Narasimhan. 1995. "Has Power Shifted in the Grocery Channel?" *Marketing Science*. 14 (2): 189-223.
- Meyerowitz BE, and S Chaiken. 1987. "The Effect of Message Framing On Breast Self-Examination Attitudes, Intentions, and Behavior." *Journal of Personality and Social Psychology*. 52 (3): 500-10.
- Meyers-Levy, Joan, and Durairaj Maheswaran. 2004. "Exploring Message Framing Outcomes When Systematic, Heuristic, or Both Types of Processing Occur." *Journal of Consumer Psychology*. 14 (1): 159-167.
- Molden, Daniel C., and E. Tory Higgins. 2008. "How Preferences for Eager versus Vigilant Judgment Strategies Affect Self-Serving Conclusions." *Journal of Experimental Social Psychology*. 44 (5): 1219.
- Monga, Ashwani, and Rui Zhu. 2005. "Buyers Versus Sellers: How They Differ in Their Responses to Framed Outcomes." *Journal of Consumer Psychology*. 15 (4): 325-333.
- Nelson, Thomas E., and Zoe M. Oxley. 1999. "Issue Framing Effects on Belief Importance and Opinion." *Journal of Politics*. 61 (4): 1040-1067.
- Nelson, Thomas E., Zoe M. Oxley, and Rosalee A. Clawson. 1997. "Toward a Psychology of Framing Effects." *Political Behavior*. 19 (3).

- Niedrich, Ronald W., Subhash Sharma, and Douglas H. Wedell. 2001. "Reference Price and Price Perceptions: A Comparison of Alternative Models." *Journal of Consumer Research*. 28 (3): 339-354.
- Novak, Thomas P., and Donna L. Hoffman. 2009. "The Fit of Thinking Style and Situation: New Measures of Situation-Specific Experiential and Rational Cognition." *Journal of Consumer Research*. 36 (1): 56-72.
- Nowlis, Stephen M., and Itamar Simonson. 1997. "Attribute-Task Compatibility as a Determinant of Consumer Preference Reversals." *Journal of Marketing Research*. 34 (2): 205-218.
- Orth, Ulrich R., Peter P. Oppenheim, and Zuzana Firbasova. 2005. "Measuring Message Framing Effects Across Europe." *Journal of Targeting, Measurement and Analysis for Marketing*. 13 (4): 313-326.
- Pham M.T., and Avnet T. 2009. "Contingent reliance on the affect heuristic as a function of regulatory focus." *Organizational Behavior and Human Decision Processes*. 108 (2): 267-278.
- Pham, Michel Tuan, and Tamar Avnet. 2004. "Ideals and Oughts and the Reliance on Affect versus Substance in Persuasion." *Journal of Consumer Research*. 30 (4): 503-518.
- Quelch, J. A., and D. Harding. 1996. "Brands Versus Private Labels: Fighting to Win." *Harvard Business Review*. 74 (1): 99-111.
- Ramanathan, Suresh, and Sanjay K Dhar. 2010. "The Effect of Sales Promotions on the Size and Composition of the Shopping Basket: Regulatory Compatibility from Framing and Temporal Restrictions." *Journal of Marketing Research*. 47 (3): 542-552.
- Rothman AJ, and P Salovey. 1997. "Shaping Perceptions to Motivate Healthy Behavior: The Role of Message Framing." *Psychological Bulletin*. 121 (1): 3-19.
- Rothman, Alexander J., Steven C. Martino, Brian T. Bedell, Jerusha B. Detweiler, and Peter Salovey. 1999. "The Systematic Influence of Gain- and Loss-Framed Messages on Interest in and Use of Different Types of Health Behavior." *Personality and Social Psychology Bulletin*. 25 (11): 1355-1369.
- Ruble, Diane N., Ronda Eisenberg, and E. Tory Higgins. 1994. "Developmental Changes in Achievement Evaluation: Motivational Implications of Self-Other Differences." *Child Development*. 65 (4): 1095-1110.
- Safer, Diane. 1998. *Preferences for Luxurious or Reliable Products: Promotion and Prevention Focus as Moderators*. Thesis (Ph.D.)--Columbia University, 1998.

- Salovey, Peter, and Pamela Williams-Piehot. 2004. "Field Experiments in Social Psychology: Message Framing and the Promotion of Health Protective Behaviors." *American Behavioral Scientist*. 47 (5): 488-505.
- Shah, J., and E. T. Higgins. 1997. "Expectancy x Value Effects: Regulatory Focus as Determinant of Magnitude and Direction." *Journal of Personality and Social Psychology*. 73 (3): 447-458.
- Shah J, ET Higgins, and RS Friedman. 1998. "Performance Incentives and Means: How Regulatory Focus Influences Goal Attainment." *Journal of Personality and Social Psychology*. 74 (2): 285-93.
- Shah, James, and E. Tory Higgins. 2001. "Regulatory Concerns and Appraisal Efficiency: The General Impact Of Promotion and Prevention." *Journal of Personality and Social Psychology*. 80 (5): 693-705.
- Shapiro, L.J. (2002), "Top brands." *DSN Retailing Today*. 41, 3-5.
- Shiv, Baba, Julie A. Edell Britton, and John W. Payne. 2004. "Does Elaboration Increase or Decrease the Effectiveness of Negatively versus Positively Framed Messages?" *Journal of Consumer Research*. 31 (1): 199-208.
- Sinha, I., and M. F. Smith. 2000. "Consumer's Perceptions of Promotional Framing of Price." *Psychology and Marketing*. 17: 257-275.
- Spiegel, S., H. Grant-Pillow, and E. T. Higgins. 2004. "How Regulatory Fit Enhances Motivational Strength During Goal Pursuit." *European Journal of Social Psychology*. 34: 39-54.
- Thaler, Richard. 1985. "Mental Accounting and Consumer Choice." *Marketing Science*. 4 (3): 199-214.
- Tversky A, and D Kahneman. 1981. "The Framing of Decisions and the Psychology of Choice." *Science (New York, N.Y.)*. 211 (4481): 453-8.
- Vahie, Archana, and Audhesh Paswan. 2006. "Private Label Brand Image: Its Relationship With Store Image And National Brand." *International Journal of Retail & Distribution Management*. 34 (1): 67-84.
- Vaidyanathan, R., and P. Aggrawal. 2000. "Strategic Brand Alliances: Implications of Ingredient Branding for National and Private Label Brands." *Journal of Product and Brand Management*. 9: 214-228.
- Voss, Kevin E., Eric R. Spangenberg, and Bianca Grohmann. 2003. "Measuring the Hedonic and Utilitarian Dimensions of Consumer Attitude." *Journal of Marketing Research*. 40 (3): 310-320.

- Wan E.W., Hong J., and Sternthal B. 2009. "The Effect of Regulatory Orientation and Decision Strategy on Brand Judgments." *Journal of Consumer Research*. 35 (6): 1026-1038.
- Wang, Jing, and Angela Y Lee. 2006. "The Role of Regulatory Focus in Preference Construction." *JMR, Journal of Marketing Research*. 43 (1): 28.
- Werthenbroch, Klaus, and Ravi Dhar. 2000. "Consumer Choice between Hedonic and Utilitarian Goods." *Journal of Marketing Research*. 37 (1): 60-71.
- Yinlong Zhang, and V Mittal. 2007. "The Attractiveness of Enriched and Impoverished Options: Culture, Self-Construal, and Regulatory Focus." *Personality & Social Psychology Bulletin*. 33 (4): 588-98.
- Yi, Sunghwan, and Hans Baumgartner. 2009. "Regulatory Focus and Message Framing: A Test of Three Accounts." *Motivation and Emotion*. 33 (4): 435-443.
- Zhao, Guangzhi, and Cornelia Pechmann. 2007. "The Impact of Regulatory Focus on Adolescents' Response to Antismoking Advertising Campaigns." *JMR, Journal of Marketing Research*. 44 (4): 671.
- Zhou, Rongrong, and Michel Tuan Pham. 2004. "Promotion and Prevention across Mental Accounts: When Financial Products Dictate Consumers' Investment Goals." *Journal of Consumer Research*. 31 (1): 125-135.
- Zhu, R., and J. Meyers-Levy. 2003. "The Influence of Regulatory Focus on Consumer Information Processing." *Advances in Consumer Research*. 30: 116-117.