NOT ALL ADVERTISEMENTS ARE CREATED EQUAL: THE ROLE OF CONSTRUAL LEVEL ON HEDONIC AND UTILITARIAN ATTRIBUTES

A Dissertation in

Hotel, Restaurant and Institutional Management

by

Ju Yeon Han

Submitted in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

December 2015
The dissertation of Ju Yeon Han was reviewed and approved* by the following:

Anna S. Mattila  
Professor of Hospitality Management  
Marriott Professor of Lodging Management  
Dissertation Advisor  
Graduate Program Chair  
Chair of Committee

Hubert B. Van Hoof  
Professor of Hospitality Management

Seoki Lee  
Associate Professor of Hospitality Management

Lisa Bolton  
Professor of Marketing  
SMEAL College of Business

*Signatures are on file in the Graduate School
ABSTRACT

The current dissertation examines the ways in which utilitarian and hedonic attributes of a product/service in an advertisement can be effectively presented. Specifically, this dissertation identifies the effect of consumers’ construal level (abstract versus concrete), framing (gain-framing versus loss-framing), and type of attribute (hedonic versus utilitarian) on their evaluation of products or services. The four research questions are: 1) Under what conditions, would emphasizing hedonic versus utilitarian attributes be more effective in an advertisement? 2) Would an individual’s construal level influence his/her evaluation of the product that emphasizes hedonic versus utilitarian attributes? 3) Would it matter whether the message was gained-framed or loss-framed? 4) What is the underlying psychological mechanism of this effect?

The results of the two pre-studies and two main studies demonstrated that consumer’s construal level significantly influences how he/she evaluates a product/service with hedonic and utilitarian attributes. In detail, consumers with an abstract mindset focused more on hedonic attributes (versus utilitarian attributes), and thus they perceived the product/service more positively when hedonic attributes were emphasized. However, this result was only significant when the hedonic attributes were framed as a gain. When the attributes were framed as a loss, consumers with an abstract mindset did not favor the product/service that emphasized hedonic attributes (versus utilitarian attributes). On the other hand, consumers with a concrete mindset favored more product/service that emphasized utilitarian attributes (versus hedonic attributes) framed as a loss. However, when utilitarian attributes were framed as a gain, consumers with a concrete mindset did not favor more product/service that emphasized utilitarian attributes (versus hedonic attributes). Additionally, the results indicated that process fluency underlies this effect.
The findings of this dissertation have important theoretical contributions and managerial implications for marketing practitioners. Additionally, limitations are acknowledged and avenues for future research are discussed.
Table of Contents

LIST OF FIGURES ................................................................................................................................. vii
LIST OF TABLES ...................................................................................................................................... viii
ACKNOWLEDGEMENTS ........................................................................................................................... ix
CHAPTER 1 INTRODUCTION ................................................................................................................... 1
CHAPTER 2 BACKGROUND RESEARCH .................................................................................................. 5
  Hedonic versus Utilitarian Attributes ................................................................................................. 5
  Construal Level Theory ......................................................................................................................... 7
  Processing Fluency ................................................................................................................................. 12
CHAPTER 3 HYPOTHESE DEVELOPMENT ............................................................................................... 15
  Hedonic versus Utilitarian Attributes ................................................................................................. 15
  Construal Level Theory and Processing Fluency ................................................................................. 16
  Boundary Factor of Regulatory Focus ................................................................................................. 20
CHAPTER 4 METHOD AND RESULTS OF STUDY 1 ............................................................................... 24
  Pretest .................................................................................................................................................... 24
    Procedure and Stimuli ......................................................................................................................... 25
    Measurements .................................................................................................................................... 26
    Analysis and Results ........................................................................................................................... 26
  Main Study ............................................................................................................................................ 28
    Procedure and Stimuli ......................................................................................................................... 28
    Measurements .................................................................................................................................... 30
    Manipulation Check ............................................................................................................................ 32
    Analysis and Results ........................................................................................................................... 33
    Discussion ........................................................................................................................................... 37
CHAPTER 5 METHOD AND RESULTS OF STUDY 2 ............................................................................... 38
  Pretest .................................................................................................................................................... 38
    Procedure and Stimuli ......................................................................................................................... 39
    Measurements .................................................................................................................................... 39
    Analysis and Results ........................................................................................................................... 40
LIST OF FIGURES

Figure 1-Conceptual Diagram 1............................................................................................................. 19
Figure 2-Conceptual Diagram 2............................................................................................................. 23
Figure 3-Mean Plots of Study 1 Results ................................................................................................. 36
Figure 4-Mean Plots of Study 2 Results ................................................................................................. 46
LIST OF TABLES

Table 1- Behavioral Identification Form (BIF) .......................................................... 32
Table 2- ANCOVA Table in Attitude for Study 1 ......................................................... 34
Table 3- ANCOVA Table on Behavioral Intention for Study 1 .................................. 35
Table 4- ANCOVA Table on Attitude for Study 2 ...................................................... 45
ACKNOWLEDGEMENTS

First, I would like to express my sincere appreciation to my advisor and chair of the committee, Dr. Anna Mattila, for her guidance, encouragement, and patience over the last four years. Without her, the completion of the degree and this dissertation would not have been possible. I am extremely grateful for all her support.

I would also like to thank Dr. Hubert B. Van Hoof, Dr. Lisa Bolton, and Dr. Seoki Lee for serving on my committee. I have learned so much from Dr. Van Hoof who took time to talk with me and give me countless advices during the past four years. I feel extremely fortunate to have Dr. Bolton on my committee, as she provided valuable insights and thoughtful comments. I am thankful to Dr. Lee for his generosity, support, and encouragement that helped me move forward with this dissertation.

Additionally, I would like to thank all the faculty and friends at School of Hospitality Management at Pennsylvania State University. I am grateful to have met some remarkable people who offered their help and friendship.

Finally, I would like to thank my mom for her support. Mom, without the love and support from you, I would not have come this far. Thank you.
CHAPTER 1 INTRODUCTION

Nowadays, consumers are flooded with product information; hence, they selectively choose information to make purchase choices. Companies try to convince consumers to purchase their products by developing advertisements that would be more attractive and persuasive compared to those of their competitors. This research looks at how advertisers can effectively present their message to the consumers.

One common strategy that advertisers use is emphasizing product attributes that can effectively attract consumers. For example, when advertising an orange juice, advertisers have to determine whether emphasizing the functional aspects of the orange juice, such as nutrition information, or the pleasurable aspects of the orange juice, such as taste, would be more effective. Furthermore, they have to consider conditions in which such advertisements are effective. Prior studies have indicated that when consumers make purchase decisions, they often access and combine attribute information for a particular product/service or compare attributes of multiple products/services (Bettman, Johnson, & Payne, 1991; Pham, 1998). However, these studies have also found that consumers may apply different rules depending on the attributes they prefer.

A considerable amount of research has examined the ways in which consumers’ construal level, referring to individuals’ abstract and concrete thinking, influences their information processing (Tsai & Thomas, 2011). Specifically, prior research has shown that an individual’s mindset (i.e., abstract versus concrete) changes the type of information on which the individual focuses, which influences his/her subsequent judgments. The existing studies have demonstrated that consumers who have an abstract mindset rely more on higher-end goals and desirability information when making evaluations, whereas consumers who have a concrete mindset focus
more on lower-end goals and feasibility information (Fujita et al., 2006; Liberman, Trope, & Stepahne, 2007; Trope & Liberman, 2003). However, a limited number of studies have examined how consumers’ construal level influences their focus on hedonic or pleasurable versus utilitarian or functional attributes.

Additionally, due to the processing fluency effect, which concerns the ease of understanding the external information, an abstract mindset is expected to induce consumers to focus more on hedonic attributes, since hedonic attribution is related to higher-end goals and desirability features (Botti & McGill, 2011; Dhar & Wertenbroch, 2000; Kivetz, 2000). Conversely, a concrete mindset will lead consumers to focus more on utilitarian attributes. Moreover, prior literature has demonstrated that when consumers’ processing fluency increases, their preference and evaluation of the advertisement and product/service becomes more favorable. Therefore, this study proposed that when consumers have an abstract mindset, hedonic attributes (versus utilitarian attributes) would increase positive attitude, anticipated satisfaction, and their favorable behavioral intentions towards the product/service. On the other hand, when a concrete mindset is activated, emphasizing utilitarian attributes (versus hedonic attributes) of a product/service will enhance processing fluency, resulting in a more positive attitude, higher anticipated satisfaction, and higher behavioral intention towards the product/service.

However, emphasizing specific attributes of the product is not the only factor that influences consumers’ decision-making processes. Another strategy advertisers commonly use to persuade consumers is message framing, which refers to different methods of presenting the message. Messages can be presented as a loss (e.g., emphasizing losses that consumers may face by not purchasing the product) or a gain (e.g., emphasizing a brand’s advantages or potential
benefits). This study argues that framing the attributes as a gain message or a loss message will influence the effect between construal level and attribute type. Prior studies have suggested that framing attributes in advertisements influences consumers’ judgements and purchase decisions (Hardisty, Johnson, & Weber, 2010; Levins & Gaeth, 1988; Levin, Schneider, & Gaeth, 1998; Smith, 1996). In this study, we investigated how gain-framed attributes, i.e., attributes framed as benefits of consuming the advertised product, and loss framed attributes, i.e., attributes framed as costs of not consuming the advertised product (Salovey, Schneider, & Apanovitch, 2002), influence consumers’ evaluation of the advertised product.

According to the previous literatures, loss-framed messages are more effective when consumers have a concrete mindset whereas gained-framed messages are more effective when consumers have an abstract mindset (Lamberton & Diel, 2013; White, MacDonnell, & Dahl, 2011). Therefore, we propose that when an abstract mindset is activated, hedonic attributes will have a favorable effect only when the message is framed as a gain. When the message is framed as a loss, no difference between hedonic versus utilitarian attributes is expected. Conversely, when a concrete mindset is activated, utilitarian attributes will be effective when the message is framed as a loss rather than a gain.

To examine the proposed relationships, study 1 investigated the interaction effect of attribute types and consumers’ construal level. In detail, when consumers’ have an abstract mindset, a product/service that emphasizes hedonic attributes is more favored whereas when consumers’ have a concrete mindset, a product/service that emphasizes utilitarian attributes is evaluated more positively. Additionally, processing fluency mediates these relationships.
Study 2 examined a boundary factor of gain and loss framing. Processing fluency has also been shown to mediate the three-way interaction effect of attribute type, consumers’ construal level, and gain and loss framing on attitude towards the product/service.

The findings of these studies have critical practical implications for hospitality and retail managers, especially when designing product/service advertisements. The effectiveness of emphasizing hedonic and utilitarian attributes in an advertisement may rely on consumers’ mindsets and their framing. Thus, not all advertisements are created equal and as such, they will elicit greater number of positive reactions from consumers whose mindset is congruent with the product/service’s attributes and information framing. For example, if the advertiser is promoting a product for consumers with an abstract mindset, such as a product purchased for later use, it may be necessary to highlight a product/service’s hedonic attributes (versus utilitarian attributes) and frame the attribute using gain message. However, if the advertiser is promoting a product for consumers with a concrete mindset, that is, a product for immediate use, it may be beneficial to highlight utilitarian benefits framed as a loss message.

The introduction and purpose of the study are described in Chapter 1. Chapter 2 summarizes previous literature on hedonic versus utilitarian attributes, construal level theory (CLT), and processing fluency. Chapter 3 lists the hypotheses of this study with the support of the previous literature. Furthermore, Chapter 4 introduces the design, methodology, results, and discussion of the study 1, and chapter 5 presents the design, methodology, results and discussion of the study 2. Finally, Chapter 6 discusses theoretical and managerial contributions of the study and limitation of the current research.
Hedonic versus Utilitarian Attributes

Consumers may purchase products or services with different goals and motives (Botti & McGill, 2011). “Consumers purchase goods and services and perform consumption behaviors for two basic reasons: (1) consummatory affective (hedonic) gratification and (2) instrumental, utilitarian reasons” (Voss, Spangenberg, & Grohmann, 2003, p. 310). Hirschman and Holbrook (1982) stated that consumers make purchases to solve problems or seek fun and enjoyment, and previous studies classified these consumptions as utilitarian and hedonic (Botti & McGill, 2011; Holbrook & Hirschman, 1982). Hedonic consumption refers to purchases made for the “sensation derived from the experience of using the products”, whereas utilitarian consumption refers to purchases made for “the functions performed by the product” (Roy and Ng, 2012; Voss et al., 2003, p. 310). For example, not all consumers may view shopping experiences in the same way. Consumers who target a specific product may view the shopping experience from a utilitarian perspective whereas consumers who focus on the enjoyment of the shopping experience may have a hedonic perspective (Babin, Darden, & Griffin, 1994). Hedonic consumption experiences are “fun, sensorial, and spontaneous due to their pleasurable, playful, immediately gratifying nature” while utilitarian consumption experiences are “functional, sensible, and useful, which relates to virtues and necessities” (Botti & McGill, 2011; Dhar & Wertenbroch, 2000; Kivetz & Strahilovitz, 2000; Okada, 2005; Sela, Berger, & Liu, 2009).

Previous research has shown that hedonic consumption, but not utilitarian consumption, enhanced life happiness (Botti & McGill, 2011; Deci & Ryan, 1985). Additionally, hedonic consumption has been found to be more closely related to higher-end goals compared to
utilitarian consumption (Carver & Scheier, 2000; Vallacher & Wegner, 1987).
Furthermore, previous studies have shown that hedonic consumption is intrinsically motivated and inherently rewarding; thus, it is perceived as an end goal itself. On the other hand, utilitarian consumption is extrinsically motivated, and it can be considered an instrumental tool to achieve a higher-level goal (Dhar & Wertenbroch, 2000; Holbrook & Hirschman, 1982; Mano & Oliver, 1993; Pham, 1998).

However, hedonic or utilitarian consumption are not necessarily two ends of a one-dimensional scale (Voss et al., 2003). A product can have both hedonic and utilitarian attributes (Crowley, Spangenberg & Hughes, 1992; Okada, 2005). Additionally, consumer’s experience can be examined by looking at hedonic and utilitarian characteristics at both overall-product and attribute-specific levels (Adaval, 2001; Dhar & Wertenbroch, 2000; Kivetz & Simonson, 2002). For example, ice cream is generally perceived as a hedonic product. However, it can have both hedonic and utilitarian attributes. Although the taste of ice cream is a hedonic attribute, the nutrition information can be considered a utilitarian attribute. Therefore, consumers may choose an ice cream by assessing its utilitarian attributes (e.g., nutrition) or hedonic attributes (e.g., taste). This research focuses more on the hedonic and utilitarian attribute-specific level.

Past research has suggested that hedonic and utilitarian attributes of a product/service can play a critical role in product evaluation and purchase decisions (Batra & Ahtola, 1990; Mano & Oliver, 1993). When consumers purchase a product or a service, they may consider both utilitarian attributes and hedonic attributes of the product/service (Batra & Ahtola, 1990; Chitturi, Raghunathan, & Mahajan, 2007; 2008; Dhar & Wetenbroch, 2000). Hedonic attributes refer to “aesthetic, experiential and enjoyment-related” attributes of the product/service, whereas utilitarian attributes refer to “the functional, instrumental and practical” attributes of the
product/service (Batra & Ahtola, 1990; Chitturi et al., 2008, p. 46; Dhar & Wertenbroch, 2000; Strahilevitz & Myers, 1998). For example, when purchasing a cell phone, consumers consider several attributes, including the phone’s battery life and sound volume (i.e., utilitarian attributes), as well as the aesthetic appeal of the phone (i.e., hedonic attribute; Chitturi et al., 2008).

Some studies have reported that both hedonic and utilitarian values influence consumers’ satisfaction and behavioral intentions (Hirschman & Holbrooke, 1982; Lim & Ang, 2008; Ryu, Han, & Jang, 2010). However, despite the amount of research conducted on hedonic and utilitarian attributes, relatively few studies have examined the circumstance or situation in which consumers focus on these attributes related to a given product/service. Chitturi and colleagues (2007) argued that consumers are more likely to value hedonic attributes (versus utilitarian attributes) when a minimum level of functionality is met. However, their study shows that choice behavior relies more on utilitarian attributes, whereas willingness to pay relies more on hedonic attributes. Kivetz and Simonson (2002) demonstrated that consumers focus more on hedonic attributes when they believe that they have earned the right to indulge. Additionally, when consumers make a choice among several options, utilitarian values influence consumers’ decisions, whereas when consumers need to rank the services/products, hedonic values are more influential (Dahr & Wertenbroch, 2000; Shafir, Simonson, & Tversky, 1994; Tversky & Griffin, 1991).

Construal Level Theory

Construal level theory (CLT) suggests that psychological distance influences mental representation, judgment, and behaviors (Trope & Liberman, 2003; Trope & Liberman, 2010; Trope, Liberman & Wakslak, 2007). High-level construals are perceived to be more abstract, coherent, and superordinate mental representation compared to low-level construals (Trope &
Liberman, 2010). For example, a cellular phone can be represented as a communication device (abstract representation) or a small object (concrete representation). Previous studies have indicated that individuals who adopt a higher-level construal are more likely to perceive an object’s abstract categories (a mammal) rather than concrete categories (a dog or a poodle), and they are more likely to think about their abstract or superordinate goals (Carver & Scheier, 2000; Vallacher & Wegner, 1987). For instance, a concrete level mindset may allow individuals to think about doing well on the exam whereas abstract level mindset induces them to think about happiness in life. Additionally, when individuals have a concrete mindset, they focus on the concrete detail action to achieve their goals, whereas when they have an abstract mindset they tend to focus on the general meaning of their goal and the reasons to achieve this goal (Semin & Fiedler, 1988; Trope, 1986, 1989; Trope & Liberman, 2010).

Previous literature on CLT has suggested that an increase in psychological distance forces individuals to think more abstractly (Liberman & Trope, 1998; Trope, 1986; 1989; Trope & Liberman, 2003; Trope & Liberman, 2010). Trope and Liberman (2010) explained that this is because high-level construals are unlikely to change compared to low-level construals. For instance, a goal to contact a friend (higher-level goal) may not change but the method of contacting a friend, such as sending him/her an email (lower-level goal), may change easily (Trope & Liberman, 2010). Therefore, when psychological distance is distant and the outcome is uncertain, it makes more sense to think about the action more abstractly and to think about high-level rather than low-level goals (Trope & Liberman, 2010).

Several areas of the social sciences have studied the effect of individuals’ psychological distance on their decision-making and preferences, and many factors, such as spatial, temporal, and social distance, have been found to influence psychological distance (Fujita et al., 2006;
Liberman & Trope, 1998; Rachlin, 1995; Smith & Trope, 2006; Trope, 1986; 1989; Trope & Liberman, 2003). A study conducted by Liberman and Trope (1998) showed that spatially distant events are construed at a higher level whereas near distance events are construed at a lower level. Fujita et al. (2006) showed that events that happened near individuals’ residences were represented more concretely compared to events that happened far away. Similarly, temporally distant events are construed at a higher level compared to events that will occur in the near future (Fujita et al., 2006; Liberman & Trope, 1998). Additionally, strangers (versus close others) or an incident with high uncertainty (versus with low uncertainty) are likely to be construed at a higher level (Kim, Zhang, & Li, 2008; Liberman & Trope, 2008; Trope et al., 2007; Trope & Liberman, 2010; Wakslak et al., 2006). Accordingly, others’ recommendations or behaviors are represented at a higher and more abstract level relative to one’s own opinions or behaviors (Trope et al., 2007; Zhao & Xie, 2011). In sum, individuals use high-level construal to represent psychologically distant events and low-level construal to represent psychologically proximal events (Amit, Algom, & Trope, 2009; Trope & Liberman, 2010).

However, previous studies have demonstrated also the reverse relationship between construal level and psychological distance. In other words, construal level has a significant influence on how we perceive the distance from an object or an event (Idson & Mischel, 2001; Kim, Zhang, & Li, 2008; Linville, Fishcher, & Yoon, 1996; Trope & Liberman, 2010). For instance, when thinking about having fun (high level of construal) instead of playing basketball outside (low level construal), may induce individuals to think the activity to happen in a more distance future (Trope & Liberman, 2010).

Most importantly, studies have shown that individuals’ construal level, abstract or concrete mindset, influences consumers’ information focus and behavior (Idson & Mischel, 2001;
Kim, Zhang, & Li, 2008; Linville, Fishcher, & Yoon, 1996). Consumers with a high-level construal represent the object abstractly and therefore focus on its core features, whereas those with a low-level construal represent the object concretely and therefore focus on the surface features of the object (Hong & Sternthal, 2010; Trope & Liberman, 1998; 2003). Additionally, individuals think more about their global values (Eyal, Liberman, & Trope, 2008) and focus more on desirability features of the product (Trope & Liberman, 2000; 2003) when abstract mindset is activated. Furthermore, their focus on particular information motivates them to make purchase decisions (Eyal et al., 2009; Torelli & Kaikati, 2009). Previous literature on CLT has also found that high-level construal enhances self-control (Agrawal & Wan, 2009; Fujita, 2008; Fujita & Han, 2009; Fujita et al., 2006; Malkoc, Zauberman, & Bettman, 2010; Schmeichel & Vohs, 2009). For example, consumers with a high-level construal preferred to eat apples (versus candies) more compared to consumers with a low-level construal (Fujita & Han, 2009).

The relationship between psychological distance and construal level has been examined through different tasks, such as categorization. When events are temporally distant, fewer and broader categories are used to classify objects (Liberman, Sagristano, & Trope, 2002; Trope and Liberman, 2010). Therefore, the results of the previous studies have indicated that distal events, compared to proximal events, are categorized into broader categories (Henderson et al., 2006; Trope & Liberman, 2010). Additionally, increase in spatial distance allows individuals to use abstract language and categorize actions into broader behavioral categories (Henderson et al., 2006). Additionally, when social distance or perception of power increases, broader categorization is used (Smith & Trope, 2006).

In addition, some previous studies used pictures to demonstrate the relationship between psychological distance and construal level. Through a picture-word task (Stroop, 1935),
individuals who viewed a landscape picture pointing at a distal point selected words that represented psychological distance (e.g., year, others) rather than psychological proximity (e.g., tomorrow, we). However, those who viewed a picture pointing at a proxy point selected words that represented psychological proxy (Trope & Liberman, 2010). Another picture task that has been commonly used involves a global letter made of local letters. For example, a large L made of small 20 Hs was presented to participants who were asked to identify the letter they saw on the computer screen (Liberman & Forster, 2009; Navon, 1977; Trope & Liberman, 2010). Studies have shown that when participants were primed with temporal distance, they identified the global letter whereas when they were primed with temporal proximity, they identified the local letters (Navon, 1977; Liberman & Forster, 2009; Trope & Liberman, 2010).

The third manipulation involves describing an action in either high or low level terms (Liberman, & Trope, 1998). For instance, an activity, such as studying, can be explained by high level terms, such as doing well in school, or low level terms, reading a textbook (Trope & Liberman, 2010). Additionally, when individuals think more about “why” (high-level terms) they are studying instead of “how” (low-level terms) they are studying, they are thinking more abstractly (Liberman et al., 2007; McCrea et al., 2008).

However, not only CLT has demonstrated the relationship between construal level and psychological distance for future events, but also previous literatures have shown the relationship for past events (Kyung, Menon, & Trope, 2010). When individuals have less knowledge about an event, concrete mindset, compared to abstract mindset, made them feel closer to the event. However, when individuals had greater knowledge about the event, individuals with an abstract rather than a concrete mindset perceived the event nearer to them. Kyung et al. (2010) explained that these findings depend on how information is stored in individual’s memories because
higher-level and abstract concepts are stored only when individuals have greater knowledge (Chase & Ericsson, 1981). These higher-level and abstract concepts are more accessible compared to lower-level and concrete concepts (Kyung et al., 2010). Therefore, when individuals have less knowledge, a concrete rather than an abstract mindset allows them to think about an event as closer in time, whereas individuals with more knowledge will easily use abstract concepts and therefore abstract mindset to think about an event as close in time.

Processing Fluency

Previous literature has reported that consumers evaluate not only the information regarding the products/services but also the ways in which they process the information (Higgins, 2000; Schwarz, 2004). Processing fluency is defined as “the subjective feelings of ease or difficulty that individuals experience while processing information about an object” (Novemsky et al., 2007; Shen, Jiang, & Adaval, 2010, p.877). Processing fluency theory suggests that the more fluently consumer’s process the information, the more positively they evaluate the object (Reber, Schwarz, & Winkielman, 2004). Additionally, when consumers experience processing fluency, their attitude towards and evaluation of the object become more positive (Lee, 2001; Winkielman & Cacioppo, 2001). Previous studies have identified various factors that may influence processing fluency, such as previous exposure (Zajonc, 1968; 1980), background contrast effect (Reber & Schwarz, 1999), and fonts (Novemsky et al., 2007). In detail, when information was presented easier, the products/services were perceived to be prettier (Reber et al., 2004), and when consumers were repeatedly exposed with product information, which makes information processing easier, the evaluation was more positive (Zajonc, 1968; 1980). When information was presented with a font that was easier to read, participants evaluated the product more favorably (Novemsky et al., 2007).
Extensive studies on processing fluency can be divided into two streams of research. The first stream focuses on conceptual fluency, which is related to the meaning or knowledge consumers have about an object (Berger & Fitzsimons, 2008; Whittlesea, 1993; Winkielman et al., 2003). Semantic predictability, i.e., consistency between the stimulus and the context, rhyme, and availability of appropriate mental concepts has been shown to influence conceptual fluency (Kelley & Jacoby, 1998; McGlone & Tofighbakhsh, 2000; Poldrack & Logan, 1998; Whittlesea, 1993). For example, Whittlesea (1993) conducted a study with series of sentences in which the last word was either semantically predictive or not semantically predictive. The study showed that the participants in the semantically predictive condition evaluated the product more positively.

Another stream of research focuses on perceptual fluency, where a product’s perceptual attributes influence consumer’s processing (Berger & Fitzsimons, 2008; Lee & Labroo, 2004). Figure-ground contrast, clarity of the stimuli, simple repetition, and duration have been shown to influence perceptual fluency (Jacoby, 1983; Roediger, 1990; Schwarz, 2004; Tulving & Schacter, 1990). For example, studies have shown that a product with a color that matches the product type (i.e., red apple) is more preferred than products with a non-matched color (blue apple; Reber & Schwarz, 1999). Repetition and figure-ground contrast have also been shown to influence individual’s evaluation of truth or popularity (Jacoby et al., 1989; Reber & Schwarz, 1999).

Considering both streams of literature, both conceptual fluency and perceptual fluency seem to influence consumers’ judgment (Winkielman et al., 2003).

Both types of processing fluency lead to positive affects for the following reasons (Winkielman et al., 2003). First, individuals may feel more familiar with processing fluent information (versus non fluent information; Winkielman et al., 2003). Familiar stimuli tend to
be processed faster (Jacoby & Dallas, 1981) and fear of the unknown does not exist, which relates to positive affects (Winkielman, et al., 2003). Second, individuals may perceive an information that is easy to process as more prototypical (Winkielman et al., 2003). Studies have demonstrated that when individuals receive prototypical or symmetrical stimuli, they perceive it to be less complex to process (Winkielman et al., 2003), which enhances preferences (Halberstadt & Rhodes, 2000; Rhodes & Tremewan, 1996).
CHAPTER 3 HYPOTHESE DEVELOPMENT

Hedonic versus Utilitarian Attributes

Central to our theory development, we believe that when companies emphasize hedonic (versus utilitarian) attributes or consumers perceive the product to be hedonic (versus utilitarian), purchases are more closely linked to higher end goals and motivation. One study conducted by Chitturi and colleagues (2008) demonstrated that utilitarian attributes are related to “must meet” necessities or needs, such as security, whereas hedonic attributes are related to “aspire to meet” goals, such as delightful feelings and excitement. According to Huffman, Ratneshwar, and Mick’s (2000) hierarchy of consumer goals, lower-level consumer goals include thinking about the benefits or features of owning the product/service or using the product or service. Higher-level goals are related to the terminal value or life value of the product/service. Since utilitarian attributes are features that satisfy consumers’ necessity needs, thinking about the benefits and the outcomes related to purchasing the product/service is unavoidable. For example, when purchasing a car, consumers may consider the car’s safety, relying on utilitarian attributes, such as airbags and seatbelts. On the other hand, a convertible roof feature would be considered a hedonic attribute because it contributes to a cheerful and exciting driving experience. Compared to the car’s safety, a cheerful and exciting driving experience can reflect the consumer’s life value and higher-end goals (Chitturi et al., 2008).

Similarly, a means-end chain (MEC) theory explains the link between hedonic rather than utilitarian purchases and consumers’ higher-end and abstract motivations (Gutman, 1982; Mort & Rose, 2004). According to this theory, there is a hierarchical cognitive structure, when consumers think about a product/service. Consumers can be motivated to purchase the product by linking the product to the attributes of the product or instrument to achieve their values.
According to Mort and Rose (2004), as individuals focus on physical, tangible, and objective outcome when evaluating utilitarian products, motivation to purchase utilitarian products is based primarily on the consequences of the product’s functional attributes. However, “people buy products not only for what they can do, but for also what they mean to the consumer” (Mort & Rose, 2004, p.224). Specifically, motivation to purchase hedonic products is associated more with consumers’ value related to the product attributes (Mort & Rose, 2004). Therefore, we expect that when an advertisement emphasizes hedonic attributes, consumers associate their purchase with their higher end goal or value, whereas when it emphasizes utilitarian attributes, consumers think about the functional consequences consuming the product.

**Construal Level Theory and Processing Fluency**

When consumers need to evaluate or judge a product or service, metacognitive experience- processing fluency significantly influences their evaluation and choice behavior (Alter & Oppenheimer, 2009; Novemsky et al., 2007; Tsai & McGill, 2011, 808). Processing fluency examines the ease or difficult with which an external information can be processed (Winkielman et al., 2003). In other words, when the information process is fluent, processing the information is easy and effortless; thus, individuals tend to evaluate the event or object more positively than when the information process is less fluent (Jacoby et al., 1989; Schwarz, 2004). Additionally, studies have shown that consumers perceive fluent thinking process as more likeable, familiar, true, and more intelligent compared to less fluent process (Alter & Oppenheimer, 2009; Tsai & Thomas, 2011). These attributions of fluency are shown to be automatic and effortless (Bornstein & D’Agostino, 1992; Jacoby et al., 1989).

In this current study, we expected consumers’ construal level to have a significant influence on their information fluency for hedonic rather than utilitarian attributes of a
product/service. Construal level theory (CLT) proposes that people are more likely to use abstract mental construals as the distance from the object increases (Liberman & Trope, 1998; Trope, 1986). According to this theory, people use higher-level construals to represent information about distant future events instead of information about near future events (Liberman & Trope, 1998; Trope, 1986; 1989; Trope & Liberman, 2003; Zhao & Xie, 2011).

Empirical work on CLT has also demonstrated that psychological distance and construal levels motivate people to focus and select certain attributes of the information (Freitas, Salovey, & Liberman, 2001; Trope & Liberman, 2003), which then influences the consumer’s product evaluations and choice behavior (Idson & Mischel, 2001; Kim, Zhang, & Li, 2008; Linville, Fischer, & Yoon, 1996). In particular, when abstract mindsets are activated, individuals focus more on high-level purpose (e.g., “why will I go about recycling?”), whereas when concrete mindsets are activated, individuals focus more on concrete actions (e.g., “how will I go about recycling?”). Similarly, studies have indicated that when an abstract mindset (vs. concrete mindset) is activated or when psychological distance is greater (vs. smaller), an individual will focus more on desirability aspects than on feasibility aspects (Trope & Liberman, 2000, 2003). Desirability aspects refer to the value of the higher-end goal by focusing on the “why” of an action, whereas feasibility aspects refer to the value of the means to achieve the goal, such as the “how” of an action (Liu, 2008). For example, when an individual’s abstract mindset is activated, the extent to which the individual likes a band (i.e., desirability) will influence the choice decisions more than the cost of the ticket (i.e., feasibility). However, when an individual’s concrete mindset is activated, the price of the ticket (feasibility) will be more salient.

Furthermore, previous research has demonstrated that congruency between claims of an advertisement and psychological distance is critical for consumers (Dhar & Kim, 2007). For
instance, the authors suggested that when psychological distance is great, the advertisement should focus on features central to the product/service, whereas when psychological distance is smaller, the advertisement should emphasize peripheral features of the product/service. It has been shown that consumers are more receptive to core and central claims when their construal level is high and more receptive to peripheral information when their construal level is low (Dhar & Kim, 2007). Additionally, studies have identified that when congruency between available information and psychological distance increases process fluency, which enhances evaluations and purchase intentions (Alter & Oppenheimer, 2009; Novemsky et al., 2007; Tsai & McGill, 2011).

Based on these findings, we propose that since abstract mindset motivates consumers to focus on higher end goals and desirability features, abstract mindset will allow consumers to focus more on hedonic attributes compared to utilitarian attributes. Additionally, their attitudes will be more positive, and their anticipated satisfaction and willingness to purchase towards hedonic attributes will increase more compared to utilitarian attributes. On the other hand, when concrete mindset is activated, consumers will process the information more easily, and they will be able to focus more on the attributes and products when reading information about utilitarian rather than hedonic attributes. Therefore, their attitude, anticipated satisfaction, and willingness to purchase will be more positive when consumers with a concrete mindset read information that focuses on utilitarian attributes compared to hedonic attributes. Furthermore, we predict that process fluency will mediate the effect of mindset (abstract versus concrete) and type of attributes (hedonic versus utilitarian) on type of attributes on which consumers focus. Therefore, we hypothesized:
H 1: A person’s mindset moderates the effect of attribute type (hedonic versus utilitarian) on consumer’s attitude, anticipated satisfaction, and behavioral intention.

H 1a: When an abstract mind-set is activated, consumer’s attitude, anticipated satisfaction, and behavioral intention will be higher when hedonic attributes (versus utilitarian attributes) are emphasized.

H 1b: When a concrete mind-set is activated, consumer’s attitude, anticipated satisfaction, and behavioral intention will be higher when utilitarian attributes (versus hedonic attributes) are emphasized.

H 2: Process fluency mediates the effect of mind-set (abstract versus concrete) and attribute type (hedonic versus utilitarian) on consumer’s attitude, anticipated satisfaction, and behavioral intention.

The proposed hypotheses are visualized in Figure 1.
Boundary Factor of Regulatory Focus

According to the regulatory focus theory (Higgins 1997, 2000), individuals focus on gaining pleasure (e.g., promotion focus) or avoiding pain (e.g., prevention focus; Higgins, 1997). Promotion-focused individuals pay more attention to attaining pleasure, growth, and achievement, whereas focused individuals focus more on attaining safety and security (Crowe & Higgins, 1997; Higgins, 1997). Furthermore, promotion focused individuals tend to be more open to new challenges and take more risks than prevention focused individuals (Liberman et al., 1999; Zhou & Pham, 2004). Most importantly, promotion focused consumers rely more on hedonic and attractive features whereas prevention focused consumers rely more on utilitarian and reliability features when making purchasing decisions (Chernev, 2004).

Previous studies on regulatory focus and CLT indicate that there is close relationship between the two factors (Fürster & Higgins, 2005; Lee, Keller & Sternthal, 2010; Semin et al., 2005). An abstract mindset allows individuals to focus on the purpose or higher-end meaning of the action, thus reflecting the promotion focus, as individuals are inclined to think about their hopes and goals (Higgins, Roney, Crowe, & Hymes, 1994). However, a concrete mind-set encourages individuals to focus on the details of executing behavior; thus, it reflects prevention focus, as individuals’ thoughts center on duties and responsibilities (Crowe & Higgins, 1997).

Studies have also demonstrated that promotion-focused individuals process information at a more abstract level, whereas prevention-focus individuals process information at a more concrete level (Fürster & Higgins, 2005; Lee, Keller, & Sternthal, 2010; Semin et al., 2005). When participants were asked to identify a target letter, promotion-focused participants processed larger letters faster compared to smaller letters (e.g., responded to H when a large H made of small T’s were given), whereas prevention-focused participants responded to the smaller
letters faster than to the larger letters (e.g., responded to T when a large H of small T’s were given). Additionally, regulatory focus influences the size of a consideration set (Pham & Higgins, 2005; Pham & Chang, 2010). Promotion focused consumers tend to search for a larger consideration set and think more globally when choosing alternatives, whereas prevention focused consumers search for a smaller consideration set and chose alternatives more locally (Pham & Chang, 2010).

Previous literature has shown that regulatory focus can be manipulated by framing information as a gain or a loss (Cesario, Grant, & Giggins, 2004; Higgins, Shah, & Friedman, 1997; Shah & Higgins, 2001). For example, Cesario et al. (2004) demonstrated that could be manipulated to adopt promotion focus or prevention focus by reading information about eating more fruits and vegetables. In the promotion focus condition, the description was framed to emphasize the benefits of eating fruits and vegetables, such as increased energy and improved mood. In the prevention focus condition, participants read about how eating fruits and vegetables can protect them from harmful outcomes. Therefore, when product/service advertisements are framed as a gain or a loss, consumers’ regulatory focus can be manipulated.

Previous studies have shown that gain- and loss-framing influence consumers’ purchase decisions, preferences, attitudes, and behavior intentions (Rothman et al., 1993; Tversky & Kahneman, 1981; Wilson, Purdon, & Wallston, 1988). However, some previous studies have demonstrated that framing the information as a gain is more effective than loss framing (Rothman et al., 1993), while others argue that loss framing produces better results than gain framing (Banks et al., 1995; Meyerowitz & Chaiken, 1987). In this study, we expect proposed that consumers’ construal level (abstract versus concrete) and attribute type (hedonic versus utilitarian) will influence the effectiveness of the gain and loss framing.
Taken together, we suggest that regulatory focus is a very important variable that serves as a boundary condition for the interaction effect of attribute type and construal level on attitude and behavioral intentions. We argue that since gain framing is associated with an abstract mindset, when abstract mindset is activated, consumer’s attitude and behavioral intention will be more positive for hedonic (vs. utilitarian) attributes only when the information is framed as a gain. When the information is framed as a loss, the effect will be attenuated. On the other hand, when a concrete mindset is activated, utilitarian (vs. hedonic) advertisements will be higher in consumer’s attitude and behavioral intention only when the information is framed as a loss. When the information is framed as a gain, this effect will be attenuated. Therefore, we proposed the following hypotheses:

H 3: Regulatory focus (gain vs, loss) will moderate the effect of interaction between a person’s mindset (abstract vs. concrete) and attribute type (hedonic versus utilitarian) on consumer’s attitude.

H 3a: When an abstract mind-set is activated, consumer’s attitude and behavioral intention will be higher when hedonic attributes (versus utilitarian attributes) of an advertisement are framed as a gain.

H 3b: When an abstract mind-set is activated, consumer’s attitude and behavioral intention will not be higher when hedonic attributes (versus utilitarian attributes) of an advertisement are framed as a loss.

H 3c: When a concrete mind-set is activated, consumer’s attitude, anticipated satisfaction, and behavioral intention will be higher when utilitarian attributes (versus hedonic attributes) of an advertisement are framed as a loss.
H 3d: When a concrete mind-set is activated, consumer’s attitude, anticipated satisfaction, and behavioral intention will not be higher when utilitarian attributes (versus hedonic attributes) of an advertisement are framed as a gain.

H 4: Process fluency will mediate the interaction effect of mind-set (abstract versus concrete), attribute type (hedonic versus utilitarian), and regulatory focus (gain versus loss) on consumer’s attitude and behavioral intention.

The proposed hypotheses are visualized in Figure 2.

*Figure 2-Conceptual Diagram 2*
CHAPTER 4 METHOD AND RESULTS OF STUDY 1

Two between-subject experiments were conducted to examine the proposed hypotheses. Prior to conducting the two main studies, two pretests were conducted to examine the attributes of the products that are perceived to be hedonic or utilitarian. The following sections discuss in detail the designs and methods that were used to conduct the pretests.

In study 1, we posited that consumers with an abstract mindset will have more positive attitudes and will express increased anticipated satisfaction and increased willingness to purchase a product or a service when hedonic attributes (versus utilitarian attributes) are highlighted. Conversely, consumers with a concrete mindset will have more positive attitudes as well as increased anticipated satisfaction and increased willingness to purchase a product or a service when utilitarian attributes (versus hedonic attributes) are highlighted. To test the hypotheses 1a, 1b, and 2, psychological distance was manipulated by priming participants with either an abstract or concrete mindset, utilizing a procedure adapted from Freitas, Gollwitzer, and Trope (2004). This study utilized a 2 (mindset: abstract vs. concrete) x 2 (attributes: hedonic vs. utilitarian) between-subjects design. Additionally, we confirmed that processing fluency mediates the interactive effect of consumer’s mindset and motivation on attitude, anticipated satisfaction, and willingness to purchase.

Pretest

A simple one-way experiment was conducted to identify which attributes of the smoothie were perceived to be hedonic or utilitarian. The attributes used in this study were adapted from the previous literature (Roy and Ng, 2012).

Sixty participants from Amazon Mechanical Turk was used in this study. Approximately 54.2% of the participants were male and 76.3% were Caucasian. The average age of the
participants was 35.6 and more than 61% of the participants hold a bachelor’s degree. On average, average participants purchased 1.3 smoothies within a month.

**Procedure and Stimuli**

First, participants were provided with definitions of hedonic and utilitarian attributes. Hedonic attributes refer to aesthetic, experiential and enjoyment related attributes of the product, whereas utilitarian attributes refer to the functional, instrumental and practical features of the product (Dhar & Wertenbroch, 2000). Afterwards, we asked participants to imagine they were reading the description from an advertisement of a smoothie. Participants read six descriptions of a smoothie (adapted from Roy and Ng, 2012). In order to avoid order bias, the order of the descriptions presented was in random order.

- *The smoothie is especially manufactured to give a rich and creamy taste. The addition of several ingredients, like creamy milk, thickeners, skim milk powder, etc., gives that delicious taste in your mouth.*

- *The smoothie comes in a wide range of fruity flavors, like strawberry, apricot, mango and kiwi, in addition to the original flavor. The wide range of fruity flavors makes our smoothie a wonderful choice for every occasion. You just cannot resist the temptation of its fruity taste.*

- *The smoothie actually contains real fruit chunks for added taste. You can actually see the chunks of fresh ripe strawberries or mangoes that have been added to the product to tingle your taste buds. The pieces of fruit have been especially added to blend with the original rich and creamy taste, thereby delighting one gastronomically.*
• The smoothie is made from calcium and vitamin fortified milk. It is specially formulated to capture the goodness of high calcium product. In addition, its formulation also ensures that it has absolutely low levels of fat. It is in fact 97% fat free.

• The smoothie has essential bone nutrients, like vitamins D and K, in addition to other nutrients like zinc and magnesium. The presence of these nutrients helps you to maintain strong bones, especially in adults.

• The smoothie contains two live cultures, Streptococcus thermophilus and Lactobacillus bulgaricus. Consuming this smoothie with live cultures helps you to maintain a healthy balance of good and bad bacteria in the gut.

Measurements

After each description was presented, participants were asked to identify the extent to which the attributes specified in the description were hedonic or utilitarian in nature (1= very hedonic, 7= very utilitarian), how positive the attributes were (1=very negative, 7=very positive) and ease of processing (1= difficult to process, 7 =easy to process; adapted from Janiszewski and Meyvis, 2001). Additionally, expected price for the product, number of smoothie purchase within a month were asked. At the end of the survey, participants’ demographic information including gender, age, education and ethnicity was measured.

Analysis and Results

Similar to the study conducted by Roy and Ng (2012), results of this study suggested that the participants perceived the three descriptions as hedonic: 1) “The smoothie is especially manufactured to give a rich and creamy taste. The addition of several ingredients, like creamy milk, thickeners, skim milk powder, etc., gives that delicious taste in your mouth.”(M=2.7, SD= 1.8), 2)“The smoothie comes in a wide range of fruity flavors, like strawberry, apricot, mango
and kiwi, in addition to the original flavor. The wide range of fruity flavors makes our smoothie a wonderful choice for every occasion. You just cannot resist the temptation of its fruity taste” (M=2.2, SD=1.4), and 3) “The smoothie actually contains real fruit chunks for added taste. You can actually see the chunks of fresh ripe strawberries or mangoes that have been added to the product to tingle your taste buds. The pieces of fruit have been especially added to blend with the original rich and creamy taste, thereby delighting one gastronomically (M=2.8, SD=1.6).

Meanwhile, the other three descriptions were perceived as utilitarian: 1) The smoothie is made from calcium and vitamin fortified milk. It is specially formulated to capture the goodness of high calcium product. In addition, its formulation also ensures that it has absolutely low levels of fat. It is in fact 97% fat free (M=5.6, SD=1.3). 2) The smoothie has essential bone nutrients, like vitamins D and K, in addition to other nutrients like zinc and magnesium. The presence of these nutrients helps you to maintain strong bones, especially in adults (M=5.6, SD=1.5), and 3) The smoothie contains two live cultures, Streptococcus thermophilus and Lactobacillus bulgaricus. Consuming this smoothie with live cultures helps you to maintain a healthy balance of good and bad bacteria in the gut (M=5.8, SD=1.6). Overall, the result showed that the participants clearly perceived the hedonic descriptions as hedonic, whereas the utilitarian descriptions were perceived as utilitarian (M_{hed}=2.6, M_{util}=5.7, p-value <.01). However, the valence (M_{hed}=5.6, M_{util}=5.7, p-value =.5) and ease of processing (M_{hed}=6.5, M_{util}=6.4, p-value =.3) between the hedonic versus utilitarian descriptions did not significantly differ.

Therefore, as the three descriptions were clearly hedonic and the other three descriptions were clearly utilitarian, with no difference in valence and ease of processing, this stimuli was used for the main study 1 to test the proposed hypotheses.
Main Study

A two by two between subject experiments was conducted to identify the moderating role of construal level on consumers’ attitude, anticipated satisfaction and behavioral intentions toward hedonic and utilitarian advertisements. To test the proposed hypotheses of H1 and H2 we manipulated participant’s construal level (abstract vs. concrete) and asked them to read an advertisement which was framed either a hedonic or utilitarian.

A total of 132 participants were recruited on Amazon Mechanical Turk to participate in this study. 50% of the participants were male and 82.6% were Caucasian. The average age of the participants was 36.19 and more 53.8% of the participants hold a bachelor’s degree.

Procedure and Stimuli

First, participants were randomly assigned to one of the four experimental conditions. In order to manipulate abstract and concrete mindset, we gave the participants a passage to read (adapted from Freitas et al., 2004). For the abstract condition they read,

“For everything we do, there always is a reason why we do it. Moreover, we often can trace the causes of our behavior back to broad life-goals that we have. For example, you do your homework for school. Why are you doing your homework? Perhaps to satisfy a class requirement. Why are you satisfying the class requirement? Perhaps to pass a class. Why pass the class? Perhaps because you want to earn a degree. Why earn a degree? Maybe because you want to find a good job, or because you want to educate yourself. And perhaps you wish to educate yourself or find a good job because you feel that doing so can bring you a better life. Research suggests that engaging in thought exercises like that above, in which one thinks about how one’s actions relate to one’s ultimate life goals, can improve people’s life satisfaction.
Afterwards, they were asked to think about their life from a broader perspective (i.e. focus on what is important in life). Then they were asked to write about their long-term goal in life (Trope & Liberman, 2011).

For the concrete condition, they will read,

For everything we do, there always is a process of how we do it. Moreover, we often can follow our broad life-goals down to our very specific behaviors. For example, like most people, you probably hope to find happiness in life. How can you do this? Perhaps finding a good job, or being educated, can help. How can you do these things? Perhaps by earning a degree. How do you earn a degree? By satisfying class requirements. How do you satisfy class requirements? In some cases, you do your homework for the class. Research suggests that engaging in thought exercise like that above, in which one thinks about how one’s ultimate life goals can be expressed through specific actions, can improve people’s life satisfaction.

Afterwards, they were asked to think about their life from a day-to-day perspective (i.e. focus on what is important in day-to-day life). Then they were asked to write about their daily activities to achieve their daily goal (Trope & Liberman, 2011).

Next, participants were asked to read a hedonic or a utilitarian advertisement about a new smoothie beverage (adapted from Roy and Ng, 2012).

Participants in the hedonic condition read the following ad:

• The smoothie is especially manufactured to give a rich and creamy taste. The addition of several ingredients, like creamy milk, thickeners, skim milk powder, etc., gives that delicious taste in your mouth.
• The smoothie comes in a wide range of fruity flavors, like strawberry, apricot, mango and kiwi, in addition to the original flavor. The wide range of fruity flavors makes our smoothie a wonderful choice for every occasion. You just cannot resist the temptation of its fruity taste.

• The smoothie actually contains real fruit chunks for added taste. You can actually see the chunks of fresh ripe strawberries or mangoes that have been added to the product to tingle your taste buds. The pieces of fruit have been especially added to blend with the original rich and creamy taste, thereby delighting one gastronomically.

Participants in the utilitarian condition read the following ad:

• The smoothie is made from calcium and vitamin fortified milk. It is specially formulated to capture the goodness of high calcium product. In addition, its formulation also ensures that it has absolutely low levels of fat. It is in fact 97% fat free.

• The smoothie has essential bone nutrients, like vitamins D and K, in addition to other nutrients like zinc and magnesium. The presence of these nutrients helps you to maintain strong bones, especially in adults.

• The smoothie contains two live cultures, Streptococcus thermophilus and Lactobacillus bulgaricus. Consuming this smoothie with live cultures helps you to maintain a healthy balance of good and bad bacteria in the gut.

Measurements

After reading the advertisement, participants were asked to complete a survey. In the survey, we measured a series of dependent variables including: attitude towards the product (adapted from Jiang et. al., 2010), anticipated satisfaction (adapted from Botti and Iyebgar,
Attitude was measured with a three-item, seven point scale (Cronbach alpha = .98) including: “good-bad”, “positive-negative”, “favorable-unfavorable”. Anticipated satisfaction was measured with a three-item, seven point scale (1pt- definitely not, 7pt-definitely yes; Cronbach alpha = .95) including: “I will be satisfied with this choice when I receive it”, “I will be happy with the choice I made”, and “I will be satisfied with this choice when I get it”. Behavioral intension was measured with a three-item, seven point scale (1pt- strongly disagree, 7- strongly agree; Cronbach alpha = .91) including: “Would you like to purchase this smoothie?”, “Would you be interested in receiving more information about this smoothie?”, and “Would you recommend this smoothie to a friend?”

Additionally, for mediation analysis, ease of processing (adapted from Janiszewski and Meyvis, 2001) was measured (1pt- very difficult to process, 7- very easy to process) and expected price for the smoothie was measured as a control variable.

Finally, Behavioral Identification Form (BIF; Vallacher and Wegner, 1989) was measured to confirm participants’ construal level. The BIF consist 25 dichotomous questions where participants were asked to describe an action. For example, taking a test (action) can be described as either answering questions (low-level construal) or showing one’s knowledge (high-level construal) (see Table 1).
<table>
<thead>
<tr>
<th>Items</th>
<th>a</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making a list</td>
<td>Getting organized</td>
<td>Writing things down</td>
</tr>
<tr>
<td>Reading</td>
<td>Following lines of print</td>
<td>Gaining knowledge</td>
</tr>
<tr>
<td>Joining the army</td>
<td>Helping the nation's defense</td>
<td>Signing up</td>
</tr>
<tr>
<td>Washing clothes</td>
<td>Removing odors from clothes</td>
<td>Putting clothes into the machine</td>
</tr>
<tr>
<td>Picking an apple</td>
<td>Getting something to eat</td>
<td>Pulling an apple off a branch</td>
</tr>
<tr>
<td>Chopping down a tree</td>
<td>Wielding an axe</td>
<td>Getting firewood</td>
</tr>
<tr>
<td>Measuring a room to remodel</td>
<td>Getting ready to remodel</td>
<td>Using a yardstick</td>
</tr>
<tr>
<td>Cleaning the house</td>
<td>Showing one’s cleanliness</td>
<td>Vacuuming the floor</td>
</tr>
<tr>
<td>Painting a room</td>
<td>Applying a brush strokes</td>
<td>Making the room look fresh</td>
</tr>
<tr>
<td>Paying the rent</td>
<td>Maintaining a place to live</td>
<td>Writing a check</td>
</tr>
<tr>
<td>Caring for house plants</td>
<td>Watering plants</td>
<td>Making the room look nice</td>
</tr>
<tr>
<td>Locking a door</td>
<td>Putting a key in the lock</td>
<td>Securing the house</td>
</tr>
<tr>
<td>Voting</td>
<td>Influencing the election</td>
<td>Marking a ballot</td>
</tr>
<tr>
<td>Climbing a tree</td>
<td>Getting a good view</td>
<td>Golden on to branches</td>
</tr>
<tr>
<td>Filling out a personality test</td>
<td>Answering questions</td>
<td>Revealing what you are like</td>
</tr>
<tr>
<td>Tooth brushing</td>
<td>Preventing tooth decay</td>
<td>Moving a brush around in one's mouth</td>
</tr>
<tr>
<td>Taking a test</td>
<td>Answering questions</td>
<td>Showing one's knowledge</td>
</tr>
<tr>
<td>Greeting someone</td>
<td>Saying hello</td>
<td>Showing friendliness</td>
</tr>
<tr>
<td>Resisting temptation</td>
<td>Saying no</td>
<td>Showing moral courage</td>
</tr>
<tr>
<td>Eating</td>
<td>Getting nutrition</td>
<td>Chewing and swallowing</td>
</tr>
<tr>
<td>Growing a garden</td>
<td>Planting seeds</td>
<td>Getting fresh vegetables</td>
</tr>
<tr>
<td>Traveling by car</td>
<td>Following a map</td>
<td>Seeing countryside</td>
</tr>
<tr>
<td>Having a cavity filled</td>
<td>Protecting your teeth</td>
<td>Going to the dentist</td>
</tr>
<tr>
<td>Talking to a child</td>
<td>Teaching a child something</td>
<td>Using simple words</td>
</tr>
<tr>
<td>Pushing a doorbell</td>
<td>Moving a finger</td>
<td>Seeing if someone's home</td>
</tr>
</tbody>
</table>

**Manipulation Check**

To ensure that the construal level manipulation worked as intended, we examined participants’ BIF scores. First, we coded participants’ response to 1 (high level construal) and 0 (low level construal). Afterwards, 25 items were summed to calculate participants’ BIF score.
The results indicate that the participants’ BIF score in the abstract condition (M_{abs} = 16.58) were significantly higher than those in the concrete condition (M_{con} = 14.38; F = 3.76; p-value = 0.05).

Moreover, consistent with the pretest result, participants in the hedonic condition (M_{hed} = 2.83) perceived the advertisement more hedonic compared to the participants in the utilitarian condition (M_{util} = 4.14; F = 20.64; p-value < 0.01).

**Analysis and Results**

**Test of Hypothesis 1: A person’s mindset moderates the effect of attribute type (hedonic versus utilitarian) on consumer’s attitude, anticipated satisfaction, and behavioral intention**

To test the proposed two way interaction effect of construal level and attribute type, ANCOVA was conducted on attitude, anticipated satisfaction and behavioral intention. H1_a proposes that participants with an abstract mind-set will have higher level of attitude, anticipated satisfaction and behavioral intention when the advertisement focuses on the hedonic attributes compared to utilitarian attributes. On the other hand, H1_b proposes that when concrete mindset is activated, advertisement focusing on utilitarian attributes, compared to hedonic attributes will increase their attitude, anticipated satisfaction and behavioral intention towards the product.

Consistent with the theoretical prediction, the two way interaction effect was significant for attitude (F_{(1,127)} = 5.48, p = .02; Table 2) and behavioral intention (F_{(1,127)} = 5.04, p = .03; Table 3). However, the results of the ANCOVA failed to show significant interaction effect for anticipated satisfaction (F_{(1,127)} = 1.07, p = .30; H1 partially supported). Afterwards, we conducted follow-up simple effects tests for attitude and behavioral intention. The result indicate that when abstract mindset is activated, consumer’s attitude towards the hedonic attribute is higher (M_{Abs-Hed} = 5.75) than the utilitarian attribute (M_{Abs-Util} = 4.68; F_{(1,127)} = 6.64, p = .01).
Additionally, consumer’s with an abstract construal level had higher behavioral intentions towards the hedonic attribute ($M_{Abs-Hed} = 5.40$) than the utilitarian attribute ($M_{Abs-Util} = 4.29$; $F_{(1,127)} = 8.72$, $p < .01$; $H1_a$ partially supported). However, when concrete mindset is activated, both attitude ($M_{Con-Hed} = 5.32$; $M_{Con-Util} = 5.62$; $F_{(1,127)} = 0.52$, $p = .47$) and behavioral intention ($M_{Con-Hed} = 4.73$; $M_{Con-Util} = 4.81$; $F_{(1,127)} = 0.04$, $p = .83$; $H1_b$ not supported) did not significantly differ between hedonic and utilitarian condition. (see Figure 3)

*Table 2-ANCOVA Table in Attitude for Study 1*

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>price</td>
<td></td>
<td>0.059</td>
<td>1</td>
<td>0.059</td>
<td>0.021</td>
<td>0.884</td>
</tr>
<tr>
<td>Test Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>construal</td>
<td></td>
<td>2.197</td>
<td>1</td>
<td>2.197</td>
<td>0.799</td>
<td>0.373</td>
</tr>
<tr>
<td>hedutil</td>
<td></td>
<td>4.712</td>
<td>1</td>
<td>4.712</td>
<td>1.713</td>
<td>0.193</td>
</tr>
<tr>
<td>construal * hedutil</td>
<td></td>
<td>15.083</td>
<td>1</td>
<td>15.083</td>
<td>5.483</td>
<td>0.021</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td>349.344</td>
<td>127</td>
<td>2.751</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4067.222</td>
<td>132</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td></td>
<td>372.757</td>
<td>131</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3-ANCOVA Table on Behavioral Intention for Study 1

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>price</td>
<td></td>
<td>9.841</td>
<td>1</td>
<td>9.841</td>
<td>4.351</td>
<td>0.039</td>
</tr>
<tr>
<td>Test Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>construal</td>
<td></td>
<td>0.15</td>
<td>1</td>
<td>0.15</td>
<td>0.066</td>
<td>0.797</td>
</tr>
<tr>
<td>hedutil</td>
<td></td>
<td>8.463</td>
<td>1</td>
<td>8.463</td>
<td>3.742</td>
<td>0.055</td>
</tr>
<tr>
<td>construal * hedutil</td>
<td></td>
<td>11.404</td>
<td>1</td>
<td>11.404</td>
<td>5.042</td>
<td>0.026</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td>287.23</td>
<td>127</td>
<td>2.262</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3308.889</td>
<td>132</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td></td>
<td>314.785</td>
<td>131</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Test of Hypothesis 2: Process fluency mediates the impact of mind-set (abstract versus concrete) and attribute type (hedonic versus utilitarian) on consumer’s attitude, anticipated satisfaction and behavioral intention

Using the moderated mediation analysis, we examined whether process fluency mediates the interaction effect of construal level and attribute type on consumer’s attitude and behavioral intention (Hayes, 2013). We used model 8 and the independent variable was attribute type (hedonic versus utilitarian), the moderator is construal level (abstract versus concrete) and the mediator is process fluency.

The bootstrapping analysis demonstrates the mediation by process fluency for both attitude and behavioral intention. Specifically, the mean indirect effect via process fluency
excluded zero for attitude (index=0.25; 95% CI=0.03 to 0.74) and behavioral intention (index=0.24; 95% CI=0.04 to 0.61; H2 partially supported).

Discussion

In sum, the results of the study 1 indicate that consumers’ construal level moderates the impact of type of attributes on consumers’ attitude and behavioral intentions but not on anticipated satisfaction. We believe that anticipated satisfaction did not differ between hedonic attributes and utilitarian attributes because satisfaction highly correlated with emotions and studies have shown that emotions strongly associates with hedonic attributes (versus utilitarian attributes) (Kemp and Kopp, 2011; Hirschman and Holbrooke, 1982).

The result indicate that when consumers’ have an abstract mindset, they tend to have higher attitude and behavioral intention towards hedonic attributes compared to utilitarian attributes. However, unlike our prediction (H1b), consumers with a concrete mindset did not differ in attitude and behavioral intention towards hedonic attributes compared to utilitarian attributes.

Therefore, in study 2, we investigated a boundary factor (i.e. gain and loss framing) that may have caused this result.
CHAPTER 5 METHOD AND RESULTS OF STUDY 2

In study 1, we explored how consumers’ construal level (abstract vs. concrete) and attribute type (hedonic versus utilitarian) influence their product evaluations and purchase intentions. However, the result showed that in the concrete condition, no significant difference was observed between hedonic and utilitarian conditions.

In study 2, we suggested that framing the attributes as a gain or a loss will influence the effect of interaction between consumers’ construal level and attribute type on consumers’ attitude and behavioral intention. In detail, we proposed that when hedonic (versus. utilitarian) attributes are framed as a gain, consumers with an abstract mindset will have more positive attitudes as well as greater behavioral intention towards a product/service. However, we expected this effect to be attenuated when the hedonic attributes are framed as a loss. On the other hand, consumers with a concrete mindset will have more positive attitudes and increased behavioral intention when utilitarian (versus hedonic) attributes are framed as a loss. However, this effect will be attenuated when the utilitarian attributes are framed as a gain. Additionally, similar to study 1, we confirmed that processing fluency mediates the interactive effect of consumer’s mindset, attribute type, and gain/loss framing on attitude and behavioral intentions.

Pretest

Similar to study 1, a simple one-way experiment was conducted to identify which attributes of the massage were perceived to be hedonic or utilitarian.

Eighty participants from Amazon Mechanical Turk was used in this study. Approximately 52.2% of the participants were male and 72.3% were Caucasian. The average age of the participants was 38.0 and more than 64% of the participants hold a bachelor’s degree.
Procedure and Stimuli

The procedure and stimuli for the second pretest was very similar to the first pretest. After agreeing to participate in the survey, participants were provided with definitions of hedonic and utilitarian attributes (Dhar & Wertenbroch, 2000). Afterwards, participants were asked to imagine that they were reading the description from an advertisement of a massage. The given description of the massage was adapted from the various real advertisements that was posted online (e.g., http://elementsmassage.com/southglenn/blog/6917/how-to-boost-your-energy-levels-with-massage). Participants read eight descriptions of a massage. In order to avoid order bias, the order of the descriptions presented was in random order.

- This massage will enhance your energy levels by bringing oxygen and nutrients to the tissue
- This massage will improve circulation by accelerating blood flow
- This massage will help you prevent from depression and anxiety.
- This massage will reduce low-back pain, painful menstruation cramps, headaches or fatigue.
- This massage will make you feel and smell great
- Fragrance from the essential oils will make you calm and relaxed
- This massage will help you prevent wrinkles and aging
- This massage will help you prevent or stop hair thinning

Measurements

After each descriptions were given to the participants, they were asked to identify the extent to which the attributes were more hedonic or utilitarian in nature (1= very hedonic, 7= very utilitarian), how positive the attributes were (1=very negative, 7=very positive) and the ease of processing the description (1= difficult to process, 7 =easy to process; adapted from
Janiszewski and Meyvis, 2001). Additionally, expected price for the product, number of massage purchase within a month were asked. At the end of the survey, participants’ demographic information including gender, age, education and ethnicity was measured.

**Analysis and Results**

Participants in this pretest identified four descriptions as hedonic: 1) “This massage will make you feel and smell great” (M=2.3, SD=1.6), 2) “Fragrance from the essential oils will make you calm and relaxed” (M=2.9, SD=1.7) 3) “This massage will help you prevent wrinkles and aging” (M=3.9, SD=1.9) 4) “This massage will help you prevent or stop hair thinning” (M=3.6, SD=1.9).

Meanwhile, the other four descriptions were perceived as utilitarian: 1) “This massage will enhance your energy levels by bringing oxygen and nutrients to the tissue” (M=5.0, SD=1.8) 2) “This massage will improve circulation by accelerating blood flow” (M=5.5, SD=1.6) 3) “This massage will help you prevent from depression and anxiety” (M=4.9, SD=1.8) 4) “This massage will reduce low-back pain, painful menstruation cramps, headaches or fatigue” (M=5.5, SD=1.5). Overall, the result showed that there is a significant difference between the hedonic and utilitarian descriptions (M_{hed}=3.5, M_{util}=5.2, p-value <.01). However, participants perception of the description did not differ in valence (M_{hed}=5.6, M_{util}=5.7, p-value =.2) and ease of processing (M_{hed}=6.0, M_{util}=5.9, p-value =.2) between the hedonic versus utilitarian descriptions.

Therefore, as the four descriptions were clearly hedonic and the other four descriptions were clearly utilitarian, with no difference in valence and ease of processing, this stimuli was used for the main study to test the proposed hypotheses.

**Main Study**

A 2 construal level (abstract versus concrete) x 2 attribute type (hedonic versus utilitarian) x 2 regulatory focus (gain versus loss) between subject experiments was conducted in order to
demonstrate that regulatory moderates the interaction effect of construal level and attribute type on attitude and behavioral intention. We used the same manipulation as study 1 to prime participants to have abstract versus concrete mindset. Afterwards, participants read an advertisement which was framed as hedonic-gain, hedonic-loss, utilitarian-gain, and utilitarian-loss.

A total of 248 adults from Amazon Mechanical Turk participated in this study. 48% of the participants were male and 79.4% were Caucasian. The average age of the participants was 38.2 and more 57.1% of the participants hold a bachelor’s degree.

Procedure and Stimuli

After accepting to participate in this study, participants were randomly assigned to one of the eight experimental conditions. Construal level (abstract versus concrete) was manipulated using the same passage as study 1 (adapted from Freitas et al., 2004). Afterwards, participants were asked to read an advertisement about a massage, which was framed as hedonic-gain, hedonic-loss, utilitarian-gain, or utilitarian-loss.

Participants in the utilitarian-gain condition read the following ad:

* This massage will enhance your energy levels by bringing oxygen and nutrients to the tissue

* This massage will improve circulation by accelerating blood flow

Participants in the utilitarian-loss condition read the following ad:

This massage will help you prevent from depression and anxiety.

* This massage will reduce low-back pain, painful menstruation cramps, headaches or fatigue.

Participants in the hedonic-gain condition read the following ad:
• This massage will make you feel and smell great

• Fragrance from the essential oils will make you calm and relaxed

Participants in the hedonic-loss condition read the following ad:

• This massage will help you prevent wrinkles and aging

• This massage will help you prevent or stop hair thinning

Measurements

Next, participants were asked to complete a survey. In the survey, we measured attitude towards the product (adapted from Jiang et. al., 2010) and behavioral intention (adapted from Zeithaml, Berry, and Parasuraman, 1996). Attitude was measured with a three-item, seven point scale (Cronbach alpha = .98) including: “good-bad”, “positive-negative”, “favorable-unfavorable”. Behavioral intention was measured with a three-item, seven point scale (1pt-strongly disagree, 7- strongly agree; Cronbach alpha = .90) including: “Would you like to purchase this massage?”, “Would you be interested in receiving more information about this massage?”, and “Would you recommend this massage to a friend?”

Additionally, for mediation analysis, two-item, seven point scale (Cronbach alpha = .93) including: “very difficult to process-very easy to process”, and “very difficult to understand-very easy to understand” (adapted from Lee & Aaker, 2004) was measured and expected price for the massage was measured as a control variable.

Afterwards, in order to confirm the construal level manipulation, Behavioral Identification Form (BIF; Vallacher and Wegner, 1989) was measured. Lastly, demographic information similar to study 1 was asked.
**Manipulation Check**

Similar to study 1, the BIF results demonstrate that participants in the abstract condition (M_{abs} = 17.8) were significantly higher in BIF score than those in the concrete condition (M_{con} = 12.98; F = 4.01; p-value = 0.04).

Moreover, consistent with the pretest result, participants in the hedonic condition (M_{hed} = 2.67) perceived the advertisement more hedonic compared to the participants in the utilitarian condition (M_{util} = 3.30; F = 10.10; p-value = 0.02).

**Analysis and Results**

**Test of Hypothesis 3:** Regulatory focus (gain vs. loss) will moderate the interaction effect between a person’s mindset (abstract vs. concrete) and attribute type (hedonic versus utilitarian) on consumer’s attitude, and behavioral intention.

In order to conduct the three way interaction effect of regulatory focus, construal level and attribute type on attitude and behavioral intention. ANCOVA was conducted. First, we proposed that when consumers’ abstract mind-set is activated, consumers’ attitude and behavioral intention will be higher for hedonic attributes only when the attributes are framed as a gain (H3a). However, when the attribute is framed as a loss, there will be no difference in consumers’ attitude and behavioral intentions between hedonic versus utilitarian attributes (H3b). On the other hand, when concrete mindset is activated, utilitarian (vs. hedonic) attributes will increase positive attitude and behavioral intentions when it is framed as a loss (H3c). However, no difference will be observed when the attribute is framed as a gain (H3d).

As we hypothesized in H3, the three way interaction effect was significant for attitude (F(1,247) = 4.46, p = .04; Table 4). However, the results of the ANCOVA failed to show significant interaction effect for behavioral intentions (F(1,247) = 1.40, p = .24; H3 partially supported).
Afterwards, we conducted a follow-up simple effects tests for attitude to confirm our proposed hypotheses. The result indicate that when abstract mindset is activated, consumer’s attitude towards the hedonic attribute ($M_{Abs-Hed-Gain} = 6.09$) is higher than the utilitarian attribute ($M_{Abs-Util-Gain} = 4.29$; $F_{(1,247)} = 29.57$, $p < .01$; H3a partially supported) only when the attribute is framed as gain. When the attribute is framed as loss, consumers’ attitude do not differ for hedonic attribute ($M_{Abs-Hed-Loss} = 4.93$) and utilitarian attribute ($M_{Abs-Util-Loss} = 5.48$; $F_{(1,247)} = 2.58$, $p = .11$; H3b partially supported). However, when concrete mindset is activated, consumer’s attitude toward the utilitarian attribute ($M_{Con-Util-Loss} = 5.83$) is higher than the hedonic attribute ($M_{Con-Hed-Loss} = 5.10$; $F_{(1,247)} = 4.80$, $p = .03$; H3c partially supported) only when the attribute is framed as loss. When the attribute is framed as gain, there is no significant difference in attitude between hedonic ($M_{Con-Hed-Gain} = 6.04$) and utilitarian attribute ($M_{Con-Util-Gain} = 5.84$; $F_{(1,247)} = 0.35$, $p = .55$; H3d partially supported). (see Figure 4)
Table 4-ANCOVA Table on Attitude for Study 2

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Covariates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>price</td>
<td></td>
<td>15.602</td>
<td>1</td>
<td>15.602</td>
<td>9.051</td>
<td>0.003</td>
</tr>
<tr>
<td><strong>Test Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>construal</td>
<td></td>
<td>15.726</td>
<td>1</td>
<td>15.726</td>
<td>9.123</td>
<td>0.003</td>
</tr>
<tr>
<td>hedutil</td>
<td></td>
<td>1.974</td>
<td>1</td>
<td>1.974</td>
<td>1.145</td>
<td>0.286</td>
</tr>
<tr>
<td>regulatory</td>
<td></td>
<td>3.32</td>
<td>1</td>
<td>3.32</td>
<td>1.926</td>
<td>0.166</td>
</tr>
<tr>
<td>construal * hedutil</td>
<td></td>
<td>12.27</td>
<td>1</td>
<td>12.27</td>
<td>7.118</td>
<td>0.008</td>
</tr>
<tr>
<td>construal *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>regulatory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hedutil * regulatory</td>
<td></td>
<td>41.4</td>
<td>1</td>
<td>41.4</td>
<td>24.017</td>
<td>0</td>
</tr>
<tr>
<td>construal * hedutil * regulatory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>regulatory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td>411.972</td>
<td>239</td>
<td>1.724</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>7921.111</td>
<td>248</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td></td>
<td>514.142</td>
<td>247</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Test of Hypothesis 4: The interaction effect of mind-set (abstract versus concrete), attribute type (hedonic versus utilitarian) and regulatory focus (gain versus loss) will be mediated by process fluency on consumer’s attitude and behavioral intention.

Using PROCESS bootstrapping method (Hayes, 2013), we conducted the moderated mediation analysis to examine whether process fluency mediates the interaction effect of construal level, attribute type, and regulatory focus on consumer’s attitude. We used model 11 and the independent variable was attribute type (hedonic versus utilitarian), the two moderators are construal level (abstract versus concrete) and regulatory focus (gain versus loss) and the mediator is process fluency.
The bootstrapping analysis demonstrates the mediation by process fluency is significant for attitude. Specifically, the mean indirect effect via process fluency excluded zero for attitude (95% CI=−.49 to -0.09; H4 partially supported).

**Discussion**

The findings of study 2, explain why H1b was not supported. When consumers have an abstract mindset, attitude towards the product will be more positive only when hedonic attributes (versus utilitarian attributes) are framed as a gain. When the hedonic attributes are framed as a loss, this effect will be attenuated. However, consumers with a concrete mindset will evaluate utilitarian attributes (versus hedonic attributes) more highly only when the attributes are framed as a loss. When the utilitarian attribute is framed as a gain, than the interaction effect will disappear. In study 1, the study only looked in to attributes that was framed as a gain and that is why the result showed no significance difference between hedonic and utilitarian attributes for hypothesis H1b.
Chapter 6 GENERAL DISCUSSIONS AND CONTRIBUTIONS

The objective of this dissertation was to examine how consumers’ construal level (abstract versus concrete) and type of attribute (hedonic versus utilitarian) influence their evaluation of products or services. This paper extends prior research on hedonic and utilitarian attributes, CLT, and regulatory focus theory by incorporating message framing.

The results of the two pretests and two main studies demonstrated that the benefits of emphasizing hedonic and utilitarian attributes depend on the consumer’s construal level. Specifically, consumers with an abstract mindset focus more on hedonic attributes (versus utilitarian attributes), and thus perceive the product/services more positively. Furthermore, this study identified an important boundary factor: gain and loss framing. According to the second study conducted in this dissertation, consumer’s with an abstract mindset evaluate hedonic attributes more highly only when the message is framed as a gain. If the attributes are framed as a loss, emphasizing hedonic attributes (versus utilitarian attributes) provides no benefits. However, for consumers with a concrete mindset, utilitarian attributes framed as a loss are evaluated more favorably compared to hedonic attributes framed as a loss. Furthermore, this study demonstrated that process fluency mediates this effect.

Theoretical Contributions

The theoretical contribution of the current research is to extend prior CLT research by demonstrating that mindset influences consumer evaluations and purchase intentions based on the type of attributes (hedonic versus utilitarian). Although previous literature has demonstrated that construal level could shift weights between primary and secondary information (Fujita et al. 2006; Liberman & Trope, 1998; Trope, 1986), to our knowledge, there has not been any research that would investigate the shift of the preference between attribute types. To bridge the gap, we
focused on hedonic and utilitarian attributes of a product/service. More specifically, we found that an abstract mindset is associated with hedonic attributes whereas a concrete mindset is closely related to utilitarian attributes. Therefore, the result of this study demonstrated that the compatibility between mindsets and product/service attributes is important in predicting consumer’s judgment and behavior intentions.

The current study also contributes to the process fluency literature. It shows that a match between hedonic and utilitarian attributes and consumer’s construal level plays a critical role in product evaluations. This result is consistent with previous studies, which have demonstrated that ease of processing leads to positive emotions and favorable judgments (Alter & Oppenheimer, 2009; Novemsky et al., 2007; Tsai & Mcgill, 2011). We proposed that a match between the consumer’s mindset and attribute of a product/service improves processing fluency, which eventually enhances consumer attitudes.

Furthermore, a significant three-way interaction effect of construal level, attribute type, and gain/loss framing on attitude contributes to the regulatory focus theory. Although study 1 indicated no significant difference between hedonic and utilitarian attributes for consumers with a concrete mindset, this may be due to the fact that the study 1 stimuli was framed as a gain rather than a loss. The findings of study 2 clearly showed that regulatory focus plays a critical role in evaluating hedonic versus utilitarian attributes. When the stimuli were framed as a loss, consumers with a concrete mindset evaluated utilitarian attributes (versus hedonic) more positively. The results of this study implied that framing attribute as a gain or a loss can influence the evaluation of both hedonic and utilitarian attributes.
Managerial Implications

The findings of this study also have important practical implications. The results of this study are of value to marketers who aim to promote products/services that have both hedonic and utilitarian attributes. We suggest that if consumers have an abstract mindset when reading information about a product or service, it will be more effective to emphasize information that is hedonic (versus utilitarian). However, if consumers have a more concrete mindset when reading information about a product or service, emphasizing the utilitarian (versus hedonic) aspects of information or an advertisement will enhance evaluation and purchase behavior.

Marketers should plan different marketing strategies for different product types or channels with different type of consumers. Consumers who have a more abstract mindset when purchasing the product/service should receive information that stresses hedonic benefits of the product/service. However, if the consumers have a more concrete mindset when purchasing the product/service, they should receive information that stresses utilitarian benefits of the product/service. For example, a product/service that is made for local customers (psychologically near) should emphasize utilitarian benefits while a product/service that is consumed by international customers (psychologically distant) should focus on hedonic features. This strategy can be used for industries or distribution channels where the gap between purchasing and consumption exists. For example, consumers who are booking a resort hotel on a booking website where reservation occurs months in advance before arrival (actual consumption) are likely to have an abstract mindset when purchasing the hotel room. Therefore, highlighting the hedonic benefits may be more effective. However, hotel booking channels that promote last minute bookings, it may be more efficient to emphasize the utilitarian aspects of the hotel.
Furthermore, the marketers should effectively frame the hedonic and utilitarian attributes in their ads. The findings of the studies suggest that framing the attributes as a gain or a loss determines the success of the ad. If most of the target consumers have an abstract mindset, hedonic attributes should be framed as a gain. However, if most of the target consumers have a concrete mindset, utilitarian attributes should be framed as a loss.

Limitations and Future Research

The current research has some limitations. First, it is important to note that both experiments were scenario-based and do not reflect actual, “real-world” consumer behavior. Thus, we rely on previous research, which has established the link between behavioral intentions and behavior (Ajzen, 1988; Ajzen & Fishbein, 1980; Sheppard, Hartwick, & Warshaw, 1988). However, it would be beneficial for future research to attempt to capture actual consumer behavior by way of field experiments. Second, the use of only two focal products in the current study may limit the generalizability of the results to other product categories. Therefore, future work should examine additional contexts to examine the generalizability of the findings reported here.

In addition to addressing the limitations, it would be worth examining how other psychological distances influence the perception of hedonic and utilitarian consumptions. For example, it would be beneficial to demonstrate how distant spatial distance (vs. near spatial distance) or distant temporal distance (vs. near temporal distance) jointly influence the evaluations of hedonic versus utilitarian consumptions.

Furthermore, considering personal traits, emotions, and cognitions of individuals may influence the results. Specifically, previous studies have demonstrated that hedonic attributes may appeal more to consumers’ who make their decisions based on emotions whereas utilitarian
attributes may persuade consumers who make their decisions based on cognition (Hirschman & Holbrooke, 1982; Kemp & Kopp, 2001). Moreover, it would be interesting to investigate promotion-focus versus prevention-focus in future studies. Some previous studies have reported that promotion-focused individuals are more affectively driven (Pham & Avnet, 2004) to obtain hedonic benefits, whereas prevention-focused individuals are more cognitively driven to obtain utilitarian benefits (Roy & Ng, 2012).
REFERENCES


Hong, J., & Sternthal, B. (2010). The effects of consumer prior knowledge and processing strategies on judgments. *Journal of Marketing Research, 47*(2), 301-311.


Levin, I., Schneider, S., & Gaeth, G. (1998). All frames are not created equal: A typology and critical analysis of framing effects. Organizational behavior and human decision processes, 76(2), 149-188.


VITA
Ju Yeon Han

Ju Yeon Han is currently a Ph.D. student at the Pennsylvania State University. Prior to entering the doctoral program, Ju Yeon has 9 years of combined professional experience in the hospitality industry with Samsung Shilla Hotel and Fairmont Raffles Hotel International in rooms operations and revenue management and with Orbitz Worldwide as a market manager. Ms. Han’s research interest areas are consumer behavior with special emphasis on experiences and services. She is also conducting research in areas of pricing and advertising. She received her bachelor’s degree in hospitality management from the University of Nevada, Las Vegas and a master’s degree in hospitality management from Cornell University, with emphases on services marketing and revenue management.

In Fall 2015, Ju Yeon will start her academic career at the University of Houston as an Assistant Professor.