HOW DIFFERENCES IN PRODUCT INVOLVEMENT INFLUENCE THE EMOTIONAL RESPONSE OF THE CHINESE CONSUMER

By

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A THESIS PRESENTED TO THE GRADUATE SCHOOL
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To my parents

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The goal of this study was to measure Chinese individuals' emotional responses to products. The measuring tool is AdSAM, a non-verbal, visual technique used to evaluate human emotional responses (Lang, 1980). AdSAM theorizes that every emotion can be thought as the combination of three dimensions – pleasure, arousal and dominance. Previous research has mainly focused on emotion in advertising messages, as it relates to attitudes toward ads and brands, but few scholars have paid much attention to attitudes toward the product itself. The term "involvement" is used in this study, to refer to the amount of an individual's interest in a product, and the importance of that product to the individual. "Product involvement" or emotional response can be classified into four categories based on the Foote Cone & Belding (FCB) grid (Vaughn, 1980). These four categories are classified by the consumer's personal characteristics, brand factors, cultural factors, and the influence of society and families. These "product involvement" or emotional responses come to represent the individual's feelings about the product and can be cues that affect his or her future motivation to purchase the product and loyalty to the brand.

In this study, the framework includes four related theories of involvement, brand factors, cultural factors, product involvement and emotion theory. The new nonverbal emotion measurement, AdSAM, is used to avoid the drawbacks of verbal measurement. The subjects are all Chinese students. The study finds that China's distinctive culture influences the emotional responses of Chinese individuals in a unique manner. This confirms the theory that "culture affects how consumers construe events and contexts, producing a range of emotional responses to a stimulus" (Russell & Pratt, 1980, p. 314). It was interesting to conduct this research on a particular group of people in a unique culture. Survey data were analyzed using the statistical analysis program, SPSS. Conclusions, limitations and the direction of further research study were determined.

The study indicates that Chinese individuals have a stronger and more positive emotional response toward cognitive-involvement products than they do toward affective-involvement products. Cognitive-involved products require three cognitive processes: interpreting the information given, retrieving previous knowledge about the product and combining the two to arrive at a decision as to responsive behavior (such as approaching or purchasing the product) (Mayer, 1997). Affective-involvement products refer to products that produce an emotional or arousing response to the product (Park & Young, 1986).

Further, where the emotional dimensions of pleasure and arousal are concerned, Chinese individuals have stronger and more positive emotions toward high-involvement products (products that consumers need more time to consider and have purchase behaviors) than they do toward low-involvement products (products that don't need much time and effort to consider and are purchased frequently). Understanding

consumers' emotional response to different products could help companies develop more effective advertising strategies.

CHAPTER 1
INTRODUCTION

Conceptual Framework

Products hold a wide range of connotations for consumers. These are the result of some dimensions: emotional connections, utilitarian effects (functional appeal of the product), benefits and personal experiences (Zaichkowsky, 1986; Ha & Lennon, 2010). Chinese consumers' emotional responses and their involvement with products in these three dimensions is of particular interest.

Product involvement describes the combination of emotions that result from the feelings and thoughts that individuals associate with a product (Zaichkowsky, 1985). At the early stage of the research, the phrase product involvement is used to refer to the degree of importance a consumer attaches to a product or his or her subjective recognition of that product's value. It is the amount of personal relevance that the individual attaches to the product. That perception is based on his or her needs, values, or interests (Zaichkowsky, 1986).

This study suggests a framework for "product emotions" that how product categories evoke different emotions. The term product emotion refers to "all the emotions experienced in response to (or elicited by), seeing, using, owning, or thinking about a consumer product" (Desmet & Hekkert, 2002, p. 62). First, the product emotion is meant to reflect the emotional responses of the individual to the product. Products elicit obvious emotions, for example exciting, happiness, boring, sadness or arousal, among many others emotions that people associate with specific products. Second, individuals often have a combination of mixed emotions rather than a single emotion (Desmet, 2008). How is the product causing this reaction?

Background

Several research theories have focused on investigating emotional responses to advertising (Burke & Edell, 1989; Englis, 1990; Holbrook & Hirschman, 1982; Holbrook & O'Shaughnessy, 1984; Morris, Bradley, Waine, & Lang, 1992; Morris, Wright, Bradley, & Waine, 1992; Morris, Bradley, Sutherland, & Wei, 1993; Ruiz & Sicilia, 2004; Geuens, Pelsmacker, & Faseur, 2011). Two areas concerning the influence of emotional responses to advertising have received substantial study. One is the attitude that results from advertisement (Holbrook & O'Shaughnessy, 1984), and the other is the attitude that results from brands (Cohen & Areni, 1991). One research group (Friedstad & Thorson, 1986; Stout & Leckenby, 1986; Holbrook & Batra, 1987) found that three dimensions: pleasure, arousal, and dominance, mediate the effects of advertisement content on attitudes toward ads. Further, it found that these three emotional dimensions, plus attitudes toward advertisements, mediate the effects of ad content on attitudes toward brands. However, there has been relatively less research focused on a third area, how the emotional responses affect attitudes toward the product. Therefore, prior to designing the questionnaire to survey and measure target subjects' emotional responses to different products' involvement, this paper examines the framework used by earlier literature.

Product involvement refers to the amount of an individual's interest in a product, and how important is that product to an individual. Thus, in product involvement, individuals have a variety of emotional responses. A product may excite some individuals while the same product may produce little arousal in others. Some individuals may evince considerable arousal from a product while the same product may leave others cold. Some individuals may experience a high level of pleasure from a

product, while the same product leaves others uninterested. The reason for such differences is sought to be understood. They might be caused by a variety of reasons, including past use of the product, personal characteristics, brand effect, background differences, perceived usefulness, or perceived ease (Ha & Lennon, 2010). All of the factors can influence the individual's emotional response to the product.

According to the FCB grid (Vaughn, 1980), products can be categorized into four types: high thinking products, high feeling products, low thinking products and low feeling products (Ratchford, 1987; Vaughn, 1980). Similarly, product involvement can be divided into four types: high-thinking involvement, high-feeling involvement, or low-thinking and low-feeling product involvement. "High-thinking" or "low-thinking" refers to the information required when purchasing the item. In high-thinking product involvement, an important product is involved, thus a large amount of information is needed when making a purchase. An example for a high-thinking product is the amount of information needed when purchasing a high-visibility or expensive product such as a television or a diamond. By contrast, a low-thinking product involvement will be found with such as a frequently-purchased convenience product that requires minimal information to affect the purchase. An example of a low-thinking product, a product that requires a low level of information needed when purchasing it, is paper towels, which is a product with less social risk and little visibility or expense. "High-feeling" or "low-feeling" refer to the emotional involvement required when purchasing an item. In high-feeling product involvement, a substantial amount of emotional involvement with the product is present when purchasing the product. An example of high-feeling product involvement is the amount of emotional involvement present during the purchase of an

item of fine jewelry. The differences are not necessarily always so clearly defined as there may be a gradient between “thinking” and “emotion” product involvement. Purchasing decisions are made differently based on whether amount of information or amount of emotion is the more dominant requirement at the time of purchase (Ratchford, 1987; Vaughn, 1980).

As to high feeling and low-feeling product involvement, individuals do not connect the emotions involved to the specific product. Rather, individuals’ emotions are based on “enduring involvement.” Enduring involvement refers to such emotional states as interest, excitement and enthusiasm that consumers hold on a long-term basis for their favorite product categories (Richins & Bloch, 1986). Consumers may have enduring involvement when the product is important to their self-concept or when it can express their values and social status. Such an enduring involvement type of product, which is visible to others and expensive, could be clothes or an automobile. These feelings might change when the influence of products, cultural factor and brand effect are added, such as when valuable extras are added to the product. This is further discussed, below. This study examines emotional responses connected with different levels of product involvement and compares levels of product involvement.

Need for the Study

The goal of this study was to measure Chinese individuals’ emotional responses to different product involvement, using the measuring tool AdSAM. AdSAM follows the theory that the combination of three dimensions: pleasure, arousal and dominance could express every emotion. Concerning Chinese individuals’ emotional responses to different product involvements, in a search of the literature, there were no theories or observed results published prior to the present study. This study, in addition to providing

data on Chinese individuals' emotional responses to product involvement, helps us better understand the emotional responses to products under this culture. This will help marketers or companies to better understand the relationship between various products and the perception and emotions they elicit. Moreover, by understanding the emotions connected with products and brand loyalty, advertisers will be in a better position to evaluate responses to products (as opposed to responses only toward ads or only toward brands), in order to better develop an effective advertising strategy.

Methodology

When examining social phenomena, two principal research methods are used, the quantitative research method, which involves math, statistics or computation, and the qualitative research method, which studies why or how a decision is made, usually in a particular case (Jonson & Christensen, 2008). The present research study uses the quantitative research method. First, a survey was created. The questionnaire (Appendix A) contains 14 questions. To test individuals' emotions related to different product categories, the survey uses the measuring tool AdSAM (self-assessment manikin) (Lang, 1980), a non-verbal, visual technique used to evaluate human emotional responses that avoid the drawbacks of verbal measurements. Research subjects were all Chinese university students, from 17 to 30 years old.

Thesis Plan

In this thesis, Chapter 2 presents previous research and theories and the selection of scales of measurement. Chapter 3 outlines the theory of research for this study, including the complete procedure, the selection of the sample and the designing of the questionnaire. Chapter 4 presents analysis of the data and measures the

hypotheses. Chapter 5 discusses the findings and limitations and a suggested direction for further research.

Summary

Chapter 1 introduces the background of this research study, the justification for carrying it out, the methodology it uses, the outline of the work, and the work's scope. This study is needed because few previous theories have focused on individuals' emotions as these relate to the product itself. This important aspect has been neglected. Chapter 2 reviews the existing literature, focusing on several aspects of studies and their theories, including the theory of involvement, product involvement, factors that influence individuals' emotions toward product involvement and the selected measuring scale.

CHAPTER 2
EXISTING RESEARCH AND THEORIES

This study tests the impact of brand factors on individuals' emotional responses toward products. The goal was to measure Chinese individuals' emotional responses to four product involvements and to compare the emotional intensity found in each case. Chapter 2 focuses on existing research and theories in involvement found in the literature: product involvement, emotion theory, and cultural factors. Individuals' emotions might not be elicited directly from the product. Rather the emotions might be a reaction to such external factors as additional brand factor, classification of products, and previous purchase experiences. These could result in enduring involvement. Moreover, such internal factors as personal characteristics; differences in background and cultural factors also influence emotional responses.

Involvement

Conceptualization of Involvement

Involvement theory attempts to describe the psychology that motivates an individual's reaction to advertising. Thus, involvement may be an important intermediary of an individual's behavior as a consumer (Mitchell, 1981). Individuals may possess beliefs that place personal importance on particular attributes of objects. These beliefs, which are related to situations, messages, or products, evoke certain emotional responses. This phenomenon is known as involvement. Mitchell (1981) describes involvement as an internal state variable whose motivational properties are aroused by a certain stimulus or situation. In this paper, involvement considers individual arousal levels in response to various stimuli. According to Zaichkowsy (1985), involvement refers to the degree of association an individual has with a particular object. The level of

association also depends on the individual's values, interests, and basic needs and is affected by personal affective and realistic factors.

In addition, the level of involvement to the same object might vary, according to differences in an individual's characteristics, previous purchase experience, external brand factors, the consumer's social status, and the influence of cultural factors (Antil, 1984). Similarly, an individual's elaboration likelihood (the extent to which an individual evaluates advertising arguments and changes them) and emotions are affected by situational factors, such as product category, and external brand factors (Nai-Hwa Lien, 2001).

The Elaboration Likelihood Model (ELM) of Persuasion

In evaluating how to change attitudes, "elaboration likelihood" refers to the extent to which advertising arguments are evaluated and changed by the consumer (Petty & Cacioppo, 1986). The Elaboration Likelihood Model (ELM) tests how the consumer will respond to the argument contained in the advertisement. According to ELM, there are two relatively characteristic paths to persuasion, the central route and the peripheral route (Petty, 1977; Petty & Cacioppo, 1978). The peripheral route and the central route to persuasion represent how individuals differ in the way they process information. This difference is brought about by the degree of involvement (Muncy, 1990). As follows, the use of the central route to persuasion is more enduring. As individuals change their emotions, there is a likelihood that the trend of buying will also change. Individuals who are highly motivated are likely to purchase a particular product. Individuals with high brand loyalty are likely to spend more time and increased cognitive processing efforts to learn more about a potential product choice. Increased cognitive processing effort is also known as high-elaboration likelihood, which involves the use of the central route.

Consumers will have a positive attitude and better product loyalty only when the information is objective and persuasive (Petty & Cacioppo, 1981).

Persuasion, which results from the central route, will be more resistant to counter-persuasion. On the other hand, the peripheral route plays a role when individuals have low motivation to purchase a low-involvement product. In that case, the attitudes will be determined by emotional appeals instead of objective information (Petty & Cacioppo, 1981). In such instances, consumers will make purchases based on their emotions and the attractiveness of the advertisements. Generally speaking, a high-involvement product would raise individual's cognitive thinking of relevant information and the elaboration likelihood will be increased. In that case, the central route influences the persuasion model. On the other side, a low-involvement product would cause the low level of information process, and a peripheral route could be used in persuasion (Petty & Cacioppo, 1981).

Different Classifications of Involvement

Different contexts lead to different types of involvement. In existing research studies on involvement, there are four levels of involvement, which in order from low to high, are identified as pre-attention, focal attention, comprehension, and elaboration (Greenwald & Leavitt, 1984). The lowest level (pre-attention) uses little cognitive capacity, whereas, elaboration, the highest level of involvement uses more capacity, which results in increasingly durable cognitive and attitudinal effects (Greenwald & Leavitt, 1984).

Several studies have concluded that when processing a persuasive message, consumers in high-involvement situations (not necessarily involving ego involvement but when making a type of purchase that is more important to the consumer, such as the

purchase of tires) are more likely to exert cognitive effort whereas less effort is expended in low-involvement conditions (Batra & Ray, 1986; Petty & Cacioppo, 1986; Swasy & Munch, 1985; Yalch & Yalch, 1984). When making a buying decision, five steps occur (Khosla, 2010). First, there is the recognition of a problem, second there are two possible types of search for information (an internal search of memory for information about the product that might resolve questions about the purchase and a search of external sources), third, alternatives are evaluated, fourth, the purchase takes place, and fifth, there occurs a post-purchase evaluation. Krugman (1966) has found that the hierarchy of communication effects of persuasive and communication processes in high-involvement situations is cognition (awareness), then attitude (attitude shift, conviction), and finally, behavior (purchasing). In low-involvement situations, such as those involving everyday repeat purchases, communication is more likely to affect cognition (awareness, minimal comprehension) first, then behaviors (purchasing), and finally, attitudes (attitude shift, conviction) (Ray, Alan, Michael, Roger, Edward, & Reed, 1973). These characteristics could be reflected in advertisement style and the advertisers should understand the classification of product involvement to thus develop the most appealing advertisement strategies to attract consumers.

All involvement describes a motivational role in processing information (Zaichkowsky, 1985). Besides level of involvement, earlier studies have provided many classifications and different types of involvement. For example, Zaichkowsky (1985) found that involvements could be described over three areas: involvement with products, advertisements, and purchase situations. Earlier, Houston and Rothschild (1978) made a distinction between situational involvement and enduring involvement.

This distinction has been widely accepted and proved in the previous research (e.g., Andrews, Durvasula, & Akhter, 1990; Day, Royne Stafford, & Camacho, 1995). Situational involvement is involvement with a certain situation or context and is temporary and active such as exists when a consumer has to purchase an auto after a car accident. The circumstances, the time, the social surroundings, the physical location, the task required and antecedent states are influential (Houston & Rothschild, 1978). By contrast, enduring involvement is related to a long-term or permanent concern that influences the level of involvement to an object. It is determined by the extent to which the object or issue is associated with personally relevant values and goals (Houston & Rothschild, 1978). Zaichkowsky (1985) notes that an "enduring involvement" is represented by the product category involvement, whereas a "situational involvement" is advertising (p. 342).

Other studies have dichotomized involvement into cognitive involvement and affective involvement (McGuire, 1974; Park & Young, 1986). Cognitive involvement can also be called rational (thinking) and emotional (feeling) involvement (Laurent and Kapferer, 1985; Vaughn, 1980). Cognitive involvement (or thinking involvement) refers to the level of consumers' informational processing activities. Affective involvement (or feeling involvement) refers to the degree of a consumer's emotion evoked by an object (Park & Young, 1986).

Product Involvement

Conceptualization of Product Involvement

Product involvement refers to consumers' levels of interest in a particular product (Solomon, 2004). There are many other definitions of product involvement. Bloch

(1981) defines product involvement as “personal relevance as related to the needs of the individual.” (p. 61) Mittal & Lee (1989) defined product involvement as “the interest a consumer finds in a product class.” (p. 363) Gordon, Mckeage, & Fox (1998) state “product involvement refers to the way consumers view different product categories with different feelings, thoughts and behavioral responses.” (p. 447) In addition, many sales promotions are now also designed to increase this type of involvement. In sum, product involvement refers to the varying degree to which consumers link their decision-making style and follow-up behaviors when purchasing various types of products.

Consumer studies show that product involvement can cause consumers to make a purchase decision, and can determine the consumer’s level of interest in finding information on a certain type of product, and involves consumers’ knowledge, attitudes, preferences and perceptions about other different brands of the same product (Celsi & Olson, 1988; Brisoux & Cheron, 1990; Leclerc & Little, 1997). The level of consumer commitment to a certain product brand in terms of attitudes, beliefs, cognition and behaviors is what constitutes product involvement (Miller & Marks, 1996; Gordon, McKeage, & Fox, 1998).

Several studies stated that a consumer with high level of product involvement could be more loyalty to the same brand and have positive emotions (Traylor, 1981; Park, 1996; Iwasaki & Havitz, 1998). Other researchers found that product involvement was an important variable for the marketer and advertiser to develop better marketing and advertising strategies (Havitz & Howard, 1995; Iwasaki & Havitz, 1998; Quester & Smart, 1996).

Previous Models in Product Involvement

Ratchford (1987) has stated that when communicating technique concepts, it is critical to consider product types. This is because consumers have different ways of understanding information about types of products. According to previous studies, there are several measurement scales and classifications for product involvement and product categories: the Foote Cone & Belding (FCB) grid model by Vaughn (1980), the Bloch involvement Scale (Bloch, 1981), the Consumer Involvement Profile (CIP) Scale proposed by Laurent and Kapferer (1985), the Personal Involvement Inventory (PII) proposed by Zaichkowsky (1985), and the Causal Model proposed by Mittal and Lee (1989). This paper assumes the products used have already been tested and classified based on the FCB Grid model that classifies the products into four different types high thinking products, high feeling products, low thinking products and low feeling products (Ratchford, 1987; Vaughn, 1980).

The FCB Grid Model

The FCB grid, a famous product typology, classifies products into four different categories: the high thinking product, the high feeling product, the low thinking product, and the low feeling product (Ratchford, 1987; Vaughn, 1980). In this classification, motives to meet utility needs are referred to as thinking motives. Thinking motives are different from feeling motives, which act to satisfy sensory needs, gratifications and social acceptance (Ratchford, 1987). Product involvement has been understood as the level of consumers' commitment to a certain product type (Petty, Cacioppo, & Schumann, 1983). The FCB grid is significant and has practical applications in advertising. The FCB grid enables firms to identify crucial considerations when creating advertising. It allows different ways of communicating and classifying product categories

when informing the market. The FCB grid has four product classes and consumers have different ways of processing information about each individual class.

The FCB grid has four quadrants (Figure 2-1). The top left quadrant is high and represents thinking-involvement products (for example, a personal computer) that require a large amount of information and thinking about related issues when making a purchase decision. The top right quadrant is high and represents feeling-involvement products (for example, when purchasing a diamond necklace). These kinds of products are highly involved, similar to the first quadrant; however, emotions or attitudes toward the product are more important than objective information. The bottom left quadrant represents low and thinking-involvement products (for example, paper towels) that require minimal thought or information and where there is a tendency to form buying habits for convenience. The bottom right quadrant represents the low and feeling-involvement products (for example, chocolates). They are purchased to satisfy personal tastes, without requiring a great deal of information to consider.

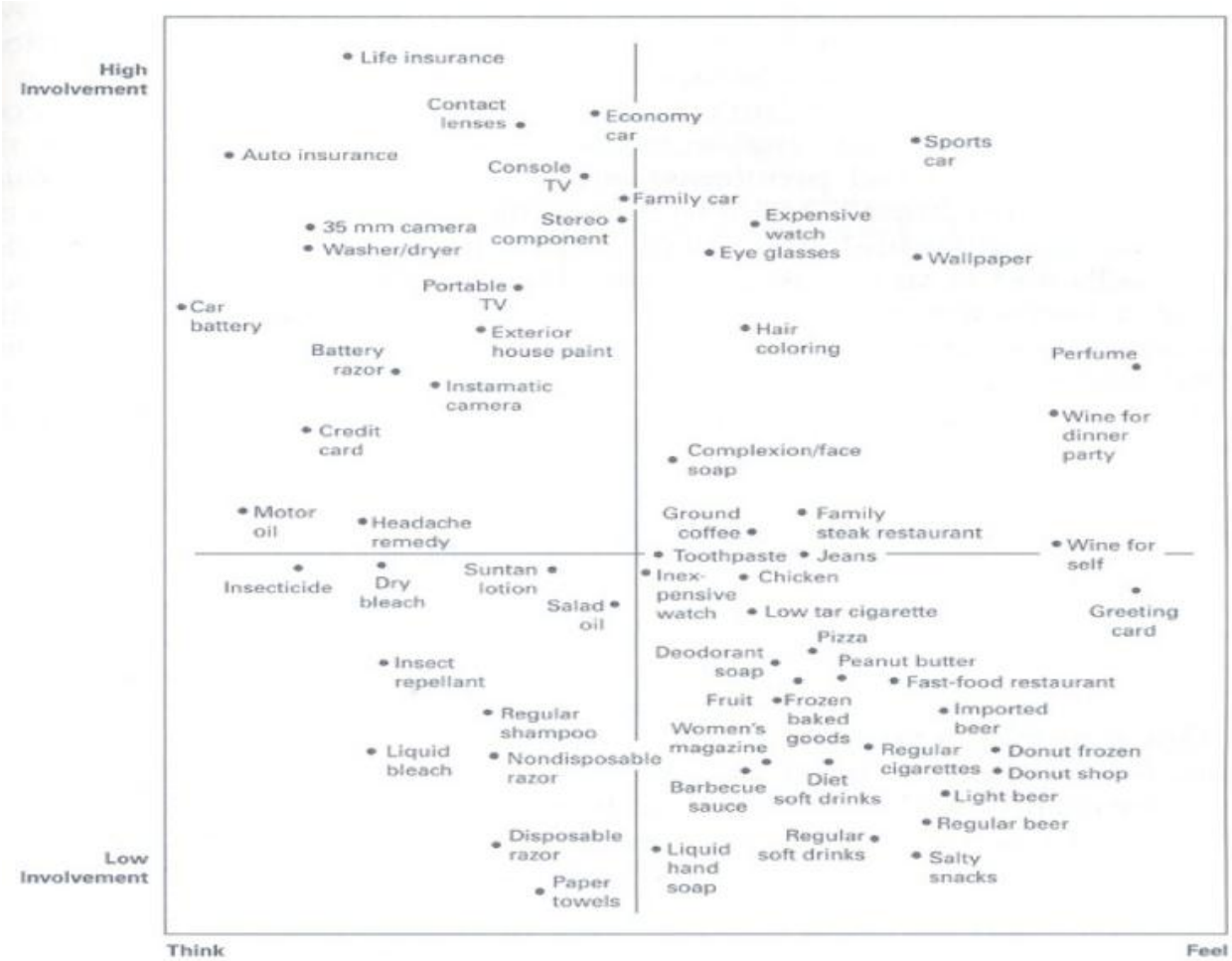


Figure 2-1. The FCB grid. Rossiter, J. J. et al. (1991). A better advertising planning grid. *Journal of Advertising Research.* p. 12

In this research study, one product was selected to represent each type of product involvement. A digital SLR camera was the high and thinking-involvement product, perfume was the high and feeling-involvement product, regular shampoo was the low and thinking-involvement product and diet cola was the low and feeling-involvement product. These four products meet the standards of their product category and have been tested and classified by previous studies. Therefore, this study did not conduct additional measurements to identify the product categories.

Factors that Influence Individuals' Level of Product Involvement

Different individuals have different attitudes and feelings toward the same product. One person may like the design and style of a vase, while another may have contempt for what he or she considers is its tedious pattern design. One person may be pleased with the innovative function of a mobile phone, while another may think that it has "gimmicky" functions. Notably, consumers' emotional responses to a particular product might change for several reasons and be different in different times. For example, one person may like a new laptop; however, he is probably to become dissatisfied after using it for a long time. Factors that cause emotions to change are complicated. An ad for a product may communicate different emotions. These emotions include inspiration, jealousy, and fascination among others. However, products do not communicate mere dislikes (such as pain or aversion) and likes (such as pleasure or attraction). Individuals always experience a range of emotions in a paradoxical and mixed manner, instead of feeling a single emotion about products. One person can be pleased with a car and excited with its new features, but at the same time, will experience other emotions, such as being annoyed with its high price and feeling frustrated when unable to afford it.

Zaichkowsky (1986) categorized the variables that influence product involvement into two factors: the personal factor and the object factor.

Personal factor

Generally, product usage could be a personal factor in product involvement (Tyebjee, 1979). There is a correlation between product involvement and product usage: product involvement is applicable to an individual in terms of satisfying the needs of that individual (Engel, Kollat, & Blackwell, 1982). Zaichkowsky (1985) said

individuals who use a product frequently might have more involvement than others who use the product infrequently.

According to Robertson, Zielinski, & Ward (1985), product involvement is also related to social visibility. If a product has “personal relevance or self-presentation, [and if] it expresses an individual’s personal status, position, personality and taste,” there will be present a high degree of involvement (Robertson, Zielinski, & Ward, 1985, p. 45). Where certain products cause the consumer to stand out in society, there will be a high degree of involvement. Personal beliefs and culture influence individuals’ feelings about a product and mediate the degree of involvement. Moreover, there is a risk involved in a consumers’ decision to buy a product. This perceived risk is found to be a precursor of product involvement (Laurent & Kapferer, 1985; Zaichkowsky, 1986; Mittal, 1989). “Involvement is influenced by the characteristics of a person” (Rothschild, 1979, p. 6). The characteristics of a person are an essential constituent of the product knowledge (Celsi & Olson, 1988). The product knowledge is made up of knowhow and understanding, where understanding refers to the product-related experiences that consumers have developed after some period and knowhow refers to the efficient performance of product-related obligations (Alba & Hutchinson, 1987). According to Mishra, Umesh, & Stem (1993), “Individuals who are more familiar with the class of the product are better placed to assimilate information presented in a more stable manner accompanied by stable structures for making decision.” (p. 334) When individuals have high product knowledge, the perceived significance of product-choice risk is likely to be reduced (Baker & Lutz, 2000). A consumer planning to purchase an unfamiliar product would have perceived risk. This perceived risk involved in purchasing an unfamiliar

product may also evoke high levels of product involvement and result in stronger emotions (Chaudhuri, 2000). When consumers are highly involved with a product, they are likely to be influenced by consumption situations and self-concept. However, consumers who are not involved with a product are solely influenced by situational factors instead of self-concepts (Xue, 2008). In other words, a consumer's satisfaction with the choice of brand is indicated through brand commitment, while repeat purchase or brand loyalty may simply show reduced effort and simplification of the process of making purchasing decisions (Rodgers, Negash, & Suk, 2005). When consumers are strongly attached to a certain product, they usually develop brand commitment and high levels of involvement (Byoungho & Koh, 1999).

Object factor

The factor of perceived differentiation of alternatives could be one antecedent of high-and low-involvement products. Korgaonkar & Moschis (1982); Zaichkowsky (1986); and Laurent & Kapferer (1985) state that products with a high price might evoke higher levels of product involvement compared with products with a low price. Another important external factor would be brand factor. Famous brands would cause individuals to have higher involvement and cause purchase motivation. Perceived risk may be higher for the same product facing follower brands versus facing a famous brand (Sheth & Venkatesan, 1968). The last external factor that influences individuals' level of involvement to different product is the media factor or the level of exposure to advertising. To attract more target audiences, effective advertising strategies that gain more attention should be developed (Buchholz & Smith, 1991; Greenwald & Leavitt, 1984; Krugman, 1965).

Emotion Theory

Feelings, as mentioned in Chapter 1, are key features of emotions. Emotions are geared to actions: angry individuals tend to fight and shout; happy individuals tend to smile and be excited. The role of emotions and emotional behaviors is to express a human state, particularly while relating with the world and surroundings (Gross, 1998). Individuals have “mixed” emotions about various products. These emotions are directly related to their behavior and evoke the purchasing or non-purchasing action. According to previous research, positive emotions about products will cause high product involvement and are likely to lead to purchasing behavior and create brand loyalty (Chardhuri, 1998).

Emotion Relevant Theories and Scales

Past studies have used a variety of scales to measure emotions. For instance, Plutchik & Kellerman (1974) using “an evolutionary perspective identify eight ‘primary’ emotions: fear, anger, joy, sadness, acceptance, disgust, expectancy, and surprise.” (p. 316) To calculate these emotions, they designed a tool: the emotion profile index. A shorter version of it was later designed by Holbrook & Westwood (1989). Izard (1977) came up with his own ways of examining emotions. His focus was on the function of the facial muscles in improving survival. The facial muscles of interest were those attached to emotional responses. He came up with a scale for measuring the ten emotions. His differential emotional scale (DES) is presented in four different forms. His DES-II is the most popular. This tool is composed of thirty adjectives and three measures of each of the ten primary emotions. Some authors have criticized Izard’s tool, saying it is dominated by negative emotions (Laverie, Kleine, & Kleine, 1993; Mano & Oliver, 1993; Oliver, 1992).

Pleasure-Arousal-Dominance (PAD) Theory

Emotions have similarities that enable them to vary along three dimensions (Mehrabian & Russell, 1977; Osgood, Suci, & Tannenbaum, 1957). These three dimensions are: pleasure-displeasure, aroused-extreme calm and dominance-submissiveness. Mehrabian and Russell (1974) developed the pleasure-arousal-dominance (PAD) scale, used to evaluate emotional responses to marketing stimuli. The PAD scale rates the perceived pleasure, arousal, and dominance caused by environmental stimuli. It contains eighteen semantic differential items--six for each category. In context and content, the PAD scales' objective is different from scales based on emotion theory. Regarding content, the PAD scale differs significantly from other measuring methods. The PAD scale does not measure certain emotions; it measures the perceived pleasure, dominance, and arousal evoked by environmental stimuli (Mehrabian, 1980). Consequently, the PAD scale is best used to gauge the underlying emotional states of study participants, rather than their specific emotions.

Emotional Measurement Method: AdSAM

Assessing the emotional relationship between advertising and different products and brands is fundamental. Subjects rated their emotional connection to several products using the nonverbal measure called the SAM (Self-Assessment Manikin) (Morris, Bradley, Waine, & Lang, 1992), a pictorial measure of emotional response ranging from most pleased to most unpleased, most arousal to boring, and most dominance to most out of control.

In this study, AdSAM, which is based on the Self-Assessment Manikin (SAM) (Lang, 1980), was used to measure the subjects' emotional responses and analyzed the results. AdSAM serves the purpose of measuring emotional reactions to marketing

stimuli. It uses a database of 232 adjectives that are scored with SAM, with the major aim of gaining insight and analyzing the relationships among numerous factors such as attitude, individual curiosity on a given brand, general mind-set, and individual cognition. The SAM illustrates every dimension of PAD using a certain form of graphic characters arrayed along a continuous nine-point scale.

Since SAM was developed in three independent, bipolar dimensions, it has been used to describe the complete gamut of human emotions (arousal, pleasure, and dominance) (Morris, Woo, Geason, & Kim, 2002). Osgood, Suci, & Tannenbaum (1957) described them as evaluation, activity, and potency. Mehrabian & Russell (1974) described them as pleasure, arousal, and dominance. This is a process that combines all the basic emotions and the combinations differ in certain aspects based on the three theories on the gamut of human emotions. All the emotions are defined effectively and sufficiently through the three independent, bipolar dimensions (Mehrabian & Russell, 1974).

In these three dimensions, the Self-Assessment Manikin (SAM) illustrates the details of PAD dimension with an animation scale of measure, which is usually an interrupted nine-point scale. In the first row, pleasure and displeasure is from extreme happiness to despondency are represented. The second row represents the intensity of arousal ranging from extreme calm (eyes closed) to full excitation revealed by open and elevated eyebrows. As to dominance or submissiveness, that usually illustrates a feeling of power, control, influence or dominance as opposed to a feeling of lack of control, submissive, or inability to influence. In most cases, subjects demonstrate how individuals feel by using the PAD scales (Mehrabian & Wetter, 1987) (Figure 2-2).

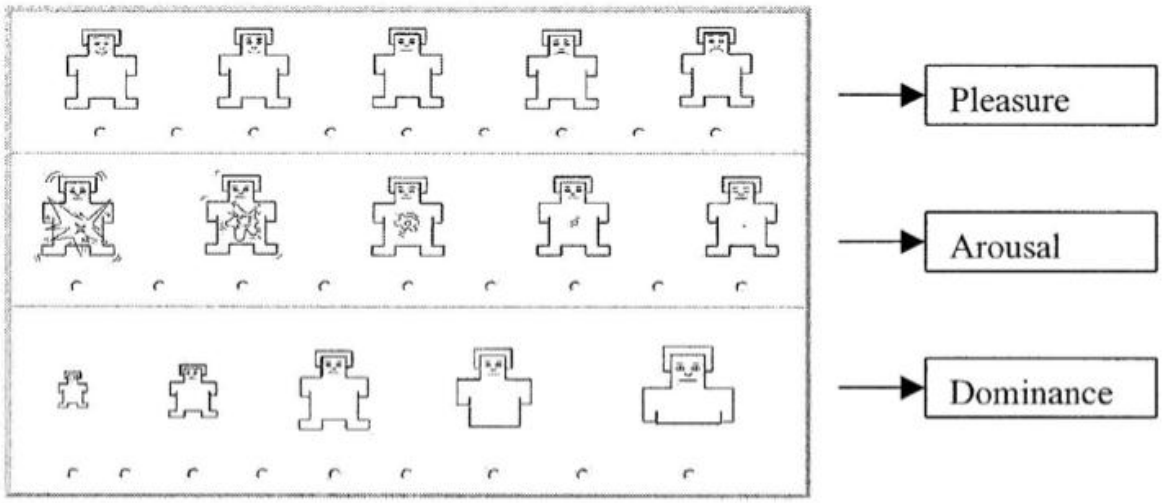


Figure 2-2. SAM (Self-Assessment Manikin) (A large figure represents the maximum control while a minute figure indicates a small amount of control.) Copyright 1996, 2012 AdSAM Marketing LLC. All rights reserved.

Advantages of SAM

Until now, SAM has been accepted and used widely to evaluate emotional responses. It was used in various research studies, including effects from advertisements (Morris, Bradley, Waine, & Lang, 1992); photos (International Affective Picture System, IAPS) (Greenwald, Cook, & Lang, 1989; Lang et al., 1993); and images and audio (Bradley, 1994).

Verbal response is difficult to measure in most advertising studies. The real meaning expressed through words is usually different depending on individuals' perceptions. For instance, happiness may represent one emotion to an individual; however, it will become a different emotion to the other. This may change subjects' actual responses of emotion. It is difficult to translate all the words with the same meaning and use one instrument to show its meaning. However, facial expressions are universal and share similar meanings, regardless of the language spoken in a given country or culture (Ekman & Friesen, 1971; Ekman, Sorenson, & Friesen, 1969).

The other problem involves using open-ended questions for a response on a given ad from a particular respondent (Stout & Rust, 1986; Stout & Leckenby, 1986). Cognitive processing is needed for both approaches. By contrast, SAM, the nonverbal measure, is easier to use and likely to eliminate the cognitive processing usually related to oral measures (Edell & Burke, 1987; Morris & Waine, 1994; Lang, 1980). "Correlations of .937 for pleasure, .938 for arousal, and .660 for dominance were found between ratings generated by SAM and by the semantic differential scales used by Mehrabian and Russell" (Morris, Bradley, Sutherland, & Wei, 1993, Morris, Bradley, Lang, & Waine, 1992; Morris & Waine, 1994, p. 9).

In addition, subjects are able to finish rating on the SAM scale within 15 seconds, thus lessening the time and allowing many stimuli to be tested. SAM generally attracts subjects' attention and they show more interest than other open-end questions (Lang, 1985). On every scale, subjects were asked to mark the dot that under the manikin or the dot between the manikins that best reflected their emotions or feelings after seeing the stimuli. Therefore, SAM is fit to be used in diverse cultures and countries since it is a no culture barrier and language barrier measurement scale (Bradley, Greenwald, & Hamm, 1994; Morris, Bradley, & Wei, 1994).

Product Involvement with Emotions

"Attitudes are relatively enduring, affectively colored beliefs, preferences, and predispositions toward objects, persons, or events" (Russell, 2003, p. 167).

Product involvement is how consumers see different product categories in conjunction with various feelings, behaviors, and thoughts (Gordon, McKeage, & Fox, 1998). Previously, product involvement was viewed in two different capacities: product

importance (Hupfer & Gardner, 1971; Lastovicka & Gardner, 1979), and enduring involvement (Bloch, 1981).

When a consumer plans to purchase a product, if he has a positive impression and positive emotions toward the product, his purchase willingness and behavior will be heightened and he will have more brand loyalty (Dick & Basu, 1994**;** Chaudhuri & Holbrook, 2001). These kinds of positive emotions come from previous purchase experiences and the characteristics of consumers, while additional information comes from outside and from different brand values (Ziethaml, 1981).

Products that are hedonic (that give pleasure because of the quality of the product purchased) might evoke enduring involvement (Houston & Rothschild, 1978). In contrast, functional or utilitarian products can be very important to a consumer, but with less enduringly involvement. For example, the paper towel is important for consumers. They use it every day yet they likely have little emotion connected with it.

Product Involvement with PAD Theory

When individuals eat chocolates, their perfect expectation emotions are satisfaction, pleasure, enjoyment and happiness. Conversely, when a medicine is mentioned, individuals may feel negative emotions, such as terrible, unpleasant, and repulsive. According to Mehrabian & Russell (1974), all the emotional connotations of stimuli could be characterized into three dimensions: pleasure-displeasure, degree of arousal, and dominance-out of control.

Pleasure is the key factor that can motivate consumers to have purchase behaviors. Regarding human factors, Jordan (1999) offers a pleasure-based approach, where pleasure with products is seen as the emotional, practical, and hedonic benefits in relation to the products. “Arousal-non-arousal constitutes a physiological dimension

characterizing the level of physical activity and mental alertness of an organism" (Mehrabian, 1980, p. 141). Arousal-non-arousal's cognitive counterpart is the information rate. In addition, dominance-submissiveness relates to sentiments of power, influence, or control, as opposed to being powerless or out of control. A combination of different levels of pleasure, dominance, and arousal are essential to describe any person's emotional state (Russell & Mehrabian, 1977).

Products that can cause emotions such as pleasure or arousal are classified under enduring involvement. Functional products could be highly important to consumers but have less enduring involving. Moreover, situations and other factors (such as brand influence) may also influence a consumer's involvement level.

Brand Factor

Consumer-Based Brand Equity

According to Farquhar (1989), brand equity is the "added value endowed by the brand to the product." (p. 27) Swait et al. (1993) define "brand equity as the customer's implicit valuation in a market with various brands, compared to a market without brand differentiation." (p. 42) The customer-based perspective shows how the customer perceives the brand instead of valuing it through numbers. Customer-based brand equity relates to how marketing creates a different result in brand knowledge for the consumers.

Product Involvement with Brand

Vaughn (1980) found that high-priced products (in conjunction with self-esteem, social status, social value, and perceived risk) require additional information and efforts. However, low-involvement products need less time to consider, elicit little interest, have less risk, and as a result, need less purchase information and effort while customers are

making purchase decisions. When consumers plan to purchase high-involvement products, they will pay more attention and spend more time to understand information and advertisements for related products. In addition, they will be affected by the situational information or emotion-related issues.

Involvement is a two-dimensional construct, encompassing “normative importance” and “commitment to brand” (Traylor, 1981, p. 51). The point, at which consumers get involved with products based on the function of the products or the influence of the brand, is called the utilitarian/value-expressive involvement. Previous studies suggest that high product involvement is more likely to cause high brand loyalty (Quester & Lim, 2003).

Some additional values, which are familiar to consumers and are well-known brands, for example leader brands, have a strong competitive power that can help the low-involvement products build brand loyalty. Leader brands play a critical role in building trust with consumers. To consumers, these groups of brands are trustworthy and promise the future and quality of products. The follower brand is not as familiar to consumers and the market share of that product is low compared with the leader brand. When customers choose products, they are not familiar with the follower brands and have lots of perceived uncertainty. In that case, they choose leader brands to ensure their high quality purchase and decrease the perceived risk. Therefore, brand factor plays a significant role in product involvement and can help the low-involvement product gain brand loyalty.

Emotions Connected with Brand Loyalty

When looking at an advertisement or product, positive customer attitudes and evaluations could be supported by trust in an advertisement (Fuan & Paul, 2006). Conversely, negative attitudes or perspectives can cause distrust.

Many researchers (Ehrenberg et al., 1990; Kahn et al., 1986; Ehrenberg, 2000) theorize that repeated purchases can capture consumer loyalty to the brand. Oliver (1999) found “customer satisfaction developed through product usage is necessary to form loyalty.” (p. 34) However, it becomes less important as loyalty forms through other means, such as individual fortitude and social bonding (the degree to which society encourages the consumer to stay loyal). Many researchers feel the need to explore “attitudes” and “behaviors” to define brand loyalty. Day (1969) suggested that consumers with more positive emotions for the products and related brands would have more brand loyalty.

Cultural Factors

Cultural factors play a significant part in determining individuals’ emotions and the level of involvement toward a certain product. Individuals’ values and thoughts change in response to societal influence, personal background, social visibility, and specific culture (Cohen, 2001). According to Dawar & Parker (1994), values, norms, and beliefs that appear explicit to a particular social setting are usually referred to as culture. They further contend that a particular culture can be used in defining various but diverse levels of emotions. This is because such emotions vary depending on a given culture. This implies that cultural differences arise as a result of the present methods and normative responses of individuals (Mesquith, Frijda, & Scherer, 1997).

Hosfstede (1997) argues that the given culture and the given country of individuals are likely to affect emotions, methods of learning, and experiences of individuals as they socialize. Hofstede's general cultural dimensions are extensively accepted and have been used widely by numerous marketing researchers with the aim of locating and researching specific countries (Dawar & Parker, 1994; Lynn, Zinkhan, & Harris, 1993; Roth, 1995). His cultural dimensions were used to analyze this factor in the present study.

Subjects in this research study were Chinese individuals. China has an interesting and special culture. Based on Hofstede's culture dimensions, culture has five aspects: power distance, individualism, masculinity, uncertainty of avoidance, and long-term orientation.

Figure 2-3. Hofstede's China culture dimensions (From 1 for the lowest to 120 for the highest) Hofstede, G. (2013).Retrieved from http://geert-hofstede.com/china.html

Power distance (PDI) is defined as "the extent to which the less powerful members of institutions and organizations within a country expect and accept that

power is distributed unequally" (Hofstede, 1991, p. 28). China has a relatively higher score in power distance (80) compared to other countries. This reflects that individuals in societies are not equal and have status differences. This society believes that the existence of inequalities among individuals is acceptable. Individuals prefer to choose products that can help them show their societal status and achievements.

Individualism versus Collectivism (IDV) reflects "the extent to which individuals are integrated into groups" (Hofstede, 1991, p. 51). This dimension is the degree of interdependence that members have in a society. The societies focused on individualism, individuals tend to care for their own interests and those of their immediate family members. In collectivist cultures, individuals identify with groups that care for them and work in the interests of the group. China ranks low in individualism, but is a highly collectivist country.

Masculinity versus Femininity (MAS) refers to "assertiveness and competitiveness versus modesty and caring" (Hofstede, 1991, p. 82). With a measure of 66, China's culture is masculine. It is success-oriented. The need for success is demonstrated by the way Chinese individuals would forego family and leisure activities so that instead they may work. Individuals in the service industry, such as barbers, will provide work until late hours. When masculinity is high, individuals tend to develop self-esteem and society status, which are usually dominant. This also contributes to symbolic consumption, which is usually prevalent (De Mooij & Hofstede, 2002) and emotional appeals associated with self-concept are sought (Tsikriktsis, 2002). The idea that purchasing the latest and most novel products serves as a success substitutes is referred to as a symbolic argument.

Uncertainty Avoidance (UAI). The dimension of uncertainty avoidance describes how a society deals with uncertainty of the future and whether to control circumstances or to just let things be as they are. In cultures with high uncertainty avoidance, most individuals prefer to stick to the status quo. Conversely, in a culture with low uncertainty avoidance, most individuals usually seek more information to challenge what they believe. This helps them become more or less innovators (De Mooij & Hofstede, 2002; Smith & Bristor, 1994). Despite the above intent of low uncertainty avoidance, seeking new ideas can at times prove extremely risky because individuals may choose to go for established brands. At a score of 30, China is low in terms of uncertainty avoidance. Truth could be relative. Although in social circles, individuals are concerned with truth, rules and norms, individuals do not want to perceive risk.

Long-term orientation (LTO). With a measure of 118, the Chinese are highly focused on long-term prospects where persistence and perseverance are considered the norm. Relationships in China depend on and are ordered by status, and the rank of status is observed. New traditions and changes are adapted to accommodate new conditions. Thinking focuses on being fully confident or not being confident, which contrasts with low scoring long-term oriented nations who work in terms of probability.

In terms of the culture analysis in Hofstede's five dimensions, Chinese individuals are interested in seeking product information because of their low score of uncertainty avoidance. Moreover, Chinese individuals prefer to purchase high-price and high-quality products to reflect their social status in terms of their high power distance and masculinity ranking. Individuals like to choose famous brands in high-involvement products and tend to have more brand loyalty to decrease perceived risk.

In addition, Chinese customers score high in long-term orientation: they pay more attention to the quality of products and expect the investment to have a high payback (the products can be used for a long time or give them a good self-concept or high social status). They would have more positive emotions for high-end products and leader brands when compared to their emotions for low-end products and follower brands.

Summary

Chapter 2 compiled a literature framework of previous theories and studies about product involvement, emotion theory, the brand factors, and cultural factors. From these theories and studies, the following information can be concluded.

Involvements can be classified in different ways: enduring and situational involvement; advertising, product, and purchase situation involvement; cognitive and affective involvement; and high and low involvement. This study focuses on product involvement.

According to the FCB grid, product involvements fit into four different categories and individuals have mixed emotions connected with each one, for several reasons. Individuals' level of involvement with a product could be affected by personal factors and object factors. Customers' personal characteristics, the society's visualization of what the product could bring them, the additional brand factor, and cultural factors all influence individuals' emotions to some extent.

Emotion is a key factor that affects individuals' level of involvement with a product, motivates individuals to have brand loyalty and creates purchase behavior in the future. According to the literature, when a consumer has positive and stronger emotions toward a product, he is in high involvement, and is more likely to seek related

information on that product and purchase the product, and is even more likely to be a loyal customer. Therefore, it is helpful for advertisers and companies to understand consumers' emotional responses to certain product categories and to develop an effective advertising strategy and marketing position for the product.

Chapter 2 examines emotional theory and methods for measuring emotions. AdSAM is an effective non-verbal measurement method to measure individuals' emotions toward product involvement in the pleasure, arousal and dominance dimensions.

The section following then analyzes cultural factors that affect individuals' behaviors and emotions. Subjects in this research study were Chinese students since China has a special culture. It would be interesting to discuss the relation between the cultural dimensions based on Hofstede (1980) and individuals' emotions connected with products.

Chapter 3 discusses in detail the entire methodology that this study utilizes, including the designing of the survey, the procedure, sample information, the steps of data collection and the method of analyzing the data.

CHAPTER 3
METHOD

Chapter 3 introduces the complete design of the research study and the sample selection of the survey and discusses the measurement scales and the procedure. This study is guided by phenomenological inquiry. The aim is to understand the perceptions and relationships of emotional responses from Chinese individuals. Phenomenology is an ideal guiding framework as it is committed to understanding the phenomenon from the actor's perspective.

Hypotheses

The literature review in Chapter 2 revealed numerous theories and research studies focused on advertising involvement. A few of them refer to the three dimensions of emotion that are connected with the product itself and with the possibility of additional brand factors influencing emotional responses. Therefore, this research study focuses on the product itself and on individuals' emotional responses among four different product categories.

The goal of this study is to measure Chinese individuals' emotional responses to different product categories under various involvements. High-involvement products connect with stronger emotions and require individuals to spend much time to consider. The purchase behavior of low-involvement products takes place without much consideration and always less emotional involvement, but product usage and consumers' buying habits also play a significant role. Furthermore, when individuals purchase thinking products, they need more information to support their decisions. Thus ads for cognitive products require the obtaining of more information, while ads for

affective products can rely on emotional appeal. Therefore, the hypotheses were formulated as below:

Hypothesis 1. Cognitive-involvement products have significantly greater emotional responses than do affective-involvement products.

- **Hypothesis 1a.** Cognitive-involvement products have significantly greater pleasure response than do affective-involvement products.
- **Hypothesis 1b.** Cognitive-involvement products have significantly greater arousal responses than do affective-involvement products.
- **Hypothesis 1c.** Cognitive-involvement products have significantly greater dominance responses than do affective-involvement products.

Hypothesis 2. For the cognitive category, high-involvement products have significantly greater emotional responses than do low-involvement products.

- **Hypothesis 2a.** For the cognitive category, high-involvement products have significantly greater pleasure responses than do low-involvement products.
- **Hypothesis 2b.** For the cognitive category, high-involvement products have significantly greater arousal responses than do low-involvement products.
- **Hypothesis 2c.** For the cognitive category, high-involvement products have significantly greater dominance responses than do low-involvement products.

Hypothesis 3. For the affective category, high-involvement products have significantly greater emotional responses than do low-involvement products.

- **Hypothesis 3a**. For the affective category, high-involvement products have significantly greater pleasure responses than do low-involvement products.
- **Hypothesis 3b.** For the affective category, high-involvement products have significantly greater arousal responses than do low-involvement products.
- **Hypothesis 3c.** For the affective category, high-involvement products have significantly greater dominance responses than do low-involvement products.

Research Design

Methodology

. To test the model, a web-based questionnaire, created in online survey software Qualtrics, https://ufljour.qualtrics.com/, was selected as the research instrument. All questions were guided and approved by the University of Florida Institutional Review Board (IRB). The survey was called emotion testing and was sent to subjects via Email and social media. Subjects were given one week to complete the survey. There were two parts to the questionnaire: the first is questions for research study, and the second is basic demographic information about the subjects. Data were electronically downloaded into a .csv file, which was imported into SPSS software for analysis.

Four typical products (representing four different product categories specified in previous studies) were selected based on FCB grid (Vaughn, 1980) for doing the survey:

- An SLR camera represents the high thinking (cognitive)-involvement category.
- Perfume represents the high feeling (affective)-involvement category.
- Regular shampoo represents the low thinking (cognitive)-involvement category.
- Diet Cola represents the low feeling (affective)-involvement category.

To assess the quality of the questionnaire, a pre-test was taken by a convenient sample of 10 subjects selected from among Chinese students of the University of Florida, College of Journalism and Communication. The pre-test is to test the reliability and validity of the survey. The result was evaluated to revise the questionnaire appropriately.

Sample Selection

All participants came from China. Some were international students studying or working in the United States or other countries. The rest are now studying in Chinese

universities or working in China. Chinese students were selected for several reasons. China is a quickly developing country and has a special culture. Consumers in China might have different value theories according to the influence of a society- and family-oriented culture. It is interesting to find out how they feel toward four different types of products and to compare the emotional intensity each product type generates. As seen in previous research, emotional intensity predicts brand interest and identity and purchase behavior (Morris, Woo, Geason, & Kim, 2002).

Survey Design and Procedure

The survey is divided into two parts: the emotion test and the basic demographic information questions. There are several potential limitations in this research study: the size of the sample, the products selected and the validity of the questionnaires' design. All of the subjects were Chinese students from various universities. To ensure the reliability and feasibility of the research, the entire sample has a similar demographic background and age range.

The questionnaires were made into Chinese version because it is easier for Chinese subjects to take it. After doing the pre-test, the link to the survey was sent to students randomly selected from the University of Florida and other universities in the United States and China, in different majors, via social media and emails. The students had similar ages and educational backgrounds. The entire survey process took about one week.

The questionnaire begins with a few introductory instructions of the survey and SAM scale. The first row of figures is the pleasure/displeasure scale, which ranges from extreme happy, with a smiling face to extreme unhappy, with a frowning face. The middle row is the arousal scale, which ranges from extremely calm with eyes closed

manikin to extremely excited with eyes open manikin. The last row is the dominance scale, from a tiny figure, which indicates less power and control to a large figure represents full of power and maximum control (Figure 3-1). This research study chose this measure scale because emotions are difficult to measure and define. Individuals from different countries might have different translations for the same word. However, a SAM picture can represent almost the same emotion worldwide and can convey the meaning of the emotions accurately.

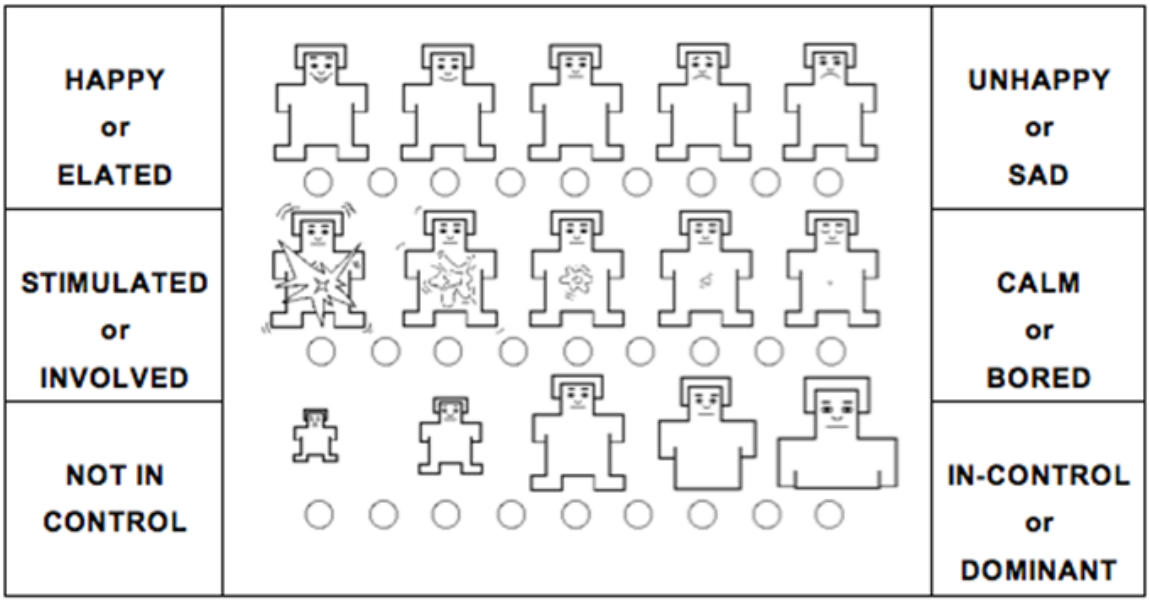


Figure 3-1. The AdSAM® Scale. Copyright 1996, 2012 AdSAM Marketing LLC. All rights reserved.

Before the survey began, the instrument and clear definition of each scale were given to the subject to avoid potential confounding variables and meaningless results. Four representative products were selected to be the stimuli. Subjects used the pleasure, arousal and dominance scales to express the first feeling while using or seeing each product. Questions resembled in following:

- How do you feel about . . .?
- How does____ make you feel like?

After the subjects saw the product, they were supposed to give their immediate emotional response to the product. In this survey, the independent variables were different levels of involvement in four product categories according to FCB grid (Vaughn, 1980). The dependent variables were individuals' emotions in three dimensions: pleasure, arousal and dominance.

Data Collection

The complete data-collection process lasted a week and a half and 435 responses were received, of which 301 are valid and counted into the final analysis for the hypotheses. Questionnaires returned with incomplete or invalid answers were eliminated to avoid potential confusion.

Data Recoding Process and Analysis Technique

Results data were input into the SPSS for analysis. To ensure the accuracy of the data, the scale was changed in the questionnaire. After putting all the data into the SPSS, there was a recoding process in pleasure and arousal dimensions before analyzing the data. The score of some dimensions also needed some changes. On the pleasure and arousal scales, selection to the far left represents a score of 9 and far right represents a score of 1. In the dominance scale, selection to the far left represents a score of 1 and far right a score of score 9. This research compares respondent's answers to one questions to their answers to other questions, so it is a repeated measures design. In the analysis, the repeated measure was selected under the general linear model to measure significance.

Summary

Chapter 3 discussed the methodology used in the research study and the hypotheses of this paper. The goal of the research is to measure Chinese individuals'

emotional responses toward four different product categories. Moreover, it measures whether a significant difference exists between cognitive and affective involvement products, high cognitive-involvement products and low cognitive-involvement products and high affective-involvement products and low affective- involvement products. The method that this study used was a survey, and the target subjects were Chinese students who had similar demographic information.

After receiving the data SPSS was used to analyze the data and measure the hypotheses. The results are discussed in Chapter 4.

CHAPTER 4
RESULTS AND ANALYSIS

Data from the survey were cleared and analyzed in detail by SPSS according to the hypotheses. These analyses measured whether significant differences existed in individuals' emotional responses to different product involvements. A repeated measure analysis was conducted and the results were considered significant at ($p<0.05$).

Statistical Methods and Data Analysis

Demographic Findings

The sample for the survey was 301 Chinese students, ages 17 to 30, of whom 187 were international students studying or working in United States, 99 were studying or working in China, and 15 have relocated to other countries. Of the 301 students: 163 were male, and 138 were female. All of them were attending a university and pursuing degrees from undergraduate to doctoral. One hundred thirty one (131) students were employed. Of the 436 individuals who responded to the survey, 135 individuals did not finish, and therefore their data were unusable. Thus, the final sample was 301.

Results

Nine hypotheses were tested for difference. The results are as follows:

Hypothesis 1. Cognitive-involvement products have significantly greater emotional responses than do affective-involvement products.

Products in the cognitive-involvement category included Digital SLR cameras and regular shampoo. The affective-involvement product category included perfume and diet cola. The pleasure scores of the Digital SLR camera and regular shampoo were added together and divided by two to get the mean pleasure value of cognitive-involvement products. The pleasure score of perfume and diet cola were also added

together and divided by two to gain the mean pleasure score of affective-involvement products. The mean scores of arousal and dominance for cognitive-involvement products and affective-involvement products were obtained in the same manner. A repeated measure was then used under the general linear model to compare the mean values and conduct the analysis. Based on the questionnaire, the directional values of the pleasure and arousal dimensions ranged from 9 to 1, dominance dimension ranged from 1 to 9, where 9 represented the highest score in each dimension and 1 represented the lowest. There was a recoding process in pleasure and arousal dimensions.

Table 4-1. Analysis Results of Cognitive and Affective Involvement Products

Source	Cognitive-Involvement Products	Affective-Involvement Products	Sig
Pleasure	6.985	5.879	.000
Arousal	5.566	5.022	.000
Dominance	5.535	5.507	NS

df=1, F=102.848, p=.000. df=1, F=25.038, p=.000. df=1, F=.069, p=.793

Hypothesis 1a. Cognitive-involvement products have significantly greater pleasure responses than do affective-involvement products.

The study compared subjects' pleasure responses toward cognitive-involvement product category with affective-involvement product category. Based on Figure 4-1, the results of a repeated measures analysis of variance, within-subjects effects: F=102.848, df=1, p=0.000 was significant ($p < 0.05$ is significant). According to mean value analysis for the different pleasures scores, the mean value of pleasure for cognitive-involvement product was 6.985, which was significantly different from the pleasure score for affective-involvement products (5.879). Moreover, according to the coding system, the higher the score, the stronger the emotion was. In this case, Chinese individuals tended

to have stronger pleasure responses to cognitive-involvement products than they do to affective-involvement products. Therefore, the data supported Hypothesis 1a.

Hypothesis 1b. Cognitive-involvement products have significantly greater arousal responses than do affective-involvement products.

According to the above SPSS data analysis, the directional values of the arousal scores designed in questionnaire were on a scale from 9 to 1, where 9 represented the highest arousal score and 1 represented the lowest arousal score. The results of a repeated measures analysis of variance: within-subjects effects (subject's arousal response to cognitive-involvement product category and affective-involvement product category): $F=25.038$, $df=1$, $p=0.000$ ($p<0.05$) was significant. In addition, the mean value of the arousal score for cognitive-involvement products was 5.566, which was significantly different from the arousal score for affective-involvement products of 5.022. The confidence interval was 95%. The arousal score for cognitive-involvement products was higher than that of affective-involvement product. This supported Hypothesis 2a, which stated that there would be a significant difference between cognitive and affective involvement products in arousal response.

Hypothesis 1c. Cognitive-involvement products have significantly greater dominance responses than do affective-involvement products.

Based on the data analysis above, the directional values of the dominance scores designed in questionnaire were on a scale of 1 to 9, where 1 represented the lowest dominance score and 9 represented the highest. The results of a repeated measures analysis of variance: the test of within-subjects effects (compared the individual's dominance response between cognitive-involvement product category and

affective- involvement product category) was F=0.069, df=1, p=0.793 (>0.05) was insignificant (p <0.05 is significant). The mean value analyses for the different dominance scores for cognitive and affective-involvement products were conducted. The mean value of dominance for the cognitive-involvement products was 5.535, which was not significantly greater than the dominance score for affective-involvement products (5.507).

This evidence indicated that the Hypothesis 1c was not supported. There would not be a significant difference between cognitive-involvement products and affective-involvement products in dominance responses.

In summary, Hypotheses 1a and 1b were supported, but 1c was not. Cognitive-involvement products had significantly greater emotional responses than affective-involvement products on pleasure and arousal dimensions, but no difference was found on the dominance dimension. In addition, among the three dimensions, Chinese individuals tended to have more positive and arousing emotions toward cognitive-involvement products than they did to affective-involvement products.

Hypothesis 2. For the cognitive category, high-involvement products have significantly greater emotional responses than do low-involvement products.

In Hypothesis 2, two cognitive-involvement products were selected to represent the high-involvement and low-involvement products, respectively. In this study, the Digital SLR camera was a high cognitive-involvement product and the regular shampoo was a low cognitive-involvement product. The survey collected the scores for individuals' emotional responses toward these two specific products (Table 4-2). Based on the questionnaire, the directional values of the pleasure and arousal dimension

scores ranged from 9 to 1, dominance dimension score ranged from 1 to 9, where 1 represented the lowest score and 9 represented the highest. The same recoding process had been done in pleasure and arousal dimensions.

As related to this hypothesis, the pleasure, arousal, and dominance scores of the Digital SLR cameras and regular shampoo were compared. Repeated measures were used under the general linear model for analysis.

Table 4-2. Analysis Results of Digital SLR Camera and Regular Shampoo

Source	Digital SLR camera	Regular shampoo	Sig
Pleasure	7.316	6.654	.000
Arousal	5.910	5.223	.000
Dominance	5.532	5.538	NS

df=1, F=29.379, p=.000. df=1, F=18.467, p=.000. df=1, F=.002, p=.964

Hypothesis 2a. For the cognitive category, high-involvement products have significantly greater pleasure responses than do low-involvement products.

The result of repeated measure analysis of variance was: the test of within-subjects effects (compared Digital SLR camera and regular shampoo in pleasure) was F=29.379, df=1, p=0.000 was significant ($p < 0.05$ is significant).

In the mean value analysis for the different pleasure scores, the confidence interval was 95%. The mean value of pleasure for the Digital SLR camera was 7.316 (a high pleasure score), while the pleasure score for regular shampoo was 6.654. Thus, the high cognitive-involvement products had a significantly different and higher pleasure score than the low cognitive-involvement products had. Moreover, the high cognitive-involvement products produced significantly stronger emotional response than the low cognitive-involvement products on the pleasure factor. Therefore, Hypothesis 2a was supported.

Hypothesis 2b. For the cognitive category, high-involvement products have significantly greater arousal responses than do low-involvement products.

The results supported Hypothesis 2b. For the cognitive category, there would be a significant difference in arousal responses between high-involvement products and low-involvement products. The results of a repeated measure analysis of variance were as follows: the test of within-subjects effects (compared Digital SLR camera and regular shampoo in arousal) was $F=18.467$, $df=1$, $p=0.000$ ($p<0.05$ is significant). The mean arousal score for the Digital SLR camera was 5.910, which was significantly higher than the arousal score for regular shampoo of 5.223. Moreover, Chinese individuals had stronger emotional responses toward the high-cognitive involvement products on the arousal dimension.

Hypothesis 2c. For the cognitive category, high-involvement products have significantly greater dominance responses than do low-involvement products.

According to the above figures, the data on within-subjects effects (compared the dominance response between Digital SLR camera and regular shampoo) showed these two variables did not differ significantly ($F=0.002$, $df=1$, $p=0.964$ (>0.05) ($p <0.05$ is significant). The mean value of dominance for the Digital SLR camera was a neutral score of 5.532, which was not significantly different from the dominance score for the regular shampoo (5.538), Thus, Hypothesis 2c was not supported. For the cognitive category, there would not be a significant difference in dominance responses between high-involvement products and low-involvement products.

In conclusion, Hypotheses 2a and 2b were supported, but Hypothesis 2c was not. For high and low cognitive-involvement products, the emotional responses had

significant differences in terms of the pleasure and arousal dimensions, but tend to have similar dominance scores. In the emotional intensity area, individuals had much stronger emotions toward high cognitive-involvement products compared with their emotions toward low cognitive-involvement products in both pleasure and arousal. Neutral emotion scores were found for dominance.

Hypothesis 3. For the affective category, high-involvement products have significantly greater emotional responses than do low-involvement products.

Hypothesis 3 discussed the relationship between high-involvement products and low-involvement products in the affective category. The two affective-involvement products selected were perfume and diet cola to represent the high- and low-involvement products, respectively. The survey documented the scores for individuals' emotional responses toward these two specific products. The directional values of the pleasure and arousal dimension scores were on a scale from 9 to 1, dominance dimension score was on a scale from 1 to 9, where 1 represented the lowest score in pleasure and 9 represented the highest. The analysis of this hypothesis was similar to that of Hypothesis 2. The pleasure, arousal, and dominance scores of perfume and diet cola were compared. After the recoding process, the repeated measures under the general linear model were used to analyze the data.

Table 4-3. Analysis Results of Perfume and Diet Cola

Source	Perfume	Diet cola	Sig
Pleasure	6.764	4.993	.000
Arousal	5.698	4.346	.000
Dominance	5.362	5.651	NS

df=1, F=102.249, p=.000. df=1, F=56.800, p=.000. df=1, F=2.552, p=.111

Hypothesis 3a. For the affective category, high-involvement products have significantly greater pleasure responses than do low-involvement products.

According to Table 4-3, Hypothesis 3a was supported. The results of a repeated measures analysis of variance were as follows: the test of within-subjects effects (compared the pleasure response between perfume and diet cola): F=102.249, df=1, p=0.000 is significant. According to mean values analysis for pleasure for perfume and diet cola ($p < 0.05$) was significant. The mean value of pleasure for perfume was 6.764, which was much higher and greatly different than the score of pleasure for diet cola (4.993). The data supported Hypothesis 3a that pleasure emotion in high affective-involvement products was significantly greater than the low affective-involvement products.

Hypothesis 3b. For the affective category, high-involvement products have significantly greater arousal responses than do low-involvement products.

Hypothesis 3b was supported on the basis of the results of a repeated measures analysis of variance: within-subjects effects (compared the arousal response between perfume and diet cola): F=56.800, df=1, p=0.000 (<0.05) was significant. The mean values analysis for the two different arousals scores were as follows: arousal for perfume was 5.698 and arousal for diet cola was 4.346. These two mean values had a significant difference. Furthermore, arousal toward high affective-involvement products is much stronger than it is for the low affective-involvement products.

Hypothesis 3c. For the affective category, high-involvement products have significantly greater dominance responses than do low-involvement products.

In terms of the data shown in table 4-3, the test of within-subjects effects (compared the dominance response between perfume and diet cola) showed that F=2.552, df=1.p=0.111 was not significant ($p<0.05$ is significant). The mean value of

perfume was 5.362, which was not significantly different than the diet cola mean value of 5.651. Hence, Hypothesis 3c was not supported. There was not a significant difference in dominance responses between high and low affective-involvement products.

In summary, Hypothesis 3a and 3b were supported. Between high affective-involvement products and low affective-involvement products, there was a significant difference in pleasure and arousal scores. However, Hypothesis 3c was not supported. There was no difference in the dominance between high and low affective-involvement products. Moreover, regarding emotional intensity, subjects had much stronger and more positive emotional responses to high affective-involvement products than they had to low affective-involvement products in both of the pleasure and arousal dimensions.

Summary

Based on the analysis, Hypotheses 1a, 1b, 2a, 2b, 3a, and 3b were all supported by data. Hypotheses 1c, 2c, and 3c, on the other hand, were not supported. In other words, individuals have different emotional responses in pleasure and arousal toward cognitive-involvement and affective-involvement products as well as high-involvement and low-involvement products, but not in dominance.

The PAD scores are run through the AdSAM model and results are displayed in the perceptual map (Figure 4-1). There are four parts in this map, which are the high appeal/low engagement feelings (positive, but unmotivated), high appeal/ high engagement feelings (strong involvement and interest), low appeal / low engagement feelings (uninterested and negative feeling), and low appeal / high engagement feelings (intense negativity, strong negative motivation). According to the map, the cognitive-involvement category (P: 6.99, A: 5.57, D: 5.54) and the affective-involvement category

(P: 5.88, A: 5.02, D: 5.51) are both in the high appeal / high engagement feelings quadrant, and the emotion are wholesome and mature. However, the cognitive-involvement category has more positive emotion and higher engagement than affective-involvement category. In hypothesis 2 and 3, the perceptual map states that the emotion for the Digital SLR camera (P: 7.32, A: 5.91, D: 5.53) is stronger, and has higher level engagement than the regular shampoo (P: 6.65, A: 5.22, D: 5.54). The emotion of the diet cola (P: 4.99, A: 4.35, D: 5.65) tends to be neutral, and has feeling as aloof. It has much less engagement than the perfume (P: 6.76, A: 5.7, D: 5.36).

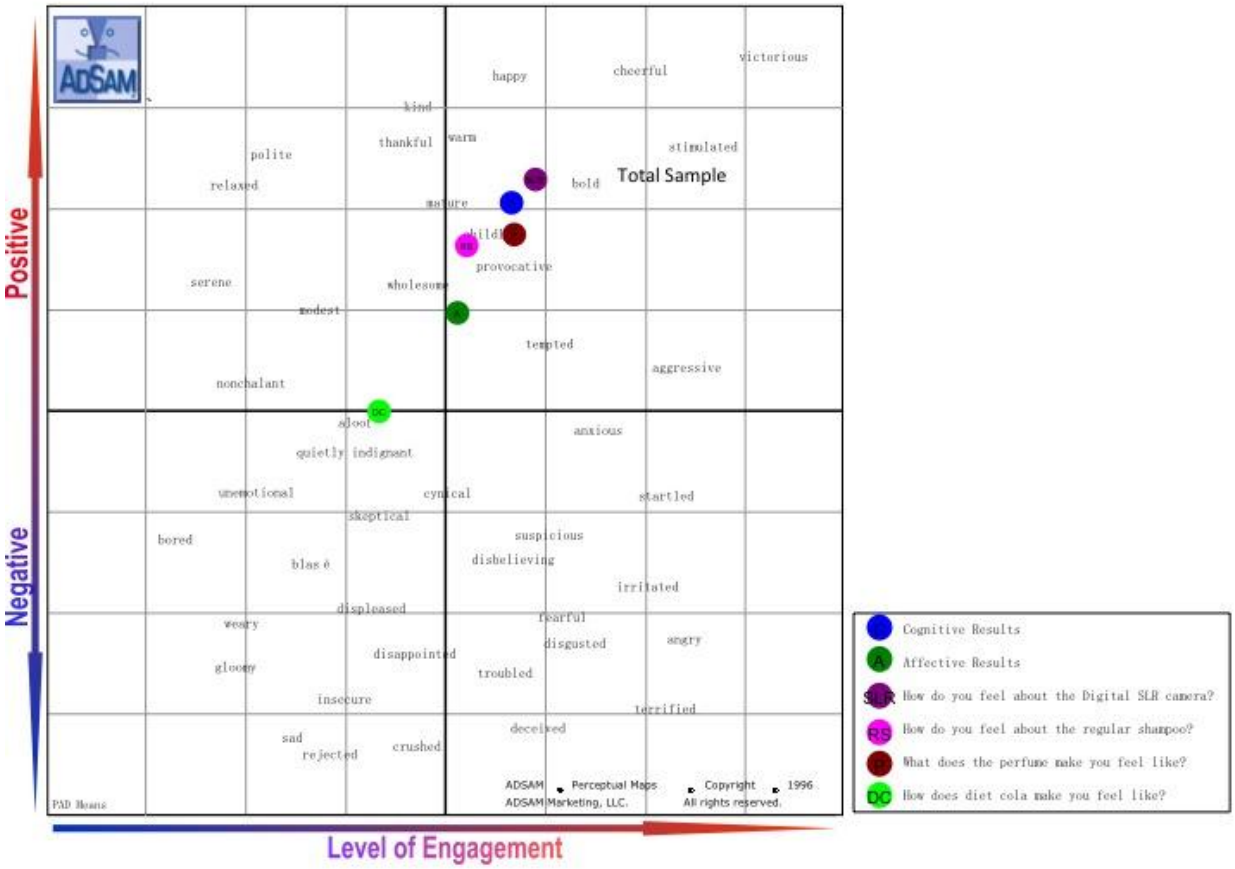


Figure 4-1. The Perceptual Map. Copyright 1996, 2012 AdSAM Marketing LLC. All rights reserved.

These differences show that cognitive-involvement products are stronger in pleasure and arousal than affective-involvement products are. For both of the cognitive and affective categories, high-involvement products are stronger in pleasure and arousal than low-involvement products are. In the dominance, the emotions are similar between the compared factors.

Chapter 5 will discuss the finding, the implications for theories of advertising, brand loyalty, and purchase motivation and future research direction.

CHAPTER 5
CONCLUSIONS, IMPLICATIONS AND LIMITATIONS

Chapter 5 includes the major findings resulting from this research study, the limitations, and the direction for future research. The goal of this study was to discuss the relationship between Chinese individuals' emotions in three dimensions by products delineated by product involvements. According to the statistical results, differences existed between cognitive- and affective-involvement products, high- and low-involvement products on the emotion dimensions of pleasure and arousal, but not dominance.

Discussion of findings and results

Results in hypotheses

According to the analysis covered in Chapter 4, the results of this study show that Hypotheses1a, 1b, 2a, 2b, 3a and 3b are supported. However, Hypotheses 1c, 2c and 3c are not supported.

Hypothesis 1. In Hypothesis 1, individuals' emotional responses toward cognitive-involvement products in pleasure and arousal dimension have significant differences in regards to affective-involvement products. However, in the dominance dimension, this difference is not significant and the subjects tend to get similar responses scores. In terms of Hypothesis 1a and 1b, subjects have much higher scores in cognitive-involvement products than affective-involvement products, which means the pleasure and arousal emotions are much stronger and more positive when they face functional products. Although the dominance score tends to be neutral, the dominance score for cognitive-involvement products is a little bit higher than that of the affective-

involvement products. In summary, individuals have stronger emotions toward cognitive products compared with affective products.

Hypothesis 2. The results of Hypothesis 2 show that Chinese individuals are more likely to have stronger and positive emotions on pleasure and arousal to the cognitive high-involvement products than the cognitive low-involvement products. However, the dominance scores toward these two groups of products are similar and produce no significant difference.

Hypothesis 3. According to SPSS data analysis, subjects have much higher and stronger emotions toward affective high-involvement products than the affective low-involvement products in the pleasure and arousal dimensions, but similar scores in the dominance factor.

Findings

First, Chinese individuals have stronger and more positive emotions toward cognitive-involvement products than they have toward affective-involvement product. Previous research found that a cognitive-involvement product would be important to individuals, but cause less enduring involvement than the affective-involvement product. However, the results of this research study show the opposite. The cause for this different result could be the cultural factors that Chinese individuals have low scores in uncertainty and prefer to seek information of products. They will devote much more effort and attention to practical products than they will give for merely “flashy” products with no practical qualities.

Additionally, Chinese individuals have stronger and more positive emotions toward the high-involvement products when compared with low-involvement products in both the cognitive and affective area. This result supports the theory that a consumer

with higher product involvement will have positive emotions compared with low product involvement (Traylor, 1981; Park, 1996; Iwasaki & Havitz, 1998). According to a prior literature review, factors that may affect individuals' involvement include the personal characteristics, product usage, social visibility, perceived risk, brand factors, cultural factors and the influence of society. It is also interesting in terms of the special culture in China. Individuals prefer high-priced products to reflect their societal status, as shown by high scores in power, distance and masculinity.

Individuals in China prefer high priced products or famous brands to avoid the risk, in accord with their low rank of UAI (Hofstede, 1991). Moreover, they trust brand and think the higher the price, the better the quality has the product. They have stronger and positive emotions connected with high-involvement products. Consequently, it is important for the advertisers and companies to understand this culture and the specific emotions it connects with products. In advertisement, it is better to pack the products into a high-end product and use an information strategy to attract consumers' attention.

Implications for theory and practice

The findings of this study contribute to assisting advertisers' develop effective advertising strategies for Chinese audiences based on their emotional responses toward different products involvements.

Advertisement

According to previous research, consumers will have positive attitudes and better product loyalty only when the information is objective and persuasive. Consumers have stronger emotions toward high-involvement products. Therefore, they will pay more attention and spend more effort to understand products and the related advertisement information, and will be less aroused with low-involvement product. Further, they are

less likely to have extreme behaviors. Petty et al. (1983) found that individuals under high-involvement conditions will elaborate the information through the central route, and would be persuaded by product-related information. Individuals in a low-involvement situation will elaborate the data via a peripheral route, with their attitudes determined by emotional appeal instead of objective information. Consumers' purchase behavior depends more on feelings and emotions and they are attracted by emotional appeals in an advertisement.

Rossiter & Percy (1997) found that "emotional authenticity" strategies work best for low-involvement products. (p. 7) Consumers have negative emotions toward products or related advertisements; they will also have a negative impression and attitude toward the brands in a low-involvement environment. In contrast, high-involvement products are best suited to the "information" strategy instead of the emotional appeal, since individuals are expected to understand and explore to find more information. Chinese consumers have more positive and stronger emotions with cognitive-involvement products than with affective-involvement products, and with high-involvement products than with low-involvement products. They prefer informational advertisement strategy than the emotional appeal one. The advertisement, which reflects the social status, the high-end product information will be effective strategy for reaching customers and get them involved.

Brand Loyalty

Many studies have made claims about the relationship between brand loyalty and level of involvement. High involvement is more likely to cause high level of brand loyalty. Positive and arousing emotions are connected to high involvement. If consumers have positive emotions with products, they might be more likely to have

brand loyalty and get involved with the products. Moreover, the power of the brand (an external factor) would influence individuals' emotional connection with the product and individuals' brand loyalty. More studies and experiments are needed to test the hypothesis.

Purchase Motivation and Behavior

Consumers make purchasing decisions for several reasons. Richins & Block (1986) found that consumers highly committed to a certain product or in a high-involvement situation would find the products or brands interesting and develop attitudes to always purchase them regardless of the buying terms. These interests and positive emotions are developed from the way consumers perceive these products in satisfying their needs and wants.

On the other hand, individuals who buy cognitive products need more information related to the products, and those who buy affective products need the influence of related emotions. Thus, a strong, logical argument and brand factors are effective for high-involvement products. In contrast, emotional appeal and attractiveness were more persuasive for low-involvement products, Individuals make purchase decisions of low involvement in terms of their hobbies, interests, or the function of the products; they do not care about the brand. Robertson (1976) states that "the consumer is not buying the same brand out of strong preferences, but because the brand is satisfactory" (p. 20) under low-involvement situation.

Limitations

The following limitations in this research study may have affected the results and findings. The research sample was a convenient sample. It might be narrow and limited

in geographical location and other demographic backgrounds. Results may not be representative of other countries.

The selection of the products to represent different classification of product involvements is random and may not be representative. This may influence the results of this research study.

Respondents could easily fail to remember the description of three emotional dimensions when they do the survey since they cannot go back to the previous page. This may influence the accuracy of the research study.

Direction of Further Research

This study examines emotional responses in three dimensions (pleasure, arousal, and dominance) among different classifications of product categories. We wondered how brand factors influence emotional responses. Individuals have certain emotions toward product categories. Would these emotion scores change for products with additional brands? How would the leader brand and follower brand influence individuals' emotion?

Moreover, we wondered how individuals' emotional responses to products would affect purchase intention and behavior. What is the relationship between attitudes and behavior? Additional research could focus on the relationship between ad messages or strategies and individuals' emotional responses to different product categories.

Summary

In closing, the aim of this research study was to measure Chinese individuals' emotional responses to different products in four classifications of product involvement. Results showed that Chinese individuals have stronger emotions connected with cognitive-involvement products than with affective-involvement products, and also more

positive emotions with high-involvement products than the low-involvement products. These results are consistent with China's special culture. Understanding individuals' emotional connection with products is important and can help advertisers develop more effective advertising strategies for their target audience to get involved. It could also help us better understand brand loyalty, purchase motivation and purchase habits.

APPENDIX
QUESTIONNAIRE

亲爱的参与者，

我是一名美国佛罗里达大学广告学系的在读研究生，这份调查问卷的目的是为了我硕士毕业论文的课题，研究人们对不同卷入度产品的情感反应以及品牌效应，调查的所有结果只会用于学术研究。

在您参加这次问卷调查之前，请仔细阅读以下信息:

调查问卷的目的：
本调查研究的目的是研究中国人对不同情感卷入度的产品所拥有的情感反应，以及品牌效应对此情感反应的影响。
在问卷中，您将会被要求做：
在本次调查中，您将会看到一些产品，请告诉我您对这些产品有什么感觉。在调查问卷的第二部分，将有一些个人信息背景相关的问题，请按顺序回答每个问题。

所需时间: 10分钟

风险和收益: 最小风险。无直接收益。

补偿: 无任何形式的补偿

保密性: 由法律规定的范围内，您的身份将被保密。您的信息将被分配为一个编号，包括您的姓名，这个数字将保存在我的导师办公室的一个归定的文件中。当完成这项研究的数据分析，该清单将被销毁。你的名字将不会被使用在任何报告上。

自愿参加: 参与这项研究是完全自愿的。

退出研究的权利: 您有随时退出的权利。

如果您有关于研究的问题, 可以与以下人员进行联系：
胡汐莹，研究生，新闻与传播学院，佛罗里达大学，电话781-333-9191. Email：huxiying113@yahoo.com.cn

课题导师: Jon D. Morris，佛罗里达大学广告系教授，博士，电话：352-392-0443，Email：jmorris@jou.ufl.edu

如果你对有关身为研究对象所拥有的权利有疑问，您可以于以下方式进行联系:
佛罗里达大学（University of Florida） 的 “社会公共机构的审查委员会 (The Institutional Review Board (IRB))。

他们的地址是：University of Florida, Box 112250, Gainesville, FL 32611-2250.他们的电子邮件是: irb2@ufl.edu，电话：392-0433

协议：

通过点击下面“我同意“的按钮，您将赋予我权限将您的回答匿名和保密地报道在我的研究结果中。
感谢您的阅读，

胡汐莹

我已经阅读了上述介绍。我同意自愿参与此调查。我已收到此说明的副本。

请点击 下面“我同意”， 以开始这项问卷。 再次感谢您的参与！

我自愿参与此项调查：

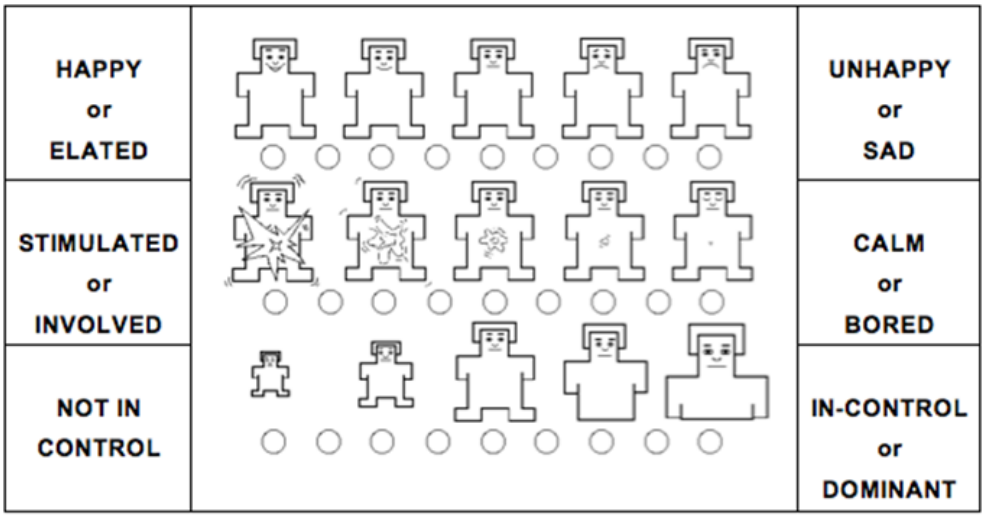
我同意

调查问卷中所提出的问题都将会使用一个简单而高效的非语言的工具，称为AdSAM®，来测试您对一些产品的想法和感受。下面的指示可以帮助您更好地了解AdSAM®，以及它是如何测试您的情感反应。

说明：
下面的图表是AdSAM®。我们将有一些对于情感的问题，请告诉我们您的感受。当您看到一个词来描述一种情感，请用您的想象来感受这个词所表达的情感，并用AdSAM来体现您的感受。

下面的图表中，您会看到三排拥有不同表情的人体模型， 它们代表您和您的情感。
这三排不同的人体模型是按照人们本质上情感的变化而进行排列的：

第一行的排列是从（最开心，愉快）的心情 到 （最不开心，悲伤地）的心情
第二行的排列是从（兴奋，激动，受到刺激，拥有很强烈的感受）的心情 到 （平静，无聊，毫无感觉）的心情。
第三行的排列是从（失去控制，无掌控力）的感受 到（能够掌控，统治，支配）的感受。



对于每一个使用AdSAM的问题，请：

- 说出您最直接的第一情感反应。
- 不要花大量的时间去思考。
- 为了表明您的情感，请在每一行中选择一个圆圈。
- 请在人体模型的正下方选择一个圆圈，或在两个模型人之间进行选择。
- 测量中没有其他文字说明，只有人体模型。

当您看到产品时，请给出您第一时间的感受。

第一部分

1. 数码单反相机

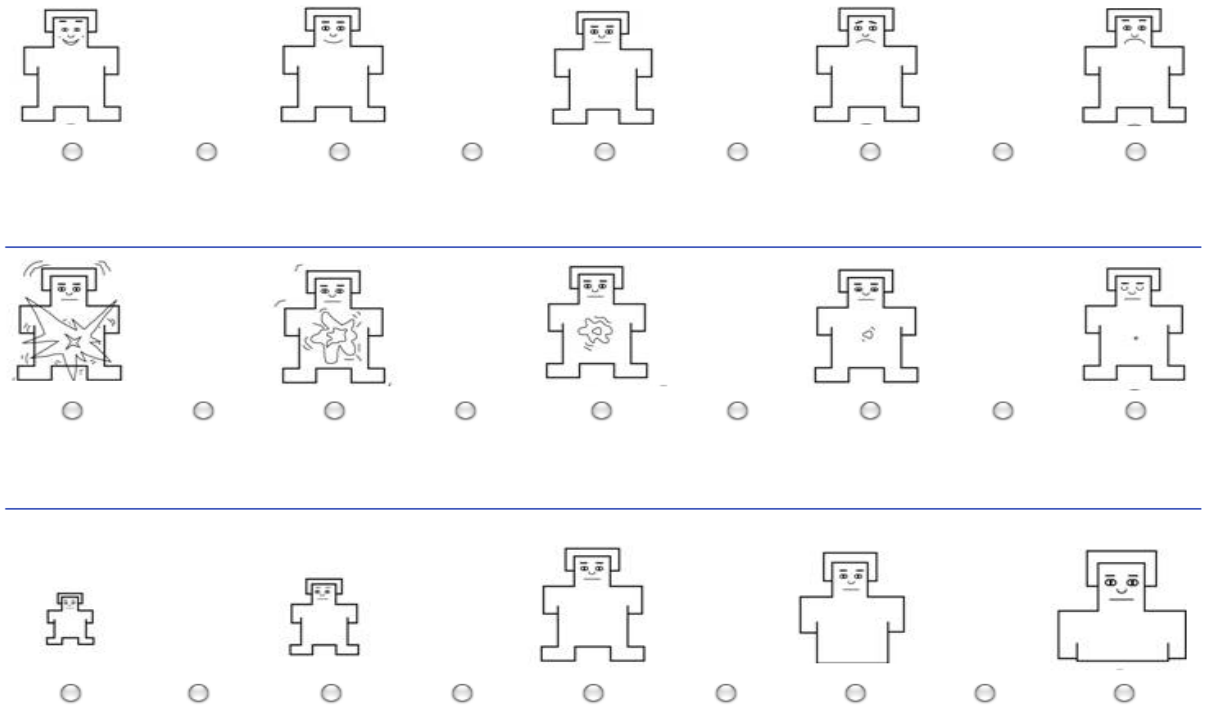
Q1. 我拥有或者想购买数码单反相机

○ 有

○ 没有

接下来，我会问您对一些数码单反相机的感觉。

Q2. 你对数码单反相机这个产品有什么感觉？



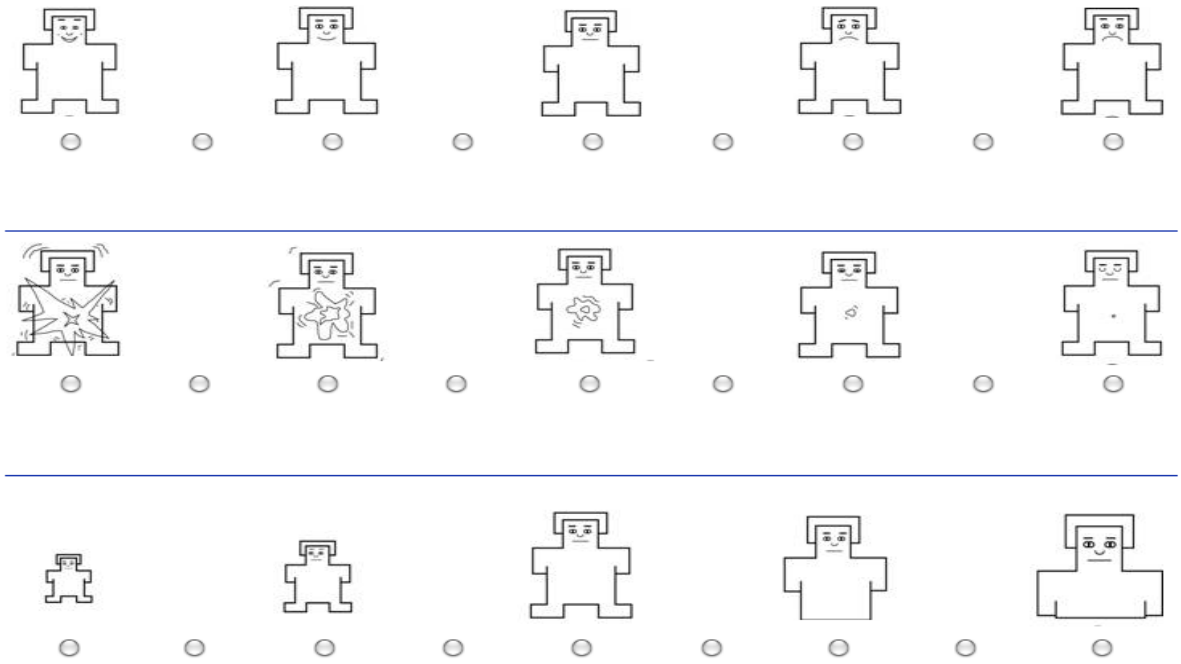
2. 香水

Q3. 我拥有或者想购买香水

- 有
- 没有

接下来，我会问您对一些香水产品的感觉。

Q4. 你对香水产品有什么感觉？



3. 日常洗发水

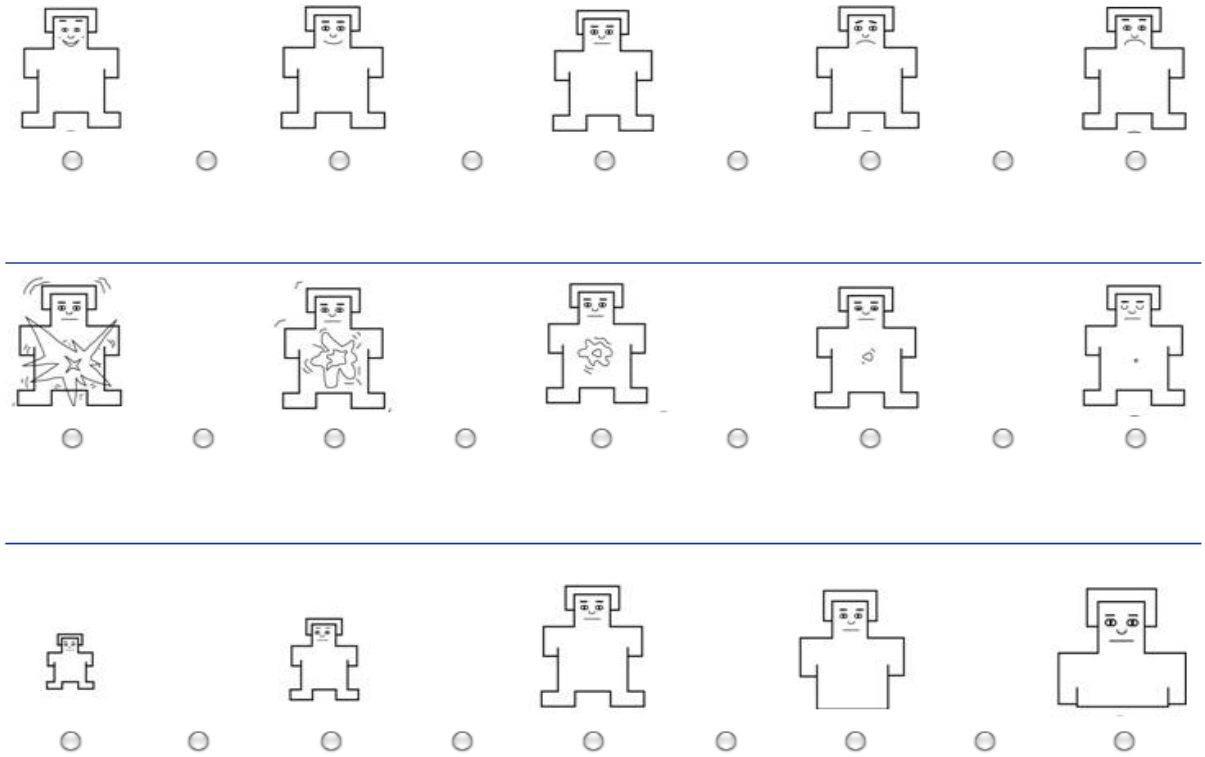
Q5. 我拥有或者想购买日常洗发水

○ 有

○ 没有

接下来，我会问您对一些日常洗发水产品的感觉。

Q6. 你对日常洗发水这个产品有什么感觉？



4. 低卡可乐

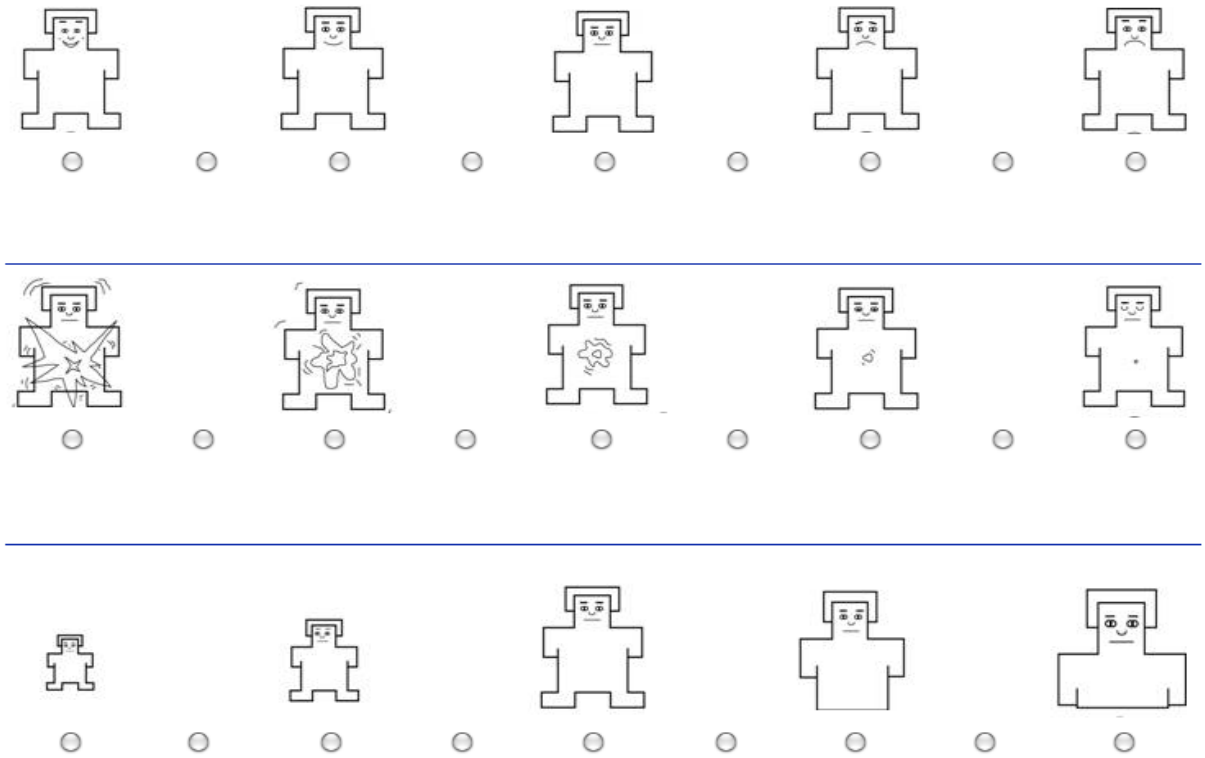
Q7. 我拥有或者想购买低卡可乐

○ 有

○ 没有

接下来，我会问您对一些低卡可乐产品的感觉。

Q 8. 你对低卡可乐产品有什么感觉？



第二部分

请花一点时间来告诉我们您的基本信息，您的信息将被完全保密。

Q9. 您的性别

- ○ 男
- ○ 女

Q10. 您现在的年龄（请填写具体数字）

Q11. 您现在就读于的大学哪一个年级？

- ○大一
- ○大二
- ○大三
- ○大四
- ○研究生
- ○博士生
- ○其他

Q12. 您现在的工作状态是？

- ○ 全职
- ○ 兼职
- ○ 没有工作

Q13. 您现在的专业是？

Q14. 您现在是。。？

○ 在美中国留学生或已工作

○ 中国学生或已工作

○ 其他国家留学生或已工作

调查问卷到此结束，非常感谢您的参与和配合！

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BIOGRAPHICAL SKETCH

Xiying Hu was born in Shanghai, China. She earned a bachelor's degree in advertising from Shanghai University in 2009 and worked as a research assistant. She received a master's degree in corporate and organization communication from Northeastern University (Boston) in 2011. She then studied at the University of Florida, earning another master's degree in advertising. She worked at the Qiantang Decoration Company, and embarked on her advertising agency career at the Young & Rubicam / Wunderman advertising agency in Shanghai in 2008.