CHAPTER II

LITERATURE REVIEW

2.1 Offensive Products

There are some studies, albeit limited in number, which have been conducted to explore offensive, sensitive, or controversial products. For example, in 1990, Barnes and Dotson investigated the nature of offensive television advertising and found that the offence caused by some products is dictated by social norms, and is most likely to occur in products that are considered taboo.

2.1.1 Definitions of Offensive and Controversial Products

In general, the word *offensive* is defined as "arousing a visceral reaction of disgust, anger, or hatred" (Wikitionary, 2011), and as "causing displeasure or resentment" by the Merriam-Webster dictionary (2011). Despite the studies regarding types of products or advertising which can be considered offensive or controversial, the definitions used to define these types of products are still unclear. Although the meanings are similar, there are inconsistencies in the terms being used to categorize these types of products. For example, some studies use the term "offensive products" (e.g., Prendergast, Ho & Phau, 2002; Prendergast & Hwa, 2003), whereas some other studies employ the terms "controversial products" (e.g., De Run, Butt, Fam, & Jong, 2010; Fam, Waller, & Yang, 2009; Fam, Waller, Ong, & Yang, 2008; Waller D. S., 1999), or sensitive products (Fahy, Smart, Pride, & Ferrell, 1995).

Although different terms were used, these studies all refer to similar types of products. In their literature reviews, none of these papers provided a direct meaning of the terms being used; instead, they referred the meaning of the terms to the concept of another well-known term, "unmentionables". The term "unmentionables" was defined by Wilson and West (1981) as "products, services, or concepts that for reasons of delicacy, decency, morality, or even fear tend to elicit reactions of distaste, disgust, offence, or outrage when mentioned or when openly presented" (p.92). The meaning of the unmentionables was further redefined by Katsanis (1994) as any products/services/concepts that are considered offensive,

embarrassing, harmful, socially unacceptable or controversial to a large group of the population.

For the categories of products and services covered under these definitions, the lists have been changed and updated over time. To identify offensive products, the research conducted in Malaysia by De Run, Butt, Fam, and Jong (2010); in China by Prendergast and Hwa (2003); in Hong Kong by Prendergast, Ho, and Phau (2002); and in Australia by Waller (1999) provided lists of products considered offensive in their specific research areas. Although the lists differed in their ranking orders due to differences of the cultural background of each region, there were a lot of similarities among the items represented in the lists. The products that were most likely to be perceived as offensive were condoms and contraceptive products, undergarments, hygiene products, funeral services, sexual services, and alcoholic drinks. Beside the product categories, the terms being used to categorize these types of products are not fixed and are exchangeable within the literature reviews of different studies. The products and services covered by these terms are also highly overlapped.

Regarding the frequency of usage, the terms "controversial products" and "offensive Products" have been used somewhat more often in previous research studies than other terms. The term "controversial products" is used frequently in business-related research articles (e,g. Waller, 1999; Waller & Fam, 2000; Fam et al., 2004; Waller, 2005). Besides "controversial products", the term "offensive products" is also used as frequently in business articles and research papers (e.g., Barnes & Dotson, 1990; Phau & Prendergast, 2001; Beard, 2008).

2.1.2 Offensive and Controversial Advertising

Besides products and services, the terms "controversial" and "offensive" are also used to describe advertising which causes negative feelings to the audience. For advertisers, controversial advertising can be defined as: "advertising that, by the type of product or execution, can elicit reactions of embarrassment, distaste, disgust, offence, or outrage from a segment of the population when presented" (Waller, 2005, p.11). It has been suggested by previous studies that a number of products, both goods and services, are considered controversial when advertised, including alcohol, cigarettes, underwear, contraceptives, and political advertising (e.g., Fam, Waller, & Yang, 2009; Prendergast et al., 2002). In 1990, Barnes and Dotson investigated the nature of offensive television advertising and found that

the offence caused by some products was dictated by social norms, and was most likely to occur in products that were considered taboo.

Looking at this topic in more detail, Dahl and colleagues (2003) explained that offensive advertising was an act and/or a process that violates the norm, and includes messages that disobey laws and customs, abuse a moral or social code, or insult the moral or physical senses (e.g., use of disgusting images). Barnes and Dotson (1990) proposed that "offensive advertising" had two components: 1) the products perceived to be offensive by potential consumers, and 2) the advertising execution, which may or may not relate to the product being represented in the advertisement.

In terms of the effects of offensive advertising, there are studies that disclosed disadvantages or backfire effects of using attention-grabbing offensive advertising. Pirowsky (1993) studied Benetton's offensive advertising campaign in Germany and found that although such ads generated high brand awareness, Benetton's brand image was dramatically weakened. Likewise, a study by An and Kim (2006) revealed that consumers were less likely to purchase products from the brands using offensive advertising.

Another important consideration for researchers regarding offensive advertising is the term being used to describe this type of advertising. For many researchers, the term being selected are consistent with those previously used in their own research studies. Research studies conducted by Waller, Fam and their colleagues always use "controversial products" and "controversial ads" (e.g Fam, Waller, & Erdogan, 2004; Fam, Waller, & Yang, 2009; Fam K.-S., Waller D. S., 1999; Waller D. S., 2004; Waller & Fam, 2000). On the other hand, the research studies conducted by Prendergast and his colleagues continuously use the terms "offensive products" and "offensive ads" (Prendergast & Hwa, , 2003; Prendergast, Cheung, & West, 2008; Prendergast, Ho, & Phau, 2002).

From the earlier discussion, both "offensive" and "controversial" are used frequently in academic research papers to describe both products and advertisements that cause consumers to experience uneasy feelings, which are also often called "offensive feelings". Since these types of product and advertising have not been widely studied, there is no standardized term to describe such categories of product and advertising up to this point.

2.2 Models and Theories related to Consumer Responses toward Advertising

Although there are several models of consumer response, there currently exist no standardized models for assessing consumer responses toward advertisements. The following subsections, therefore, will discuss models and theories related to the measurement of consumer responses toward advertisements.

2.2.1 The Hierarchy of Effects and Related Models

The Hierarchy of Effects model was created by Lavidge and Stainer (1961). This model shows how advertising works through a series of steps from awareness of product or service to actual purchase. The Hierarchy of Effects model is one of the most common tools used by many companies to measure the effectiveness of their advertising campaigns. In this model, the responses are separated into six different effects which can be grouped into three types of responses: cognition, affect, and behavior. It also clearly suggests a causal relationship from cognition to affect and from affect to behavior (conation).

However, there are several arguments against the Hierarchy of Effects model. LaPointe (2006) claimed that this model did not work well in all cases, and that it was only applicable to certain product categories, specific groups of customers, and some points in time. Since the model assumes the effects are sequential, it is important to know that these steps can be applied to specific products, customer groups, and periods of time. For example, for some of the low involvement products, consumers may purchase the product without having any emotional bond with it.

Similar to the Hierarchy of Effects model, the Model of Cognitive Response also describes the types of responses evoked by an advertising message and how those responses relate to consumer attitudes toward the ad and brand as well as their purchase intentions, while the term "cognitive responses" is used to refer to the thoughts that occur to a customer when reading, viewing, and/or hearing an advertising communication (Greenwald, 1968).

This model illustrates that after being exposed to advertising, the person who receives the message will produce cognitions in response to the stimuli which are: 1) product/message thoughts, 2) source-oriented thoughts, and 3) ad execution thoughts. These thoughts will then generate the receivers' attitudes toward the advertisement and the brand. Eventually, the two attitudes will combine to form the purchase intention of the receiver.

In addition to the Hierarchy of Effects model and the Model of Cognitive Response, there are three more models which also divide consumer responses into 3 stages or

3 types which are: AIDA (attention, interest, desire, and action) (Russell, 1921), which was developed to depict the stages in the personal selling process; the Innovation Adoption model (Rogers, 1995), which describes the stages a consumers passes through in the process of adopting a new product and the Information Processing model (Marzano, 1998), which is a model of the process through which a consumer must pass to be influenced by advertising.

By dividing consumer responses into 3 types, we can compare the elements of each stage of consumer response of each model as shown in the table below. Besides the similarity of how these models sequence the responses into three stages, these models also propose that the cognitive process occurs as step-by-step effects before the affective response, which suggests that the cognitive response mediates between the advertisement and attitudes.

Table 2.1 The Comparison of the Hierarchy of Effects Model and Related Models

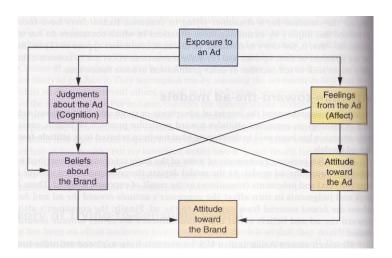
Models	Stage 1: Cognitive Response	Stage 2: Affective Response	Stage 3: Behavioral (Conative) Response
Model of Cognitive Response	 Product/message thoughts Source-oriented thoughts Ad execution thoughts 	Attitude toward the brands Attitude toward the ad	1) Purchase Intention
The Hierarchy of Effects Model	Awareness Nnowledge	1) Liking 2) Preference 3) Conviction	1) Purchase
AIDA	1) Attention	1) Interest 2) Desire	1) Action
Innovation Adoption Model	1) Awareness	 Interest Evaluation 	1) Trial2) Adoption
Information Processing Model	1) Presentation2) Attention3) Comprehension	Yielding Retention	1) Behavior

However, the causal relationships among the three stages are debatable, as they could be applied to some products or situations but not to all. This study, therefore, did not use these sequences in this current study because the experiment involves many products.

2.2.2 Attitude-Toward-the-Ad Model

The figure below presents the relationships of each element in the Attitude-Toward-the-Ad model. In this model, the consumer's attitude toward the brand is influenced by his or her attitude toward the ad and beliefs about the brand, where attitude toward the ad is influenced by both the cognition and affect that are derived from the advertisement (Baker & Lutz, 1988).

Figure 2.1 The Attitude-Toward-the-Ad Model (Modified from Edell and Burke (1987) p.431)



From the diagram above, the cognitive and affective responses occur independently and simultaneously. Since the affective response does not occur after cognitive responses, this means that cognitive response is not necessarily a mediator between an advertisement and attitude formation/change. The feeling toward the ad itself can also influence the belief about the brand, which is the cognitive response. This also represents a reverse effect of affective response toward cognitive response, which conflicts clearly with the models discussed earlier. Nevertheless, since this model does not involve the behavioral or conative responses toward the advertisement, this can be considered as a major limitation of the model.

2.2.3 The Alternative Model of Information Processing

In 1973, Ray and colleagues developed a model of information processing which suggests three alternative sequences of the three stages—cognition, affect, and conation—based on product involvement levels and perceived product differentiation.

To illustrate the model, first, in the "Standard Learning Hierarchy" sequence of cognition \rightarrow affect \rightarrow conation or learn \rightarrow feel \rightarrow do, the consumer is an active participant and this sequence is likely when the consumer is highly involved in the purchase, and when the brands are highly differentiable.

Second, in the "Dissonance/Attribution Hierarchy" sequence of conation \rightarrow affect \rightarrow cognition or do \rightarrow feel \rightarrow learn, consumers must choose between two alternatives which are similar in quality but are complex and may have unknown attributes. The focus of mass media should be on reducing dissonance after purchase.

Lastly, in the "Low involvement Hierarchy" sequence of cognition \rightarrow conation \rightarrow affect or learn \rightarrow do \rightarrow feel, consumer involvement in the purchase decision is low; differences among brand alternatives are low; and mass-media advertising is important.

As this model also suggests alternatives sequences of consumer responses which conflict with the Hierarchy of Effects and its related models, it has strengthened the argument regarding the causal relationships among cognitive, affective and conative responses, and since this study involves many types of products and services, the consumer responses were, therefore, measured independently.

2.2.4 Application to the study

The reviews of consumer responses toward advertising above provide insights regarding different patterns of consumer responses toward different situation and types of products. Even though the Cognitive Response and Hierarchy of Effects models suggest sequential and causal relationships among the three types of responses stated earlier, the Attitude-toward-the-Ad model and the alternative model of Information Processing argue that the sequence of responses in the first two models cannot be applied in all cases. Since the causal relationships among the three can be varied by involvement level and other factors (e.g., Ray et al., 1973; Edell & Burke, 1987), the responses should be measured independently. This idea is supported by many previous research studies regarding consumer responses toward advertising in general and toward online advertising in particular. Many

research studies have focused on only a few selective measurements. For instance, the study by Lohtia, Donthu, and Yaveroglu (2003) measured the efficiency of Internet advertisements by using consumer recall for cognitive response; attitude toward the ad for affective response; and click-through rate for conative response. Sewak and colleagues (2005) measured only knowledge and attitude toward the advertisement for different website designs. Therefore, the cognitive and affective responses which are the dependent variables of this study are measured independently.

2.3 Theories Explaining Why Animation Could Lead to More Favorable Responses toward Ads

2.3.1 Uses and Gratification Theory

The Uses and Gratification (U&G) theory was created by Blumler and Katz in 1974 to explain how psychological needs are related to the audience's media choice and engagement in certain media-use behaviors (Lin C. A., 1999). The uses and gratification approach tends to center on the audience's psychological processes, and aims to describe the audience's motivations and concerns for using various types of media (Eighmey & McCord, 1998). Uses and gratification studies have been conducted on several types of media, such as newspapers (Elliott & Rosenberg, 1987), television (Babrow, 1987), e-mail (Dimmick, Kline, & Stafford, 2000), and the World Wide Web (Papacharissi & Rubin, 2000).

However, the U&G theory was critiqued by Mcquail, 1994, that this approach had not provided sufficient proof in predicting and causally explaining media choice and use. He commented that this approach was mostly appropriate for examining specific types of media where motivation might be presented. This theory also has been criticized by many researchers as being too narrow as being with negligence of social structure and the place of the media (Severin & Tankard, 1997).

Regardless of the criticisms, this theory suggests that audiences use media as a means of fulfilling their satisfaction needs, this study has applied this notion to how audiences respond to advertisements of different types of products. Since offensive products can irritate viewers' feelings, the audience may avoid or decrease their exposure to the

advertisements of these products. Therefore, such advertisements must be specially designed to reduce offensive feelings in order to retain audience attention.

One previous study (Bloch et al., 1986) found that people pay attention to ads not only to gain information, but also for surveillance, for entertainment, and for alleviating boredom. In this experiment, therefore, the uses of animation and graphical content were tested to investigate whether these techniques can be an effective way to reduce the audiences' offensive feelings toward the advertising of controversial products.

2.3.2 Arousal, Mood, and Media

Developed from the uses and gratification model, this theory has placed greater emphasis on the affective rather than the cognitive states of the audiences (Zillmann, 1982; Zillmann and Bryant, 1985 & 1986). Zillmann and his colleagues proposed that a media choice, such as TV program, be used as a way to either maintain positive affective states or move from negative emotional states to more desirable ones. However, the desirable states of arousal may vary among individuals and across time. Since media content attributes can increase arousal potential, viewers are perceived as capable of being motivated to mediate undesirable excitatory levels through their content choices (Zillmann & Bryant, 1985).

Researchers hypothesized that positive hedonic media content, such as pleasant music (Day, 1980), erotica music (Zillmann & Sapolsky, 1977), could change arousal levels by reducing negative emotional states. These experiments found that pleasant stimuli improved the negative mood of the audience.

In terms of the effects of emotional reaction, Edell and Burke (1987) indicated that emotional reactions to ads could affect belief formations and the nature of the subsequent processing of ads. Also, Goldberg and Gorn (1987) found that viewing positive content led to better recall and more positive evaluations of commercials than occured from the viewing of negative content. However, some research suggests that the evaluation process of the viewers may differ under different arousal conditions. Sanbonmatsu and Kardes (1988) found that a highly aroused audience evaluated the ads based on peripheral cues, while a moderately aroused one evaluated the ads based more on the strength of the arguments in the ads.

For this current study, as interactive feature of animation can increase arousal (Fortin & Dholakia, 2003), the theory of arousal and media choice contributes highly to our assumption that media or advertising content with pleasant attributes, such as animation

(movement), could alleviate a viewer's mood, and would possibly lead to less offensive feelings toward a product, as well as to a better evaluation of the ads.

2.3.3 Rules of Distinctiveness

The distinctiveness theory suggests that things perceived as missing, absent, or different from other stimuli in the environment can capture people's attention (McGuire, 1984). Thus, compared to ads using non-animated elements, ads with cartoon characters should gain more attention from viewers (Heiser, Sierra, & Torres, 2008-9). A lot of psychological and marketing research studies reveal that the rules of distinctiveness were used as a method of creating and maintaining some differentiation from others (e.g., Appiah 2001; Grier & Deshpandé 2001; Vignoles, Chryssochoou, & Breakwell 2000). Distinctiveness findings imply that the ads with cartoon spokespeople produce better consumer responses than ads using human spokespeople (Heiser, Sierra, & Torres, 2008-9).

Regarding the mechanism by which environmental stimuli capture a person's attention, a stimulus must develop and maintain clear boundaries that distinguish it from other entities (Brewer 1991). An advertisement can be "distinctive" when it has unique traits that differentiate it from other ad stimuli (Heiser, Sierra, & Torres, 2008-9). The advertising distinctiveness will be able to obtain viewers' attention and eventually lead to better ad recall than the non-distinctive components (Phillips & Lee 2005). Distinctiveness also has the capability to stimulate cognitive and behavioral responses toward the source of the distinctiveness (Vignoles, Chryssochoou, & Breakwell, 2000).

When distinctive stimuli are presented, the ad becomes different from other ads in the environment. Different or distinct stimuli are able to draw and hold viewers' attention and, ultimately, affect their responses toward the ad (Diao & Sundar 2004; Neeley & Schumann 2004). Studies have found that animated online advertising creates more favorable attitudinal responses toward the character and the website, as well as higher levels of perceived entertainment (Phillips & Lee 2005). Other web-related research shows that animation is positively related to 1) the consumer elaboration process, 2) a liking of the character and website, and 3) the website entertainment value (Dehn & van Mulken 2000; Phillips & Lee 2005). These findings suggest that animation may generate similar positive consumer outcomes in offensive products.

Psychological studies have revealed that memory and recall of stimuli can be enhanced under conditions of moderate distinctiveness (Brewer 1991). These visible

differences may be necessary for advertisements to be considered distinctive and well-designed. It is implied, therefore, that ad distinctiveness is cognitively evaluated. Hence, in consumers' minds, the distinctiveness and perceived creativity associated with advertising stimuli should be connected (Heiser, Sierra, & Torres, 2008-9).

2.3.4 Creativity

Conceptualizations of creativity include dimensions such as artistic value, usefulness, uniqueness, relevance, connectedness, meaningfulness, and divergence of thought (e.g., Ang, Lee, & Leong 2007; Smith & Yang 2004). Plucker, Beghetto, & Dow (2004) mentioned that creative ideas frequently contained elements of novelty that could change the thoughts of the viewers. Creativity is considered an interactive process that generates new or useful answers to consumer needs, wants, and/or problems. Thus, these divergent solutions and ways of thinking may consequentially change people's attitudes or perception about their environment (Csikszentmihalyi 1999).

Creative techniques are utilized in promotional media because of their interactive nature, ability to change attitudes and thinking, and ability to trigger cognitive responses. These benefits of creativity are confirmed by the studies of Dahlén (2005) and Till and Baack (2005), which indicated that creative ads improved recall and received favorable effects on ad credibility as well as attitudes toward both the ad and brand.

In this study, the use of animation in the ads is considered more artistic and creative than regular ads. Since the Creativity Theory suggests that these creative elements can positively affect viewers' thoughts and attitudes, then utilizing animation in the ads for offensive products may result in more favorable responses toward the ads and the products.

2.3.5 Classical Conditioning Theory

The Classical Conditioning Theory, created by Pavlov (1927), assumes that learning is an associative process, with a relationship existing between a stimulus and a response. Mainly, there are two important factors if one is to learn through the associative process: continuity and repetition.

As the Classical Conditioning Theory proposed that everyone could be taught certain behaviors through repetition and reinforcement, it could be applied in marketing, especially in advertising design. One of the applications is called "stimulus generalization" whose main idea is that a similar—or slightly different—stimulus can create the same response. This strategy is a foundation of marketing strategies such as product line extensions, product form extensions, category extensions, family branding, and licensing (Schiffman & Kanuk, 2010).

In advertising design, stimuli that are favored by target audiences, such as popular music or presenters, have been used to encourage association between the favorable feelings toward stimuli and the product being advertised. Since, from arousal and creative theories, most people have positive feelings toward animation in the ads, the Classical Conditioning Theory can also be applied to the usage of animation in the advertising of offensive products. According to the theory, positive reaction toward animation can be associated with the product and/or the brand. In turn, this could help reduce the offensive feelings toward the product.

2.4 Information Processing Theory

One of the most heavily researched model since 1950s is the information processing. The IPM consists of three main components: sensory memory, working memory, and long-term memory.

Human encounter limitations of mental activity they can engage in (Kane & Engle, 2002). Sensory memory screens incoming stimuli and processes only stimuli that are most relevant for very brief periods of time. In working memory, stimuli that are forwarded from sensory memory are assigned meaning, linked to other information, and conducted essential mental operations such as inferences (Sternberg & Sternberg, 2012). Working memory is a multi-component temporary memory system. One of the useful concepts developed to describe cognitive processing efficiency in working memory is *limited attentional resources*, which refers to the extremely limited nature of information processing (Anderson, 2000; Neath, 1998).

Another important term is *automaticity*, which suggests that, through repeated practice, mental processes are able to perform a task very quickly and efficiently (Stanovich, 2003). Automated activities such as driving usually require few cognitive resources. Therefore, familiar stimuli such as spoken or printed words, faces, and sounds, can enhance the effectiveness of information processing in sensory memory as they involve a high degree of automaticity. In addition, the term *selective processing* explains that individuals

intentionally focus their limited cognitive resources on stimuli that are most relevant to them, which optimizes individuals' learning efficiency.

Long-term memory, contrasting to sensory and working memory, is not limited by capacity as it is capable of holding millions of pieces of information for very long periods of time (Anderson, 2000). Within long-term memory, encoding refers to how information is moved from temporary storage in working memory to long-term memory. Retrieval refers to memory searching process and access to the information needed for processing in working memory. As both encoding and retrieval processes provide easy access of information, they can also facilitate learning process.

In practice, the IPM provides an excellent framework for understanding principles of effective learning. Sweller and Chandler (1994) proposed *cognitive load theory* to explain how each mental task imposes some degree of cognitive load. Since the cognitive load must be supported by available cognitive resources or learner-based strategies such as selective attention and automaticity, reducing cognitive load allows individuals to learn with less mental effort. Cognitive load theory therefore has been particularly useful in terms of developing and planning of learning materials. Mayer and Moreno (2003), for examples, have developed frameworks with better design of learning materials and more strategic use of limited resources to reduce cognitive load, which in turn increase learning efficiency.

The two main strategies for effective learning, therefore, are for the learners to selectively focus their attention on important information and to engage in as much automated processing as possible. It is also important that the information itself can facilitate encoding and retrieval processes, by providing easy-to-access retrieval structures in memory. This also serves as the basis of expertise development (Alexander, 2003; Ericsson, 2003). Thus, learning can be promoted by helping learners to use their prior knowledge while absorbing the information.

Implied from IPM, animation should be more effective in high-involvement product advertising. The reason being that since, 1) when compared to static pictures, animation require more mental efforts to process which make it harder for audience to retrieve information automatically from the long-term memory, and 2) when the product is low-involvement, the attention paid to the ads will be decreased due to limited resources of sensory memory, which normally choose to obtain only information that is considered

relevant. As degrees of cognition load and selective attention may impact the effectiveness of the learning process (Sweller & Chandler, 1994), the use of animation in low-involvement product advertisements could be burdensome for consumer's information processing endeavor, and therefore may lower the effectiveness of the ads. In contrast, for high-involvement, consumers' attention is higher, which leads to a greater allocation of resources for information processing and thus increases the effectiveness of the learning process. Therefore, this suggests that the use of animation, which require higher cognitive load and attention, would be more effective in high-involvement product advertisements.

2.5 The Involvement Theory and Elaboration Likelihood Model (ELM)

The Involvement Theory was originated as an attitudinal issue in social psychology literature (Houston & Rothschild, 1978). In marketing, the Involvement Theory is focused on the consumer's involvement with the product and the purchase situation. The level of involvement depends on the degree of personal relevance the consumer perceives from a product, product category, or service (Schiffman & Kanuk, 2010).

As most of the consumer response models are open to debate in terms of the causal relationship among cognitive, affective, and conative responses, the stages provided in the Hierarchy of Effects and related models are most likely to be proven true for the high-involvement conditions when print media are used (Zinkhan & Fornell, 1989).

In 1965, Krugman provided low-involvement hierarchy as an alternative learning hierarchy. This hierarchy proposed that the affective response was developed after the conative response, instead of before, for the low-involvement condition. Also, Smith and Swinyard (1982) indicated that exposure to an advertisement for a low-involvement product could lead directly to buying behavior.

The more recently developed *elaboration likelihood model* (ELM) (Cacioppo & Petty, 1981) can serve as an over-arching framework that helps cast the different views on how consumers respond to promotional stimuli. This model suggests that consumer cognitions and sensations concerning advertised products depend on level of involvement. In the case of high involvement products, consumers are likely to process information through the central route – i.e., cognitively, and semantic cues are most effective. In contrast, for messages concerning low involvement products, consumers are more likely to process information through the so-called "peripheral route," where stimuli that are easily registered by one's sensations can be most effective.

Product involvement has been shown to be an important moderator of how information and stimuli are processed (Cai, Feng, & Breiter, 2004; Vaidyanathan & Aggarval, 2001). When involvement is high, consumers exert greater cognitive effort and process information through the central route. Consistent with the ELM, peripheral cues are expected to have a greater role in affecting consumer beliefs and attitude change in low-involvement situations (Petty & Cacioppo, 1986). According to this theory, therefore, responses toward animated ads for high- and low-involvement products could be different, especially in terms of attitudinal responses. When compared to the advertising of high-involvement products, the external or peripheral cues, such as animation, used in low-involvement product advertisements could have a greater impact on consumer attitudinal responses because consumers are less motivated to process product-related information and tend to rely on sensory cues.

2.6 Previous Studies of Animation in the Ads

2.6.1 Effects of Animation in Advertisements

In recent years, the roles of animation in online advertisements have increased and have inspired many researchers to investigate the effectiveness of animation in online advertising design. For web design, animation is considered to be a highly effective attention-grabbing method (Sundar and Kalyanaraman, 2004).

Most of the animations used in advertising design have formed part of a strategy to attract audience attention (Heiser, Sierra, & Torres, 2008-9). Since an individual's attention can be drawn by creating a distinctive or unusual ad execution (e.g. Dahlén, 2005; Till & Baack, 2005; Phillips & Lee, 2005), and since animated ads are considered more distinctive and unusual than static ads, it is logical to assume that animated ads may have more attention-grabbing power than static ads. Several studies have provided evidence to support the positive effects of animation on audience attention (e.g. Hong, Thong, & Tam, 2004).

Besides attention, animation has also been used to enhance viewers' memory, recall, attitudes, and actions. In 2004, Yoo, Kim, and Stout investigated the impact of animation on viewers' cognitive and affective responses. The findings indicated that animated banner ads resulted in higher recall, more favorable attitudes towards the ad, and higher click-through intention than for static ads. Also, a study by Lai et al. (2009) revealed that the use of animation on web advertising increased product recall as well as the hedonic and utilitarian dimensions of the perceived product values. Moreover, they found that hedonic attitudes

towards the products were enhanced through the use of animation. Lastly, Li and Bukovac (1999) also found that, when compared to static banner ads, animated banner ads led to better recall and a faster consumer click-through speed. Besides the benefits in terms of recall, attitudes, and actions, animation has also been found to be able to enhance the effectiveness of learning (Tversky & Morrison, 2002) and delivering messages (Leiner, Handal, & Williams, 2004).

2.6.2 The Uses of Animation in Offensive Products Advertising

Although cartoon animation have played a role in advertising since before the era of computer graphics, relatively little attention has been paid to researching this area (Phillips and Lee, 2005; Diao and Sundar, 2004). One recent study of adult consumers suggests that animated cartoon spokespeople in advertising could result in a favourable attitude towards the ad, attitude towards the brand, and purchase intention (Heiser, Sierra, & Torres, 2008-9).

Many offensive products have recently included cartoon animation in their advertising designs with the purpose of attracting younger consumers. The use of cartoon characters in advertisements for cigarettes aimed at young consumers was highly noticeable, especially in ads placed in magazines with large youth readerships, on promotional materials (caps, sports bags, lighters with cigarette brand logos), in sweepstakes, and in premiums (Fischer et al., 1991). One of the most popular characters promoting cigarettes was "Joe Camel". Within three years of his introduction, preference for Camel cigarettes increased from 0.5 to 32 percent among adolescent smokers (DiFranza & Tye, 1990). In addition to cigarettes, cartoon characters have also been used to advertise alcoholic products. A study by Leiber (1996) found that, one year after their introduction, the Budweiser frogs had gained the highest recall among children aged 9 to 11 years old when compared to other commercial animal icons, such as Tony the Tiger for a breakfast cereal. These findings, albeit limited, beg the question: Is animation more effective for offensive products than non-offensive products?

The evidence regarding the increasing use of animation to advertise controversial products is interesting for researchers exploring its ability to create consumer responses. While consumer responses towards advertising designs were found to be varied across different product categories (Lohse & Rosen, 2001), it is also possible that animation that is used in these ads can tone down the audience's unpleasant or offensive feelings towards the products.

2.7 Conclusion

Theories in the fields of consumer behaviour and mass communications can shed some light on the effectiveness of animation and the conditions under which these promotion tools may be most appropriate for adult audiences. The *information processing* (IP) theory suggests that individuals have limitations to the amount of information they can acquire; they tend to have selective attention and choose to acquire only relevant information (Kane & Engle, 2002). Also, the processing of a message imposes degrees of cognitive effort in obtaining information that may affect the degree of a consumer's learning (Sweller & Chandler, 1994). Because the movement of animation are less familiar to viewers and require more mental efforts to process when compared to static pictures, the use of animation in presenting product information to audiences could be perceived as burdensome in the consumer information-processing endeavour, and therefore may lower the effectiveness of such ads.

However, the traditional view on information processing, which suggests that cartoons may not be effective in advertising of offensive products, assumes that consumer response to advertising is based on cognitive learning, with learning effectiveness depending on mental effort. These theories assume that consumers respond or react to stimuli; they are commonly known collectively as "behaviourism." In this category we can include theories that view consumers as a passive audience in the communication process, having little or no motivation to process product information, and responding to stimuli that create effects as a result of either increased familiarity with the stimulus object (based on Berlyne's theory of curiosity) or association with another preferred stimulus (e.g., as in Pavlovian theory) (e.g., Robertson, 1976; Zajong, 1965).

Furthermore, theoretical developments in the field of mass communications that focus primarily on emotions (e.g., needs, aversive feelings) as drivers of behaviour and integrated into the uses and gratifications perspective (UGP) also appear relevant. These theories view consumers as active participants in the communication process. The UGP focuses on how consumers use the media to manage their emotions (as in activation and drive-reduction theories); it places greater emphasis on the affective rather than the cognitive states of the audiences (Zillmann, 1982; Zillmann and Bryant, 1985 & 1986). Some researchers have hypothesised that positive hedonic media content, such as pleasant music (Day, 1980), erotica music (Zillmann and Sapolsky, 1977), and cartoons (Baron and Ball, 1974), can change

arousal levels by reducing negative emotional states. These experiments suggest that pleasant stimuli, such as cartoon animation, improve the negative mood of the audience which may also be implied to alleviation of offensive feelings towards products.

In addition, distinctiveness theory suggests that things perceived as missing, absent, or different from other stimuli in the environment can capture people's attention (McGuire, 1984). An advertisement can be "distinctive" when it has unique traits that differentiate it from other ad stimuli (Heiser, Sierra, & Torres, 2008-9). When distinctive stimuli such as animation are presented, the ad becomes different from other ads in the environment. These stimuli are able to draw and hold the viewers' attention and, ultimately, affect their responses towards the ad (Phillips and Lee, 2005; Diao and Sundar 2004; Neeley and Schumann 2004). In addition, research has revealed that memory and recall of stimuli can be enhanced under conditions of moderate distinctiveness (Brewer 1991). Because distinctiveness has the capability to stimulate cognitive responses (Vignoles, Chryssochoou, and Breakwell, 2000), it is implied that ad distinctiveness is cognitively evaluated. Thus, ads with animation should increase attention and be positively evaluated at the cognitive level, especially for products that has tendency to create negative reactions such as offensive products.

Emotional reactions towards stimuli could also affect cognitive states and vice versa. As research by Edell and Burke (1987) shows, emotional reactions to ads can affect belief formations and the nature of the subsequent processing of ads. However, some research suggests that the evaluation process of the viewers may differ under different arousal conditions. Sanbonmatsu and Kardes (1988) found that a highly aroused audience evaluates the ads based on peripheral cues, while a moderately aroused one evaluates the ads based more on the strength of the arguments in the ads. Thus, animation as non-content or peripheral cues may arouse the audience, which in turn could increase positive evaluation of the offensive product advertising.