Measuring Advertising Effectiveness Through Inter Modulation of Affect and Cognition

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Abstract

Information processing models, involving affect and cognition, are replete with theories advocating prominence of cognition or affect or the hierarchies in which processing takes place. We have taken into account various literatures on information processing, along with recent advances on neuroscience to propose a model in which affect and cognition operate simultaneously and interactively in a mutually reinforcing manner. Any study to assess advertising effectiveness cannot ignore the role of involvement, cognitive resource allocation, and gender. The proposed model takes into consideration the moderating role of all these factors on various attitudes and behaviors. Looking at the recent surge in the tendency of advertisers to humanize the offer, the model developed can also determine the effectiveness of anthropomorphized advertisements as well, and explains the mediating role of affect and relatedness (generated as a consequence of category based processing on exposure to these advertisements) on purchase behavior.

Keywords: **attitude, cognition, affect, schema, involvement**

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The advertising industry, as a whole, lags behind in quality-assurance systems and turns out to be the industry with the most inconsistent products in any industry in the world. Almost half of the commercials have the intended effect on consumers' brand choice or purchasing behavior. One of the most difficult problems faced by advertising agencies and advertisers is the measurement of advertisement effectiveness that they intend to create. Since much of advertising expenditure goes waste in ineffective campaigns (Abraham & Lodish 1990; Lodish, Abraham, Kalmenson, Livelsberger, Lubetkin, Richardson, & Stevens, 1995), it is not unusual for an advertiser to be concerned with how advertising affects consumers, and how it works. This understanding can help them formulate more effective advertising campaigns.

Deciphering advertising effectiveness is analogous to eternal peace- everybody hopes for it, some attempt to search for it, but no one has discovered it. Various models have been proposed to study the effectiveness of advertisements: Brock and Shavitt's cognitive response model (Brock & Shavitt, 1983) ; the pure affect model (Aaker, Stayman, & Hagerty, 1986; Alwitt & Mitchell, 1985; Peterson, Hoyer, & Wilson, 1986); the persuasive hierarchy model (Aaker & Day, 1974 ; Greenwald, 1968; Lavidge & Steiner, 1961; McGuire, 1978 ; Wright, 1973); the elaboration likelihood model (Petty & Cacioppo, 1981). However, these models considered that advertisement influences behavior either through affect or cognition. However, we propose a model to study advertising effectiveness based on the recent advances in neuroscience. Furthermore, the proposed model is elaborate in a way that it takes into consideration the role of involvement and cognitive resource allocation in influencing behavior, which has not been considered in any of the earlier models proposed to study advertising effectiveness.

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Conceptual Framework

Consciously or unconsciously, advertising is known to produce some mental effects (eg. awareness, memory, attitude towards a brand) before it can influence behavior. *Cognition*, the thinking dimension of a person's response, and *affect*, the feeling dimension, are portrayed as two major intermediate advertising effects. Moreover, an individual's response to an advertisement is mediated by factors like attitudes towards the advertisement (Mackenzie, Lutz, & Belch, 1986), involvement (Krugman, 1965), cognitive resource allocation, and so forth. These factors can alter or radically change an individual's response to an advertising input. Common notations to describe the different theories and models of how advertising works follow Holbrook's model (1986): C for Cognition, A for Affect, and E for Memories (of) prior experience of brand purchase, usage, and advertising.

Vakratsas and Ambler (1999) concluded that there are seven different models that have been proposed to account for information processing. The market response model related advertising, price, and promotional measures directly to purchase behavior measures such as sale, market share, and brand choice. However, this model was soon replaced by cognitive information or information processing model, which assumed that consumer decisions are only rational and consumer preferences are not changed by advertising. This model only provided information and /or utilities in reducing research cost. Advertising was expected to be more effective for experience and credence than for search goods since it provides information that inspection does not (Nelson, 1974). The cognitive model gained prominence through the popularity of Brock & Shavitt's cognitive response model (1983). However, the findings of Heath, Brandt, and Nairn (2006) contradicted all the assumptions of the information-processing model. The results of these studies established that the assumption – advertising is a mechanism for transmission of factual information, which is best processed at high attention, and facilitated by emotional creativity - is flawed. In contradiction to the cognitive models was the pure affect model, which focused on affective response, the familiarity and feelings advertisements may evoke (Aaker et al., 1986; Alwitt & Mitchell, 1985; Peterson et al.,1986).

Shapiro, Macinnis, and Heckler (1997) provided evidence that advertising can work even when processed without any attention. Experimental work of Braun (1999) confirmed that advertising can operate as post-purchase reinforcement. The persuasive hierarchy model proposed an order in which processing takes place, with the assumption that the earlier effects, being necessary precondition, are more important. The hierarchy concept has played an important role in the development of advertising research. The number of stages in hierarchy may be increased or refined (Aaker & Day, 1974; Greenwald, 1968; Lavidge & Steiner, 1961; McGuire, 1978; Wright, 1973), but the underlying pattern is cognition affect behavior (CA). The elaboration likelihood model is one of the most comprehensive persuasive models (Petty & Cacioppo, 1981a, 1981b). The low- involvement hierarchy model proposed as an alternative to the persuasive model suggests the hierarchy cognition experience affect (CEA), though 'cognition' means no more than passing awareness in categories in which the consumer has low involvement. Ehrenberg's (1974) awareness trial reinforcement model is a variant of this class of models and suggests that product preferences are formed only after an initial trial. This is “low- involvement” hierarchy (Harris, 1987; Ray, 1973; Smith & Swinyard, 1978, 1982; Swinyard & Coney, 1978), because it is associated with the routinized choice behavior more likely to occur in low involvement situations. In the low involvement hierarchical model, product experience is the dominant factor, and advertising reinforces existing habits, frames experience, and defends the brand's consumer franchise (Ehrenberg, 1994; Pechmann & Stewart, 1989). In integrative models, the context in which advertising operates determines the strength of each effect, and different hierarchies of C, A, and E (experience) are assumed.

Though most of the research studies can be categorized in either of the models discussed above, the remaining models can be categorized under the hierarchy- free models, which presents a more person-centered view of advertising, which is an extension of the basic reinforcement model.

Emotion Over Cognition

Contrary to the prominence accorded to the role of cognition in studying advertising effectiveness, recent developments in the field of psychology and neuroscience have showed that all decision making is founded in emotions; most of what is stored in our brains and influences our behaviour is not easily accessible to consciousness, and our 'adaptive unconscious' is responsive to signals of which we remain consciously unaware of (Wilson, 2002). From the way the brain processes information, it would appear that the hierarchy of effects concept is deeply flawed (Vakratsas & Ambler, 1999). Advances in neuroscience and consumer psychology suggest prominence of affect over cognition(Damasio, 2001 ; Erdley & D'Agostino, 1988 ; Hoch & Loewenstein, 1991 ; Watzlawick, Bavelas, & Jackson, 1967).

Research findings have unequivocally shown the power of emotions. Metacommunication influences feelings and relationships (Watzlawick et al., 1967), affective reactions can occur relatively automatically without an active role of higher-order cognitive processes (Hoch & Loewenstein, 1991 ; Zajonc, 1980), affective processes can be formed independently of cognitive processes (Bierly, McSweeney, & Vannieuwkerk, 1985). Feelings of desire occur with the minimum conscious deliberation, which is a characteristic of automatic or mindless behavior and with little or no cognition (Hoch & Loewenstein, 1991), affective reactions can arise from two routes: an innate route and a memory route involving schematic and conceptual processing (Leventhal, 1984) ; cognitive attitude does not necessarily dominate over affective attitude in predicting purchase intention. Furthermore, the results indicate that both cognitive and affective attitudes are correlated with conative attitudes, but affective attitude, as measured by emotional response, is a stronger predictor of purchase intention, and accounts more of the variance in conative attitude than the cognitive response (Morris, Woo, Geason, & Kim, 2002). Excellent work of Damasio (1994), LeDoux (1995, 1996, 1987), Wilson (2002) and others shows with increasing clarity that all decision making is founded in emotions.

↳ **Affect and Cognition Operate Simultaneously :** The proposed model discards hierarchy of effect and assesses advertising effectiveness, taking into consideration contributions of both affect and cognition. The two conceptual systems tend to operate simultaneously in any given task (Epstein, 2003), and the brain receives and handles information in a parallel fashion (Rose, 1993 ; Sutherland, 1993). Although serial hierarchies exist to pass information from stage to stage, different functions of the brain receive information in parallel (Martin, 1991). The authors propose that cognitive and affective priming operate simultaneously on creating an attitude towards advertisement much in consonance to what was argued earlier.

↳ **Interrelatedness of Affect & Cognition :** One of seven deadly sins of cognitive neuroscience is to assume that affect is independent of cognition as argued by Davidson (2003). Affect and cognition have long been treated as independent entities, but recent research shows that affect is not independent of cognition, it is neither primary nor automatically elicited, but they are, in fact, highly interdependent (Storbeck & Clore, 2007). Emotions should not be divorced from cognition (Adolphs & Damasio, 2001 ; Barnard, Duke, Byrne, & Davidson, 2007). The study of emotion and cognition should be integrated since the phenomena themselves are integrated (Dewey, 1894; Parrott, 1989). Storbeck and Clore (2007) argued against the notion that discrete emotions have separate and distinct areas in the brain, and viewed cognition and emotions as inherently integrated. Duncan and Barrett (2007) asserted that emotions emerge from a combination of affective and cognitive processes, and Bower (1981) opined that emotions can be studied by using cognitive paradigms. Laboratory findings and everyday observations also suggested a unity and interrelatedness of cognitive and affective processes (Roediger, Gallo, & Geraci, 2002) and that the interconnections found within the brain provide no obvious basis for divorcing emotion from cognition (Erickson & Schulkin, 2003; Halgren, 1992; Lane & Nadel, 2000; Phelps, 2004).

Those who supported independence of affect and cognition relied on 'low route' to emotion (LeDoux, 1996), a direct pathway from the sensory thalamus to the amygdale. However, evidence suggests that the low route does not appear to be a candidate for explaining any instance of human emotion, and if it operates at all in humans, it appears

incapable of even basic affective discriminations without cognitive inputs (Storbeck & Clore, 2007).

Storbeck and Clore (2007) posited that the visual cortex processes environmental stimuli received by the sensory cortex in a view-invariant manner, allowing it to determine attributes of the object along with its affective significance, regardless of the position the object happens to be in, and subsequently projects that information to other areas in the brain. One of the primary pathways of the visual cortex is to the amygdala, whose role is to determine the urgency of the stimulus. The amygdala either retrieves the affective value of the stimulus or determines that it is novel and guides for subsequent cognitive processing. The amygdala has extensive back projections to all areas of the visual cortex which modulate visual perception, attention, and memory for affectively significant stimuli. However, it is probably not the only area involved in emotional processing that can modulate cognition; the visual cortex also has extensive projections to areas such as the orbitofrontal cortex, prefrontal cortex, and cingulate cortex, all of which can guide cognitive processing based on affective value. The evidence from neuroscience suggests that evaluations of the amygdala are dependent upon inputs from the visual cortex, suggesting that affect probably does not proceed independently of cognition, nor does it precede cognition in time. Research suggests that perception of the physical world is influenced by emotions and other internal factors (Bhalla & Proffitt, 1999; Proffitt, Stefanucci, Banton, & Epstein, 2003; Witt, Proffitt, & Epstein, 2004).

Research studies have shown that sensory information reaches the brain through the thalamus, which relays it to the cognitive functions in the neocortex and independently to the affective functions of the limbic system (Kupfermann, 1991). These, in turn, are massively interconnected because higher cognitive functions affect feelings and emotions, and vice versa, that is, they are mutually reinforcing. It is likely that cognition and affect are engaged simultaneously and interactively.

Moderating Role of Involvement & Cognitive Resource Allocated

It has often been argued that individual responses to advertising are mediated by factors such as motivation and ability to process information (MacInnis & Jaworski, 1989), and the proposed model takes into account the role played by these two constructs.

The cognitive response theory suggests that people are usually interested in thinking about and elaborating incoming information, or in self-generating issue, or product-relevant thoughts (Brock & Shavitt, 1983). The general framework for understanding attitude change considers that in some situations, people are avid seekers and manipulators of information, and in others, they are best described as 'cognitive misers' who eschew any difficult intellectual activity (Burnkrant, 1976). Since one possesses only a limited amount of information-processing time and capacity, such scrutiny would disengage the thought process from the exigencies of daily life (Miller, Geoffrey, Beaber, & Valone, 1976). Thus, any research directed to measure the effectiveness of advertisements cannot ignore these two important moderating variables, that is, involvement and cognitive resource allocation.

Involvement : Involvement is an important concept in consumer behaviour literature, which has its roots in social psychology. As commonly interpreted, involvement is the level of personal care and uncertainty an individual experiences when making purchasing decisions. Though there is no consensus on a definition of involvement, Laurent and Kapferer (1985) argued that involvement has five different facets, namely interest, risk importance, risk probability, sign value, and hedonic value. Involvement is critical to understanding of consumer decision making behaviour and associated communications. Purchase decisions made by consumers vary, and involvement is the key to brand choice decisions a consumer makes regarding the product or the purchase process. However, Ratchford (1987), quoting Zaichkowsky (1985) and others, did not perceive involvement as such a broad matter.

Involvement can be high or low. Consumers experience high involvement when they perceive that an expected purchase is not only of high personal relevance, but also represents a high level of perceived risk, which primarily is financial, but can also be social. Low involvement is a state of mind pertaining to proposed purchase with little threat or risk to the consumer.

Various studies on attitudinal change through involvement can be classified into three categories. One stems from Sherifs' social judgment theory (Sherif, Sherif, & Nebergall,1965), Krugman's theory of passive learning (Krugman, 1965), and the third is the elaboration likelihood model (ELM) of attitude change (Petty & Cacioppo, 1981b). The basic tenet of much talked about ELM is that different methods of inducing persuasion may work best depending upon the level of elaboration likelihood of the communication situation, that is, the probability of message or issue relevant thought occurrence. When the elaboration likelihood is high, the central route to persuasion would be particularly effective, but when the elaboration likelihood is low, the peripheral route would be preferable.

↳ **Cognitive Resource :** Processing of stimuli is subject to the availability of processing resources, and it is usually argued that (a) if the availability of processing resources is constrained, consumers' decision is likely to be based on relatively automatic processes, and therefore, will be based on affect rather than on cognitions evoked by the advertisements; and (b) if the processing resources are not constrained, a relatively controlled process is likely to play a more important role, and hence, cognitions will have a bigger impact on choice than when these resources are constrained (Shiv & Fedorikhin, 1999).

Shiv and Fedorikhin (1999) also argued that under conditions where the consumers do not allocate processing resources to a decision-making task, they are more likely to choose on the basis of affect rather than on cognitions. Thus, the consumers are more likely to choose the alternative that is superior on the affective dimension, but inferior on the cognitive dimension. In contrast, when the consumers do allocate processing resources to the decision-making task, the choice is likely to be based primarily on cognitions.

Gender

Examining gender issues while assessing advertisement effectiveness is of interest, since they are targeted to one or both of these consumer groups (Curry & Menasco, 1979; Davis, 1970; Ferber & Lucy, 1974; Schmitt, Leclerc, & Laurette, 1988). Also, gender recognition and recall of ad claims are of particular interest as these two memory measures are commonly used as indicators of ad effectiveness (Singh & Churchill Jr., 1986).

Meyers-Levy and Sternthal (1991) proposed a selectivity hypothesis which suggests that genders differ in their elaboration thresholds. Women have lower thresholds than men. Thus, a limited amount of attention is required for them to trigger an elaboration, which explains why women encode more detailed information than men (Gilligan, 1982; Krugman, 1966 ; Seidlitz & Diener, 1998), as well as greater recall of new information (Erngrund, Mantyle, & Nilsson, 1996). Furthermore, subtle changes in message order have been shown to encourage women to engage in more extensive message elaboration than men (Meyers-Levy & Sternthal, 1991). Women sometimes are found to exhibit greater sensitivity to the particulars of relevant information when forming judgments than men (Farina, 1982; Meyers-Levy & Sternthal, 1991), who follow schema based processing (Krugman, 1966; Meyers-Levy & Sternthal, 1991).

↳ **Manipulative Intent :** Effectiveness of advertisements is also dependent on gender's inferred manipulative intent of advertisers. Skepticism towards advertising is a general phenomenon (Boush, Friestad, & Rose, 1994). It is more magnified when certain tactics are employed, and low ad credibility is associated with greater levels of perceived manipulative intent (Cotte, Coulter, & Moore, 2005). Increase in attention sometimes evokes negative consumer inferences that the advertiser is attempting to persuade by inappropriate, unfair, or manipulative means (Campbell, 1995). Persuasion tactics that deviate from expected advertising schemas motivate participants to pay more attention to the sources (Ahluwalia & Burnkrant, 2004). Skepticism towards advertisements is dependent on the viewer's cognitive capacity. Individuals' cognitive capacities influence their inferences regarding persuasion agents' motives (Campbell & Kirmani, 2000). Subjects are more likely to use persuasion knowledge to infer manipulative intent when they are not cognitively busy.

Previous research studies on manipulative intent showed that genders differ in their skepticism towards

advertisers' intent. Women possess low threshold and are already motivated to elaborate on ad messages and are likely to encourage inferences of manipulative intent on any attention catching ad tactics. In contrast, men have low thresholds and any higher attention-getting tactics only encourage elaboration on product information and help them to see the suggested benefits of the advertised product without generating greater inferences regarding a manipulative intent.

The higher is the perceived manipulative intent, the less persuasive is the message; greater perceived manipulative intent encourages negative attributions of the advertisers and leads to more negative ad attitudes (Cotte et al., 2005), negative brand attitudes, and purchase intentions (Campbell, 1995). Women are expected to have more negative evaluations of the ad and brand, and lower purchase intentions than men (Chang, 2007).

Anthropomorphism : Affective Tag and Relatedness

Previous research studies have shown that consumers are not interested in spending time or energy in processing advertisements. Moreover, since the advertising landscape is cluttered, simplification through advertising schemas would allow consumers to wade through numerous marketing messages presented to them. A schema is a stored framework of cognitive knowledge that represents information about a topic. Schemas* develop when a subject's exposure to a knowledge structure is repeated and consistent. Advertising satisfies both the criteria since ads are shown frequently and employ similar semantic, physical, and structural features (Stoltman, 1991). Schema-based processing allows for faster, easier evaluations because individuals do not have to reevaluate information that has already been processed (Fiske, 1982; Fiske & Pavelchak, 1986).

Of late, a new trend is being witnessed where marketers have begun to anthropomorphize products to break clutter and induce purchases in both children and adults. It has been argued that anthropomorphization of products may be viewed as shifting the category of evaluation from product to human, and more specifically, to particular human categories such as friends, helpers, families, or spokespersons (Aggrawal & McGill, 2007). It has also been argued that the extent of congruity with an evoked schema is, however, not the only source of evaluative information about a stimulus provided by an activated schema.

It is opined that categories are stored in memory (schema) with an associated affective tag, and that when an item is perceived as having a good fit with an evoked category, people may evaluate the item according to the affect associated with the category (Fiske 1982; Fiske and Pavelchak 1986). Consumers commonly evaluate marketing stimuli by comparison to categories instead of proceeding in a piecewise attribute-by-attribute fashion (Goodstein, 1993). As a consequence, category-based processing due to perceived congruity with an activated human schema, and the affect stored for that schema is likely to influence the evaluation of the product's category affect, which may sometimes overwhelm the more subtle effects of satisfaction due to a perceived congruity between the features of the stimulus and the schema (Aggarwal, 2007). The model looks into the mediating role of the affective tag (associated with schema based processing) on the influence of attitude towards advertisement on purchase intention.

Epley, Waytz, and Cacioppo (2007) argued that anthropomorphism enables satisfaction of the sociality (desire to establish social connections with other humans) need. Sociality has been defined as a need for the company of others, measurable as the tendency to form social connections, to react to perceived social isolation, and to exhibit the long-term effects of social connectedness on health, successful aging, and well being (Cacioppo et al., 2005).

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*Schema congruity theory was developed in social psychology to explain how individuals process information by categorizing it, and subsequently evaluating it based upon their expectations of the activated category, which are either confirmed or disconfirmed by the new information (Hastie, 1980; Srull, Lichtenstein, & Rothbart, 1985). The congruity of the schema that individuals apply to new information impacts the processing and evaluation of that information. When information matches schema, schema congruity is achieved, and little cognitive processing is required (Hastie, 1980; Srull et al., 1985). Earlier researches have argued that congruence of an item with the evoked category schema affects evaluation (Mandler, 1982).

Isolation, or a feeling of disconnection from others is the cause of social pain, and people experiencing this will actively try to alleviate the same by seeking out meaningful social connections with others (Maner, DeWall, Baumeister, & Schaller, 2007). Lacking social support from other humans, people may try to create a sense of connection by anthropomorphizing nonhuman agents, even momentary feelings of social rejection or isolation can increase the tendency to anthropomorphize to effectively alleviate social disconnection (Epley et al., 2007). We propose that anthropomorphization generated feeling of affect towards category primed (like product is depicted as friend, parents, salesman, police, politician, etc.) arouses the feeling of relatedness (association) with the ad (category), and the proposed model tries to explore the mediating role of relatedness (association) on attitude towards advertisement influence on hedonic attitude towards a brand.

Relationships Depicted in the Proposed Model

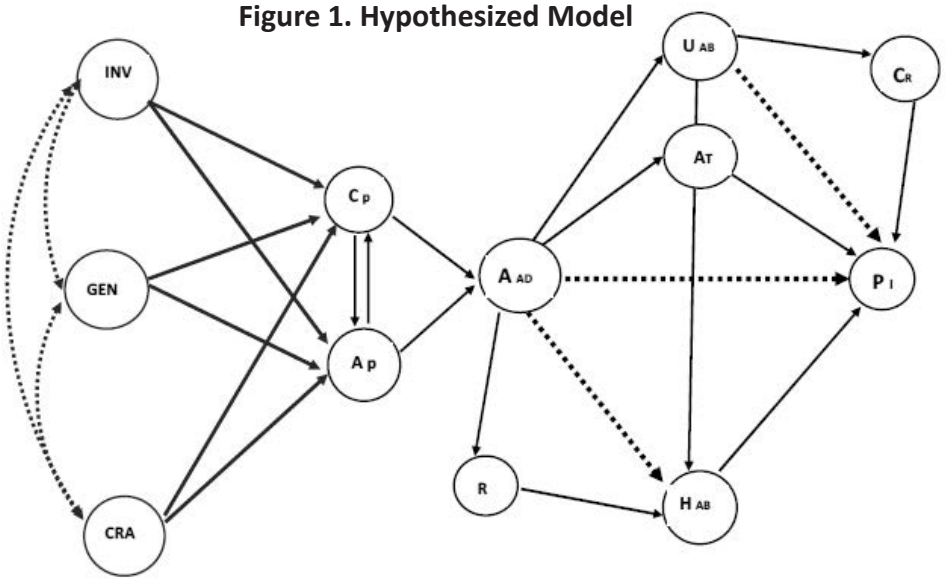
Previous researchers held that for advertisements to be effective, they should be able to generate purchase intention among the viewers by creating a favourable attitude towards the advertisements and the brands (Lutz, MacKenzie, & Belch, 1983). Thus, the effectiveness of an advertisement is adjudged by the purchase intention it generates through favourable attitude towards advertisements and brands through priming. Priming is an implicit memory effect in which exposure to a stimulus influences a response to a later stimulus. Growing evidence indicates that the priming effects occur when consumers' judgments of products are influenced by the content of recently activated knowledge structures (schema) (Herr, 1987 ; Meyers-Levy, 1988 ; Srull, 1983). Advertisements activate certain product-related attributes, making them accessible to the viewers, and this is referred to as cognitive priming (Mitchell & Oslon, 1981), while affect generated by the advertisement can be transferred to one's attitude towards the advertisement (and/or brand) and can be subsequently used in product evaluation (MacKenzie et al., 1986), which is referred to as affective priming.

The proposed model studies the influence of affective and cognitive priming on attitude (advertisement and/or brand). Studies on psychology have shown that affective reactions can be automatically triggered by the mere presence of an object and that these affective reactions influence subsequent perception and evaluations (Fazio, 1986; Erdley & D'Agostino, 1988).

Affective response to advertising can be classified into two types: one leads to the formation of an attitude towards the brand (A_B), and the other leads to the formation of an attitude towards the ad (A_{ad}) (Mitchell & Oslon, 1981; Shimp, 1981). Attitude towards advertisements is a (learned) predisposition to respond in a favorable or unfavorable manner to a particular advertising stimulus during a particular exposure occasion (Lutz, 1985), and the attitude towards a brand is recipients' affective reactions toward the advertised brand, or the desirable attitude toward purchasing the brand (Lutz et al., 1983). Batra and Ray (1986) focused on the affective component of A_{ad} and opined that affective responses under consideration contributed directly to A_{ad} and indirectly to A_B.

The role of emotion in framing attitude is widely recognized by various researchers. Emotions represent a dimension of A_{ad} (attitude towards the ad) entirely separate from thoughts about the ad (Edell & Burke, 1987) ; consumers' affective state at the time of ad exposure is an important determinant of A_{ad} (Lutz, 1985), feelings during the ad exposure are important predictors of attitude towards ad (A_{ad}) and attitude towards brand (A_B.), and that A_{ad} is known to mediate the effects of feelings on A_B (as posited by Edell & Burke, 1987). Moreover, it has been held that A_{ad} mediates the impact of both emotions and cognition on brand attitude (Lutz, 1985). Bagozzi and Burnkrant (1979) and Bagozzi (1981) postulated the bidimensionality of attitude towards a brand, that is, hedonic attitude toward brand (HA_B) and utilitarian attitude towards brand (UA_B), A_{ad} mediates the influence of affective priming on hedonic attitude towards band (HA_B) (Lutz, 1985). Homer (2006) argued that a utilitarian attitude towards brand influences a hedonic attitude (Figure 1).

Figure 1. Hypothesized Model



*The proposed model is a part of our doctoral research which has been empirically tested. Dotted arrows in the model are to assess the mediating role of constructs and double headed arrows depict the possible covariance between the independent variables.

Figure 1

Various Constructs shown in the model are:

CRA:	**Cognitive Resource Allocation**	**R:**	**Relationship/Association**
GEN:	**Gender**	**AT:**	**Affective Tag**
INV:	**Involvement**	**H_{AB}:**	**Hedonic Attitude towards Brand**
CP:	**Cognitive Priming**	**$U_{AB:}$**	**Utilitarian Attitude towards Brand**
AP:	**Affective Priming**	**PI:**	**Purchase Intention**
A_{AD}:	**Attitude towards Advertisement**		

Managerial and Theoretical Implications

Looking at the recent surge in the tendencies of advertisers to anthropomorphize offers, the proposed model takes into consideration effectiveness of anthropomorphic advertisements. The model will help in assessing the effectiveness of anthropomorphic or unanthropomorphic advertisements based on rational or emotional appeal, and will help in explaining the gender difference in processing styles (whether it is based on affect or cognition), thus facilitating the advertiser in designing ads that enhance their (ads) effectiveness, based on the segment they are targeting.

Anthropomorphizing a product may lead to more positive evaluations only when the type of person brought to mind is associated with positive feelings (Aggrawal & McGill, 2007). Feeling of affect is different for different categories primed. For example, the sales person category has a more affective tag than policeman category by virtue of which, the feeling of association/relatedness to the product will be more for a salesperson in comparison to a policeman or politician. Moreover, the model takes into consideration the effectiveness of an advertisement under various circumstances like whether the viewer is involved with the product or not, or whether the viewer utilizes the thought process to evaluate the content of the advertisement. This model can help decision makers in deciding whether to humanize the product or not and what are the possibilities of advertisement producing purchase intentions when viewers are highly or lowly involved with the product. Furthermore, this model can help

in scheduling the advertisement by guiding decision makers on the possible outcome of the advertisement when the viewers are mentally occupied while watching the ad or when they are mentally free while processing the content of the advertisement. The model also explores the advertisement credibility of anthropomorphized advertisements, and can help advertisers to know whether ad credibility influences purchase intentions for anthropomorphic advertisements.

Limitations of the Study and Scope for Future Research

The model can be tested for consumer durables and non durables advertisements, which generate sufficient affect and cognition, but not for industrial products where the purchases are based primarily on cognition or for low involvement products (like confectionary goods), where the purchases are based on routinized choice behavior, which is sought for on affect. Studies can be conducted to ascertain the cross-cultural effect on the tendency to anthropomorphize and the effectiveness of anthropomorphized depicted advertisements. Further studies can be conducted to see the effect of context on the effectiveness of anthropomorphized advertisements in both print and electronic media.

Campbell and Kirmani (2000) found that individuals' cognitive capacities influence their inferences regarding persuasion agents' motives. It will be worthwhile to explore how the gender confounds on the manipulative intent of anthropomorphized advertisements across high cognitive resource allocation and product involvement. It will be worthwhile finding out whether anthropomorphization of products elicits any manipulative intent among the viewers and subsequently, what is the effect of such an intent on advertisement credibility and conative attitude of the subject viewing the ad? Furthermore, it is being argued that attention-getting tactics are likely to be construed as manipulative intent (Campbell, 1995). It will be worthwhile to investigate whether anthropomorphization of products elicits manipulation intent among gender and its subsequent influence on purchase intention. Future research can be conducted to assess gender differences in manipulative intent (in the light of the fact that females with low attention threshold are comprehensive processors than males) and its influence on purchase intent, since attribution of manipulative intent will lead to negative attitude towards advertisements and brands as well.

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