

---

# Affective Congruency Effects in Advertising

**HyeSeung Lee**

(Yonsei University)

**Hyun Young Cho**

(Yonsei University)

---

**Abstract:** The purpose of this study is to examine how affective-expectancy influences and forms attitudes toward advertising and how specific affection (humorous, touching, and fear) influences attitudes differently beyond dichotomized affection in advertising. The findings of this study demonstrated that the effect of emotion on a designated preference in response to emotionally framed advertising was not a simple function of valence. Rather, preference only increased when the emotional framing of the advertisement matched the phenomenological state of the recipient. Specifically, expectation of humorous showed most increased preference for the humorous-framed version of the advertising, and expectation of touching showed the most increased preference for the touching-framed version of the advertising. However, expectation of fear did not show the increase in preference for the fear-framed version of the advertisement.

**Key words:** affective expectancy, affective congruency effect, advertising

---

*Korean Social Science Journal*, XXXIV No. 1(2007): 71-92.

## I . Introduction

This article addressed the effect of affective-expectations as sources of leverage in advertising, which depend on congruency of affective-states. The study of affection has long been recognized as an essential part of decision making. This notion, the importance of the role of understanding affection on persuasion, has been an area of specialization for social psychologists, as well as marketers (Cohen & Areni, 1991; Gardner, 1985; Pham, 1998), who have achieved a high degree of expertise in the area of the relation between human affection and persuasion (Bless, Bohner, Schwarz, & Strack, 1990; Petty, Desteno, & Ricker, 2001; Wegener & Petty, 1994). Affection plays an incontrovertible role in influencing individuals' judgments and decisions (Rucker & Petty, 2004). Affection is a central point of consumer behavior. Thus, an appeal to affection in advertising is an approach that can make consumers take a certain desirable action. Manipulated affections such as anger, sadness, happiness, and joy are seen to be effective ways to easily influence consumers to make certain choices or to develop preferences. Whether in news stories, advertising or entertainment programming, affection is often used to capture attention, influence attitudes, and affect behavior (Nabi, 1999).

### **Affection-based bias**

In general, emotions are viewed as internal, mental states representing evaluative, valenced reactions to events, agents, or objects that vary in intensity (Ortony, Clore, & Collins, 1988). The study of affection-based influences has primarily focused on the differential effects of positive and negative mood on persuasion (Eagly & Chaiken, 1993; McGuire, 1985; Petty et al., 2001; Petty & Wegener, 1998; Schwarz, Bless, & Bohner, 1991; Schwarz & Clore, 1996). The nature of the affect-driven bias of likely per-

ceptions has been thought to be quite general (Mayer et al., 1992). Much work has shown that positive and negative moods bias the likelihood of individuals' estimates for valence related events. Specifically, the experience of a positive mood has been shown to increase frequency estimates for the occurrence of positively valence-oriented events, and, similarly, the experience of a negative mood has been shown to increase frequency estimates for negatively valence-oriented events (Johnson & Tversky 1983; Mayer et al., 1992).

### **Discrete Affection**

Recently, however, researchers have given attention to the form and function of discrete affective experiences. In opposition to the uni-dimensional (positive or negative) or valence type view of affection, many theorists see discrete affection as not just related to experiences characterized by differing levels of a few fundamental constructs (e.g., valence, arousal), but see it as related to separate entities consisting of distinct cognitive processes (e.g., Frijda, 1986; Roseman, 1984; Ellsworth, 1985) and certain physiological components (e.g., LeDoux, 1992; Levenson, Ekman, & Friesen, 1990; Panksepp, 1994). This perspective leads to the notion that specific affection has specific effects on cognition that are not able to be reduced to a function of a uni-valence state. Also, specific affection acts to guide behavior in response to specific stimuli (Averill, 1994; Darwin, 1872; Frijda, 1986; Salovey, Bedell, Detweiler, & Mayer, in press; Tomkins 1962). There is every reason to think that they should influence certain types of cognitive processes in different ways as well (Keltner, Ellsworth, & Edwards, 1993; Niedenthal & Halberstadt, 1995; Schwarz, 1990; Schwarz & Clore, 1996). Anger and sadness might affect cognition differently even though they are both negative states. Furthermore, discrete affection of the same valence has been found to increase the accessibility of semantic information that

matches the same states in affective overtone (Niedenthal, Halberstadt, & Setterlund, 1997; Niedenthal & Setterlund, 1994). Also distinct negative affection has been shown to induce different styles of information processing in judgments of stereotype applicability (Bodenhausen, 1993).

The functional theories of emotion address how discrete emotions help to mobilize and allocate mental and physical resources for certain types of person-environment interactions. Although functional theorists vary in the emotion elements they emphasize, their general conceptualization of emotion processes can be summarized as follows: An object or event in the environment is perceived and appraised for its relevance for personal well-being. Particular patterns of appraisals then lead to certain states of action readiness, the awareness of which is the subjective emotional experience. These action tendencies are associated with physiological changes that together influence future perceptions, cognitions, and behaviors in accordance with the goal set by the action tendency (Arnold, 1960; Frijda, 1986; Lazarus, 1991).

Substantial theoretical and empirical work has focused on identifying the appraisal patterns and action tendencies associated with different emotions (Frijda, 1987; Lazarus, 1991; Roseman 1984; Wiest, & Swartz, 1994). Although each theorist supports somewhat different dimensions along which appraisals may be made, they do agree that each emotion expresses a different relational meaning that motivates the use of mental and/or physical resources in ways consistent with the emotion's action tendency.

The view that discrete affection may produce distinct effects on persuasion has begun to be studied systematically (Weiss & Fine, 1956). Likelihood estimates or expectancies play an important role in attitude structure (Albarracín & Wyer, 2001; Fishbein & Ajzen, 1975; McGuire & McGuire, 1991; Petty & Wegener, 1991; Petty & Wegener, 1998) and the experience of

specific affective states can influence the perceived likelihood of events matching in affective overtone (DeSteno, Petty, Wegener, & Rucker, 2000). DeSteno et al. found that congruency between experienced affection and affective framing of arguments contained in specific messages would differentially influence a message's persuasive impact, because individuals use affection as informational sources about their environment and that can shape their expectations about the likelihood of specific events mentioned in a persuasive message (Clore, Gasper, & Garvin, 2001; Damasio, 1994; DeSteno et al., 2000). As a result, affection has the capability of influencing the impact of message arguments.

### **Affective Expectancy**

Fishbein and Ajzen's (1975) expectancy-value model shows that attitudes towards any object are a direct function of the values that are attached to the object's attributes or outcomes weighted by the likelihood attached to the existence or occurrence of each attribute or outcome. However, when there is an absence of motivation or ability to consider the relative attributes of an object, attitudes will often be made by salient cues. (Petty & Cacioppo, 1986; Petty & Wegener, 1998).

Bias expectancies in affective-congruence show that negative affect inflated the likelihood of estimates for the occurrence of negative affect events but deflated the likelihood of estimates for the occurrence of positive affect events. Opposite to this, positive affect inflated the likelihood of estimates for the occurrence of positive affect events but deflated the likelihood of estimates for the occurrence of negative affect events. (Mayer, Gaschke, Braveman, & Evans, 1992).

However, recent research shows that discrete emotions of the same valence inflate or deflate differently depending on the events and whether the contained affective overtones match perceivers' affective states or not. (DeSteno et al., 2000; Lerner &

Keltner, 2000, 2001). For example, when people feel anger, it is likely that the perceptions they attached to angering events are increased, but not to saddening ones. The ability to experience distinct affection should result in their differential influence on many cognitive and motivational processes (Frijda, 1986; Keltner & Gross, 1999). Furthermore, DeSteno and his colleagues found that affective-specific bias exists and also found that an affective-specific bias must be the inevitable result of a likely estimation in the presence of heightened affective states.

### **Affective Expectation Model**

Wilson and Klaaren (1992) define affective expectations as “people’s predictions about how they will feel in a particular situation or towards a specific stimulus.” According to the affective expectations model (AEM), people form affective reaction with reference of prior expectations about how they anticipated they would feel. Affective expectations influence experienced affection as much as any information present in a particular situation at hand (Wilson et al., 1989).

Affective expectations, like highly accessible attitudes, are regarded to guide people’s perceptions of incoming information and facilitate the processing of congruent information (Fazio, Sanbonmatsu, Powell, & Kardes, 1986; Fazio & Williamas, 1986; Wilson et al, 1989). When people get expectation-congruent stimulus, perceivers will not have to spend additional time and cognitive processing to confirm the valence of the stimulus beyond the already existing expectation. In this case, the perceiver is expected to rely on the affective expectation rather than actual valence of the information of the stimulus.

However, when people get expectation-incongruent stimulus with a prior affective expectation and an expectation-discrepant stimulus, their affective evaluation will be assimilated to the expectation or will be contrasted away from the expectation depend-

ing on the expectation-discrepancy. For example, when people do not notice current discrepancies, they are predicted to change their affective experience to fit their prior expectation (assimilation effect), however, when people notice the current discrepancies, it is predicted that people will adjust their prior expectation (contrast effect) (Wilson et al., 1989). Therefore, according to the AEM, affective reactions are assimilated or contrasted depending on whether or not the discrepancy between the prior expectation and the stimulus is noticed by the perceiver.

Wilson et al. tested the assimilation effects where subjects assimilate affective reactions to affective expectations, when experiencing expectation-discrepant stimulus. In this study, students were asked to rate funny or unfunny cartoons. Half of the participants were given the expectation that the cartoons would be funny, whereas the other half were given no expectations at all. Participants in the expect-to-like condition and no-expectation condition both rated the cartoons as funny. However, participants in the expect-to-like condition rated them funnier than the no-expectation condition when the cartoons were unfunny. As a result, the expect-to-like participants assimilated their evaluations to their expectations.

In a follow-up study, Wilson et al. tested both the assimilation and contrast effect. Students were asked to rate four funny cartoons with a positive expectation, a negative expectation, or with no expectation. To test for the contrast effect, researchers manipulated the level of fine-grained evaluations of a stimulus (i.e., individual-rating condition, vs. overall-rating condition). The individual-rating group should be more apt to notice the discrepancies between their expectations and the valence of the stimulus than in the overall-evaluation group. The group of fine-grained analyses was expected to gain more detailed information about the cartoons, allowing them more of a chance to notice any discrepancies. The overall-evaluation group, on the other hand,

was expected to gloss over the discrepancy leading them to assimilate the stimulus in accordance to their prior expectation. In this study, however, the assimilation effect was supported but the contrast effect was not supported. One possible explanation of no evidence for the contrast effect may be that the participants failed to detect the discrepancy between their experience and expectations (Geer & Lassiter, 1999). There is other research that supports that people need a great deal of information to notice preference-inconsistent compared to preference-consistent (Ditto & Lopez, 1992).

Geers and Lassiter (1999), however, support that when individuals are in a situation in which they are more apt to notice the discrepancy between the expectation and the stimulus, a positive expectation leads to a more negative affective reaction than if no expectation is given. This research shows evidence for the predicted contrast effect and also shows that contrast effects need a great deal of exposure to expectation-discrepant information. As a result of research, Geers and Lassiter (1999), this has implications concerning the possible mechanisms by which affective expectations influence affective experience. Wilson et al. have suggested several such mechanisms, a selective attention mechanism, a change-in-interpretation hypothesis, and a change-in-weight hypothesis.

An example of selective attention is that “an expectation could change the nature of the data base that makes up the affective reaction.” That is, affective expectations may alter the initial pool of information that an individual can obtain from a stimulus. As a result, individuals with an affective expectation base their evaluations on a different pool of information than do individuals with no expectation. The study of Geers and Lassiter was consistent with the selective attention hypothesis, that manipulating the amount of information that people gain from an expectation-discrepant stimulus can effectively alter affective



evaluations.

A second explanation that the change-in-interpretation hypothesis argues is that affective expectations do not influence the pool of data that people obtain from a stimulus, but rather people with affective expectation interpret the incoming information in a different way than do people without an expectation.

A third explanation that refers to the change-in-weight hypothesis is similar to that of the change-in-interpretation hypothesis. It is argued that people with an affective expectation weigh the available information differently than do individuals with no expectation, instead of having different interpretations of the data.

### **The Present Study**

Based on earlier research, the role of specific affective-expectation with its congruency effect on advertising should be considered. Given the importance of affective factors, there are relatively few studies on how affective congruency (or incongruency) has influence on forming positive (or negative) attitudes toward advertising. For example, advertising that contains sad type affection might effectively form more positive attitudes towards advertising than those containing other affection types when they experienced sadness. Also, how affective-expectancy influences and forms attitudes toward advertising is rarely studied. Furthermore, how specific affection influences attitudes differently beyond dichotomized affection in advertising can be a worthy subject to explore.

## **II . Experiment**

In this study, the question of whether congruency of specific affective-expectation could influence the formation of preference that was likely to be attached to affection described in in-

structions connected to advertising. To do so, will require the manipulation of specific affective-expectation and the affective framing of advertising together in unison. In this research the central prediction was that a match between a specific affective-expectation state and the affective framing of advertising resulted in increased formation of preference compared with a mismatched case. This expectation was based on the occurrence of affective-induction as an increased likelihood when the same affective events that might arouse accessible attitudes to the stimulus were utilized.

### III. Method

#### Participants

320 undergraduate students from Yonsei University participated in this experiment in partial fulfillment of a course requirement. Participants were randomly assigned to one of nine experimental conditions: types of affective states (fear, touching and humorous) crossed with types of affective framing, and types of advertisements (fear framed, humorous framed, and touching framed). Participants were tested individually in sessions lasting about 30 minutes.

#### Procedure

On arriving, participants were seated in individual cubicles, each equipped with a personal computer. The experimenter informed them that they would watch and discuss a movie with the other participants about the overall overtone of the movie, and that the discussion will be recorded. After these instructions, participants were handed a set of written instructions, which contained a short article about background and a summary of the movie, was given to each of the touching-expectation participants,

humorous-expectation participants, and fear-expectation participants. The experimenter informed the participants to read the instructions and to think about what kind of movie would be played and what they would talk about afterwards. This session was provided for giving salient information about the overtone of the movie that would lead participants to notice a certain level of discrepancy. At this point, the instructions began to differ depending on the participant's condition of expectation. Then the experimenter asked the participants to turn on their individual monitors and informed that the present study was concerned with the relationship between the attitude towards advertising and psychological film appreciation. At this point, participants were told that they would watch three advertisements first, and that they would then be asked to designate a preference (attitude toward advertising). They were told that after finishing the survey, they would watch a movie for discussion. (In fact, they will not watch any movie.) Thus, participants were manipulated via an affective-expectation condition first and then watched advertisements which are consistent or inconsistent with the affective-expectation then they were asked to note their attitudes towards the advertisement. On completion of these measures, the participants responded to a series of questions concerning their affective reactions to the instructions described in the written paper (i.e., the emotion manipulation check).

In order to reduce their awareness of the affective states induced by the instructions, participants completed the affective check after the attitude measure. Awareness of the manipulation of their emotional states might have resulted in the application of corrective processes to their evaluative judgments (Berkowitz & Troccoli, 1990; DeSteno et al., 2000; Ottati & Isabell, 1996; Schwarz & Clore, 1996; Wegener & Petty, 1997). After the participants completed the survey, they were informed that the experiment executor made a criterion about the attitude towards adver-

tising but that their attitude towards advertising was not properly suited to discuss a movie. So they did not need to discuss any movies. (In fact, there was no discussion and criterion).

Several salient advertisements were pre-tested and three, most suitable for the study, were selected from each of the affection representatives. In the pre-testing, participants would be asked to rate how much they feel fear, touching, or humorous (on a 7-point scale). It assured that the advertisements would provide enough affective overtones to the participants.

## IV. Results

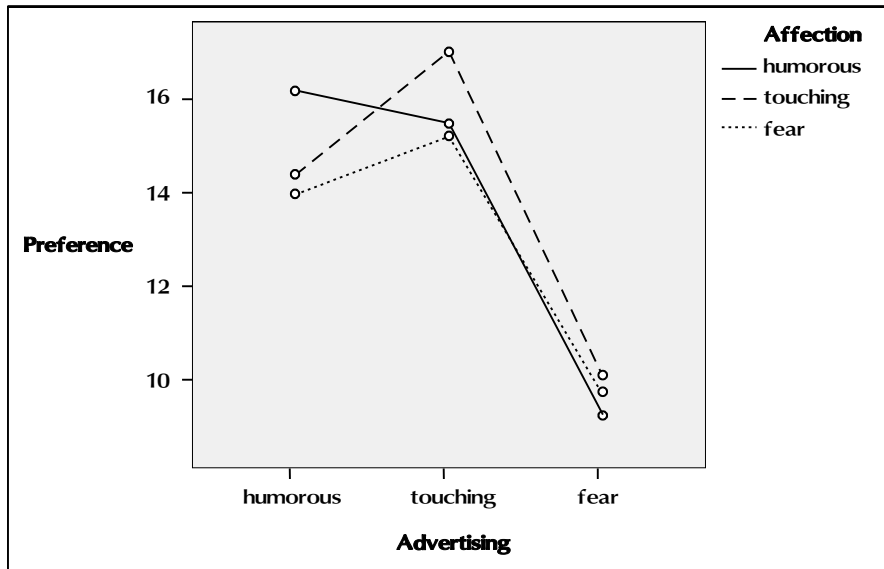
### Manipulation of Affective-Expectation check

Expectation of humorous, touching and fear were primed by reading the summary of a movie. As predicted, participants in the humorous-expectation group reported a higher level of humorous expectation ( $M=6.21$ ) than the other groups ( $M=2.68$ ),  $t(238)=19.5$ ,  $p<.01$ , participants in the touching-expectation group reported a higher level of touching expectation ( $M=6.15$ ) than the other groups ( $M=3.36$ ),  $t(238)=12.3$ ,  $p<.01$ , whereas participants in the fear-expectation group reported a higher level of fear expectation ( $M=5.76$ ) than the other groups ( $M=2.24$ ),  $t(238)=17.6$ ,  $p<.01$ .

### Attitude towards Advertising

In accordance with expectations, a 3 (affective expectation states of fear, touching, or humorous) x 3 (advertising affective context of fear, touching, or humorous) ANOVA confirmed that the reliable difference in attitudes toward the advertisement occurred as a function of the interaction between affective expectation and affective-version of advertising,  $F(4, 231)=2.637$ ,  $p<.05$ . (see Figure 1).

**Figure 1.** Interaction of preference between affective expectation and affective-version of advertising



In order to clearly demonstrate the effects of affective state on advertising as a function of congruency effects, data to simple effect test was submitted. There were significant simple effects on affection within advertising in humorous,  $F(1,154) = 5.81$ ,  $p < .05$ , and touching state  $F(1,154) = 4.79$ ,  $p < .05$ . However, the fear-expectation group did not differentially influence attitudes in response to the advertising affection. Therefore, more favorable attitudes only emerged for the humorous and touching congruency groups.

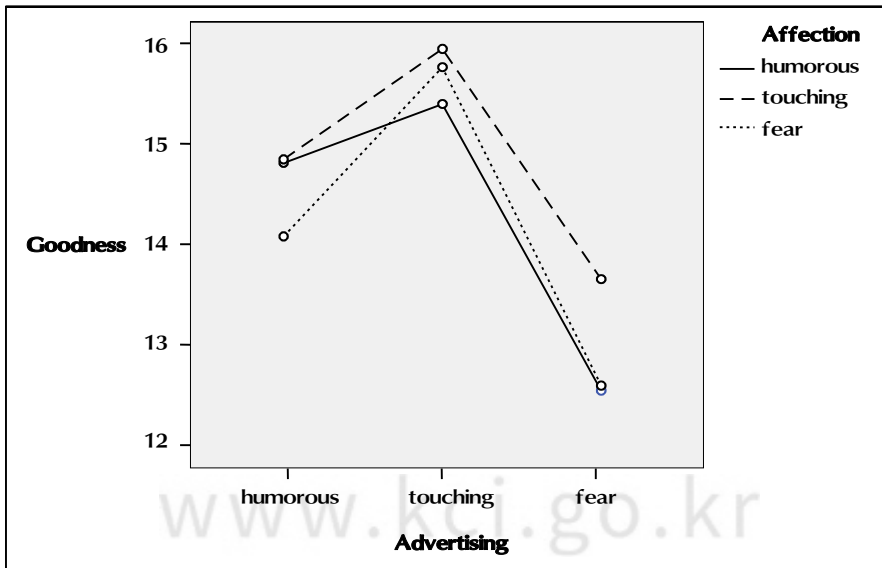
Further simple contrast analysis was conducted in order to more clearly check the difference among the three affective states within each affective-version of advertising states. Simple contrast analysis revealed that there was a significant difference between humorous and touching, humorous and fear expectations within a humorous-version of advertising,  $F(1,231) = 7.63$ ,  $p < .01$ , but no

difference between touching and fear expectation within humorous-version of advertising. And there was a significant difference between touching and humorous, touching and fear expectations within touching-version of advertising,  $F(1,231) = 5.89$ ,  $p < .05$ , but no difference between humorous and fear expectation within touching-version of advertising.

### Goodness of Advertising

As seen in Figure 2, interestingly, the score of goodness of advertising was most increased with the touching-versions of advertising irrespective of affective-expectation states. Thus, the result of the goodness of advertising indicated the possibility of people's attitude towards advertising. That is, people might generally think that touching-versions of an advertisement are better made compared to other affective-versions of an advertisement.

**Figure 2.** Interaction of goodness between affective expectation and affective-version of advertising



## **Discussion**

This study provides an extension to the finding of DeSteno et al. (2000) that the emotional congruency has more powerful persuasive impact on message. The findings of this study demonstrate that the effect of emotion on a designated preference in response to emotionally framed advertising was not a simple function of valence. Rather, preference only increased when the emotional framing of the advertisement matched the phenomenological state of the recipient. Being more specific, expectation of humorous showed most increased preference for the humorous-framed version of the advertising, and expectation of touching showed the most increased preference for the touching-framed version of the advertising. However, although the primary prediction was that a matched condition between expectations of discrete affection and framed affection of advertising form higher preferences, expectation of fear did not show the most increase in preference for the fear-framed version of the advertisement, rather touching-framed version of the advertisement showed the most increased preference for the expectation of fear.

In regards to the theoretical and empirical works, negative emotions such as fear, anger, sadness, disgust, and guilt, commonly have unique adaptive functions. (Lazarus, 1991; Roseman, 1984). Fear is generally aroused when people perceive both a threat to one's physical or psychological self and something out of one's control (Frijda, 1986; Lazarus, 1991). Threatening situations can be either is innate or learned, and an individual's threshold for fear is determined by biological factors, socio-cultural context, and an individual's experience. Based on the desire for protection, fear's action tendency is to escape from the threatening agent, and, if realized, avoidance of behavior results (Frijda, 1986; Lazarus, 1991; Roseman et al., 1994). A few recent studies have examined the effects of fear arousal on information processing (Baron, Inman, Kao, & Logan, 1992; Gleicher & Petty, 1992).

Though these studies do not reach consensus, in sum they suggest that chronic fear and message-relevant acute fear may lead to less careful message processing if the need for reassurance is not met or is met by peripheral cues (Gleicher & Petty, 1992; Hale et al., 1995; Jepson & Chaiken, 1990). Otherwise, the need for reassurance may motivate central processing by those experiencing moderate fear (Baron et al., 1992; Baron et al., 1994; Gleicher & Petty, 1992). Further inference can be made from these studies that fear appealing messages should not be considered as a single unit, but rather as two separate yet related communications, one of which induces fear while the other suggests how to alleviate it. Although Respondents may wish to avoid the message that instills fear, they may be willing to engage with the message that might offer reassurance.

Therefore, the result that there are no affective congruency effects with the state of fear can be possibly explained, because it is feasible that participants wish to alleviate the state of fear, hence forming a higher preference with other positive affections than fear in advertisements.

In terms of types of emotion, emotions are often classified in terms of avoidance or approach responses (e.g., avoidance of pain and approach to pleasure). In the context of media messages, these approach-avoidance instincts may be considered in terms of (a) willingness to engage with the source of the emotion, (b) willingness to think about the emotion-evoking situation generally, and (c) willingness to think about potential solutions. Among the five types of emotions—fear, disgust, guilt, sadness, and anger—, fear appears to be associated with the strongest avoidance reaction in terms of both responding to and thinking about the fear-evoking situation.

Thus, the findings of this study that fear-framed versions of advertisements did not show the most increase in expectation, could be possibly explained by previous researches. When people



get the message of fear, they want to escape from the fear context because fear's action tendency is to escape from the threatening agent. Consequently, the role of expectation of discrete affection in influencing attitudes differ depending on the specific affection such as humorous, touching or fear.

Despite the experiment executor informing only the objective summary without any subjective opinions about the movie in order for the participants to be given an affective expectation, participants might have had experiences with the movies. Affective expectation without any experience could be confounding with affective experience. Thus, more systematic research, which can measure the exact affective expectation, would be conducted in future studies.

Moreover, even this study fails to show that fear expectation encourages the forming of higher preference with fear-appealing advertisements than the other affective expectation groups. It can be the difference between preference and persuasive. That is, fear advertising can persuade people even if those people did not like the advertising. Thus, preference and persuasive might be in difference dimension. Further relation between preference and persuasive in advertising context should be examined.

To elucidate the effect of fear messages on behaviors, further research is needed.

## References

- Averill, J. R. (1994). In the eyes of the beholder. In P. Ekman & R. J. Davidson (Eds.), *The nature of emotion: Fundamental questions* (pp. 99-102). New York: Oxford University Press.
- Bodenhausen, G. V. (1993). Emotions, arousal, and stereotypic judgments: A heuristic model of affect and stereotyping. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping*. (pp. 13-37). San Diego, CA: Academic Press.
- Baron, R., Logan, H., Lilly, J., Inman, M., & Brennan, M. (1994). Negative emotion and message processing. *Journal of Experimental Social Psychology* 30, 181-201.
- Baron, R. S., Inman, M. B., Kao, C. F., & Logan, H. (1992). Negative emotion and superficial social processing. *Motivation and Emotion*, 16(4), 323-346.
- Bless, H., Bohner, G., Schwarz, N., & Strack, F. (1990). Mod and persuasion: A cognitive response analysis. *Personality and Social Psychology Bulletin*, 16, 331-345.
- Breckler, S. J. (1993). Emotion and attitude change. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions*. (pp. 461-473). New York: Guilford.
- Clore, G. L., Gasper, K., & Farvin, E. (2001). Affect as information. In J. P. Forgas (Ed.), *Handbook of affect and social cognition* (pp. 121-144). Mahwah, NJ: Erlbaum.
- Cohen, J. B., & Areni, C. S. (1991). Affect and consumer behavior. In T. S. Robertwon & H. H. Kassarian (Eds.), *Handbook of consumer behavior* (pp. 188-249). Englewood Cliffs, NJ: Prentice-Hall.
- Darwin, C. (1872). *The expression of the emotions in man and animals*. Chicago: University of Chicago Press.
- DeSteno, D., Petty, R. E., Wegener, D. T., & Rucker, D. D. (2000). Beyond valence in the perception of likelihood: The role of

- emotion-specificity. *Journal of Personality and Social Psychology*, 78, 397-416.
- Dillard, J. P. (1993). Persuasion past and present: Attitudes aren't what they used to be. *Communication Monographs*, 60, 90-96.
- Ellsworth, P. C., & Smith, C. A. (1988). From appraisal to emotion: Differences among negative feelings. *Motivation and Emotion*, 12, 271-308.
- Englis, B. G. (1990). Consumer emotional reactions to television advertising and their effects on message recall. In S. Agres, J. Edell, & T. Dubitsky (Eds.), *Emotion in advertising: Theoretical and practical explorations*. New York: Quorum Books.
- Frijda, N. H. (1986). *The emotions*. New York: Cambridge University Press.
- Gardner, M. P. (1985). Mood states and consumer behavior: A Critical Review. *Journal of Consumer Research*, 12, 281-300.
- Gleicher, F., & Petty, R. E. (1992). Expectations of reassurance influence the nature of fear-stimulated attitude change. *Journal of Experimental Social Psychology*, 28(1), 86-100.
- Hale, J. L., LeMieux, R., & Mongeau, P. A. (1995). Cognitive processing of fear-arousing message content. *Communication Research*, 22(4), 459-474.
- Izard, C. E. (1977). *Human emotions*. New York: Plenum Press.
- Jepson, C., & Chaiken, S. (1990). Chronic issue-specific fear inhibits systematic processing of persuasive communications. In M. Booth-Buttrfield (Ed.), *communication, cognition, and anxiety* (pp. 61-84). Newbury Park, CA: Sage.
- Johnson, E. J., & Tversky, A. (1983). Affect, generalization, and the perception of risk. *Journal of personality and Social Psychology*, 45, 20-31.
- Keltner, D., Ellsworth, P. C., & Edwards, K. (1993). Beyond simple pessimism: Effects of sadness and anger on social perception. *Journal of Personality and Social Psychology*, 64, 740-752.

- Lazarus, R. S. (1991). *Emotion and adaptation*, New York: Oxford University Press.
- LeDoux, J. E. (1992). Fear and the brain: Where have we been, and where are we going? *Biological Psychology*, *44*, 1229-1238.
- Levenson, R. W., Ekman, P., & Friesen, W. V. (1990). Voluntary facial action generates emotion-specific autonomic nervous system activity. *Psychophysiology*, *27*, 363-384.
- Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology*, *81*, 146-159.
- Nabi, R. L. (1999). A cognitive-functional model for the effects of discrete negative emotions on information processing, attitude change, and recall. *Communication Theory*, *9*, 292-320.
- Niedenthal, P. M., Setterlund, M. B. (1994). Emotion congruence in perception. *Personality and Social Psychology Bulletin*, *20*, 401-410.
- Niedenthal, P. M., Halberstadt, J. B. (1995). The acquisition and structure of emotional response categories. In D. L. Medin (Ed.), *The psychology of learning and motivation* (Vol. 33). San Diego, CA: Academic Press.
- Niedenthal, P. M., Halberstadt, J. B., & Setterlund, M. B. (1997). Being happy and seeing "happy": Emotional state mediates visual word recognition. *Cognition and Emotion*, *11*(4), 403-432.
- Mayer, J. D., Gaschke, Y. N., Braverman, D. L., & Evans, T. W. (1992). Mood-congruent judgment is a general effect. *Journal of Personality and Social Psychology*, *63*, 119-132.
- Panksepp, J. (1994). The clearest physiological distinctions between emotions will be found among the circuits of the brain. In P. Ekman & R. J. Davidson (Eds.), *The nature of emotion: Fundamental questions* (pp. 258-260). New York: Oxford University Press.
- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz(Ed.), *Advances in ex-*

- perimental social psychology* (Vol. 19, pp. 123-205). New York, NY: Academic Press.
- Petty, R. E., DesSteno, D., & Rucker, D. D. (2001). The role of affect in attitude change. In J. P. Forgas(Ed.)s *Handbook of affect and social cognition* (pp. 212-233). Mahwah, NJ: Erlbaum.
- Petty, R. E., & Wegener, D. T. (1998). Attitude change: Multiple roles for persuasion variables. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol, 1, pp. 323-390). New York: McGraw-Hill.
- Pham, M. (1998). Representativeness, relevance, and the use of feelings in decision making. *Journal of Consumer Research*, 25, 144-159.
- Robin L. Nabi (2003). Exploring the framing effects of emotion: Do discrete emotions differentially influence information accessibility, information seeking, and policy preference?, *Communication Research*, Vol. 30, No. 2, April, 224-247.
- Robin L. Nabi (1999). A cognitive-functional model for the effects of discrete negative emotions on information processing, attitude change, and recall., *Communication Theory*, Aug., 292-320.
- Roseman, I. (1984). Cognitive determinants of emotion: A structural theory. In P. Shaver (Ed.), *Review of personality and social psychology: Vol. 5. Emotions, relationships, and health* (pp. 11-36). Beverly Hills, CA: Sage.
- Roseman, I. J., Wiest, C., & Swartz, T. S. (1994). Phenomenology, behaviors, and goals differentiate discrete emotions. *Journal of Personality and Social Psychology*, 67, 206-221.
- Rucker, D. D., & Petty, R. E. (2004). Emotion specificity and consumer behavior: anger, sadness, and preference for activity. *Motivation and Emotion*, 28(1), 3-21.
- Rucker, D. D., & Petty, R. E. (2004). Ready for action? *Anger, sadness, and preference for activity*. Unpublished manuscript, Ohio State University.

- Salovey, P., Bedell, B. T., Detweiler, J. B., & Mayer, J. D. (in press). Current directions in emotional intelligence research. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed.). New York: Guilford Press.
- Schwarz, N. (1990) Feelings as information: Informational and motivational functions of affective states. In E. T. Higgins & R. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2. pp. 527-561). New York: Guilford.
- Schwarz, N., & Clore, G.L. (1996). Feelings and phenomenal experiences. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 433-465). New York: Guilford.
- Tomkins, S. S. (1962). *Affect, imagery, and consciousness*. New York: Springer.
- Wegener, D. T., & Petty, R. E. (1994). Mood-management across affective states: The hedonic contingency hypothesis. *Journal of Personality and Social Psychology*, 66, 1034-1048.
- Weiss, W., & Fine, B. J. (1956). The effect of induced aggressiveness on opinion change. *Journal of Abnormal and Social Psychology*, 52, 109-114.