

How Context-Evoked Affect Influences Responses to Ads for High and Low Involving Products

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ABSTRACT

Drawing upon the multiple roles of affect in the Elaboration Likelihood Model proposed by Petty, Cacioppo, and their colleagues (Petty, Cacioppo, & Kasmer, 1987; Petty, Cacioppo, Sedikides, & Strathman, 1988; Petty, DeSteno, & Rucker, 2001; Petty, Gleicher, & Baker, 1991), this study explored the different roles that affect plays in the ad message reception process for a high involving and a low involving product. As expected, findings showed that, when processing ad messages for a high involving product, participants in positive affective states responded more favorably to a positive ad cue than to a negative cue when ad arguments were weak, whereas ad cue valence did not influence their responses when ad arguments were strong. On the contrary, participants in negative affective states responded more favorably to ads with strong arguments than weak arguments but did not respond differently to ads with positive versus negative cues. However, the proposed main effect of affective state on ad judgments for a low involving product did not emerge.

Keywords: ad-evoked affect, argument strength, involvement

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Affect has an important and very complex influence on persuasion. A review of past research reveals three significant paradigms in the affect and cognition literature. First, affect influences cognition by priming congruent information. Information is stored in memory with other information of the same valence in an associative network. Therefore, affect can activate information of the same valence via a spreading process and thus bias judgments in an affect congruent manner (see Bower & Forgas, 2000, for a review). Second, affect can serve an information function and be assessed as an input for judgments (Schwarz & Clore, 1983, 1988). Finally, affective states can determine an individual's motivation or capacity to elaborate on a message and encourage him or her to adopt either systematic or heuristic processing strategies (see Schwarz, 1990; Schwarz & Bless, 1991; Schwarz, Bless, & Bohner, 1991, for reviews).

Based on these three research paradigms, Petty, Cacioppo, and their colleagues (Petty, Cacioppo, & Kasmer, 1987; Petty, Cacioppo, Sedikides, & Strathman, 1988; Petty, DeSteno, & Rucker, 2001; Petty, Gleicher, & Baker, 1991) elaborated on the multiple roles that affect may play within their well-accepted elaboration likelihood model (ELM). They proposed that, when elaboration likelihood is high, affect can either function as an argument or influence judgments via an affect priming process that encourages affect congruent information retrieval. When elaboration likelihood is moderate, affect determines individuals' processing strategies, with positive affect leading to a heuristic mode of processing and negative affect resulting in a systematic mode of processing. Finally, when elaboration likelihood is low, affect may serve as a peripheral cue, biasing judgments in a congruent direction.

Even though the three proposed processes have been documented in past research, past investigations have tended to focus on only one type of mechanism that affect may trigger. Except for one paper by Petty, Schuman, Richman, and Strathman (1993) that compared the different modes of influence of affect on message judgments in a high elaboration and a low elaboration condition, research testing the thesis that elaboration likelihood can determine the role of affect is scanty. Therefore, the primary objective of this study is to understand the various roles that affect plays in ad processing when products vary in the degree of involvement they evoke, which has been shown to alter ad perceivers' elaboration likelihood (Chang, 2002a).

The Influence of Affect on Information Processing and Judgments

A number of research paradigms regarding the interaction between affect and cognition have evolved in the past twenty years. This study will review three major paradigms that have important implications for persuasion research in general and advertising research in particular. The three paradigms were also foundations for Petty, Cacioppo, and their colleagues (Petty et al., 1987; Petty et al., 1988; Petty et al., 2001; Petty et al., 1991) in developing the model that specifies the multiple roles of affect in different contexts. This model provides the theoretical framework for this paper.

Mood Congruency Effects

Bower (1981) proposed the associative network model, which holds that messages of the same affect are stored together in memory. Due to this associative nature of the memory network, the elicitation of affect spreads activation to memories relevant to that affect, resulting in mood-congruent memory and further leading to mood-congruent judgments (see Bower & Forgas, 2000. for a review). In general, when individuals are in a positive affective state, they are not only better able to retrieve positive information from memory, but they also generate more favorable judgments of the target being evaluated. Conversely, when individuals are in a negative affective state, they are better able to retrieve negative information from memory, and they generate less favorable judgments of the target being evaluated.

Mood as Information

Schwarz and Clore (1983) developed the “mood as information” model to suggest that mood due to a preexisting state may be mistaken for a reaction to the target and be used as an input for judgments. Instead of integrating detailed information to reach a judgment, people may simply base their judgments on the “how-do-I-feel-about-it” heuristic. To the extent that they feel happy, they will generate more favorable judgments. This can be an unconscious process. The model was later changed to “feeling as information” to explain the influence of feelings other than moods (Clore, 1992; Schwarz, 1990).

Judgments based on feeling as information can occur in contexts where either a systematic or heuristic mode of processing is engaged. In their earlier discussion, Schwarz and Clore (1988) argued that processing on the basis of “mood as information” is a heuristic processing strategy that is more likely to occur when elaboration likelihood is low. Yet, Schwarz (2001) later suggested that relying on affect as a judgment input is not limited to situations when heuristic processing is encouraged.

Mood and Information Processing

How a person feels may influence how he or she thinks (see Schwarz, 1990; Schwarz & Bless, 1991; Schwarz, Bless, & Bohner, 1991, for reviews). Feelings can either impair or facilitate a person’s information processing in regard to elaborations of details. When people are in positive affective states, they are more likely to ignore details and rely on heuristics (e.g., Bless et al., 1990; Mackie & Worth, 1989; Worth & Mackie, 1987), whereas when they are in negative affective states, they will engage in detail-oriented and step-by-step analytical processing (e.g., Bless et al., 1990).

One important explanation for why individuals in positive and negative affective states use different modes of information processing is motivational in nature, suggesting that individuals’ affective states signal different information to themselves (see Schwarz, 1990; Schwarz & Bless, 1991; Schwarz et al., 1991, for discussions). Happy individuals perceive that their environments are unthreatening and are less likely to be alert and attentive to details. In addition, to maintain their positive affective states, they are less motivated to engage in elaborative message processing, which may dilute their pleasant states. By contrast, negative affective states signal to individuals that the current situation is threatening and deserves their attention. Thus, individuals in negative affective states are more motivated to engage in systematic message processing.

The other explanation for the effects of mood on information processing concerns how affective states constrain individuals’ cognitive capacities (Mackie & Worth, 1989, 1991; Worth & Mackie, 1987). It is proposed that positive affective states are more likely than negative affective states to trigger activation of extensive amounts of valence-congruent messages, which will diffuse attention and restrict cognitive capacity to engage in message elaboration.

Regardless of what explanation better describes the underlying mechanism, findings on the effects of mood on information processing are consistent. Happy individuals are

equally persuaded by strong and weak arguments, whereas individuals in neutral and negative moods respond more favorably to strong arguments than weak arguments (e.g., Bless et al., 1990; Kuykendall & Keating, 1990; Worth & Mackie, 1987). The patterns suggest that happy individuals engage in a heuristic mode of processing, whereas sad individuals adopt a systematic mode of information processing.

Multiple Roles for Affect in ELM

Petty, Cacioppo, and their colleagues (Petty et al., 1987; Petty et al., 1988; Petty et al., 2001; Petty et al., 1991) tried to integrate findings explained by these different paradigms by proposing that affect can play multiple roles in different contexts within their well-accepted ELM. Petty et al. (1991) stated that “the ELM holds that affect (like any other variable) can influence attitudes in the following ways: (a) by serving as an argument or item of issue-relevant information, (b) by functioning as a simple cue, (c) by influencing the extent of information processing activity, or (d) by influencing the types of thoughts that come to mind” (p. 182). They reasoned that the specific role affect plays is contingent on an individual’s motivation or ability to engage in message elaboration. It is important to note that, in their discussions, they used affect to represent “a superordinate construct to encompass emotions and relatively transient moods and feelings” (Petty et al., 1988, p. 357). This study will adopt a similar approach by using the general term “affect” in reviewing the literature.

In situations where elaboration likelihood is high, affect can influence persuasion via two processes. First, when affect is relevant to primary merits of the target being evaluated, it will serve as information or an argument. In these situations, how the individual feels about the target will function as an important judgment input, which will be integrated into the evaluation formation process with other information and thus influence attitudes toward the target. This is especially likely to happen when the target being evaluated is highly relevant to the message perceiver. This proposed mechanism is consistent with findings of the mood as information research reviewed earlier.

On the other hand, when the affect is not relevant to the target being evaluated, affect will influence information processing by enhancing affect-congruent information and biasing judgments. Petty et al. (1987) reviewed literature pertaining to the influence of affect on likelihood estimates to argue for the existence of this process. For example, they reviewed Johnson and Tversky (1983), which shows that affect evoked by negative

or positive news increases the accessibility of other valence-congruent events and enhances the likelihood estimates of their occurrences. As Petty et al. (1991) noted, this process is built upon findings of mood-congruent judgments.

Petty, Cacioppo, and their colleagues proposed that when motivation to elaborate on messages is moderate, affect will determine the processing strategies that individuals adopt. When positive affective states are induced, participants will engage in heuristic processing, whereas when negative affective states are evoked, participants will engage in systematic processing. This proposition is in line with the findings of Worth and Mackie (1987), Mackie and Worth (1989), and Bless et al. (1990) that were reviewed earlier in this paper.

When message perceivers have relatively low motivation and capacity to process persuasive messages, affect will work as a peripheral cue. Petty et al. (1987) cited findings of classical conditioning in the advertising literature to support this proposition. This line of research suggests that repeated associations can transfer the affect associated with an ad execution, such as music, to the advertised product. Petty et al. (2001) also reasoned that, under low elaboration conditions, people may misattribute how they feel about the target to how they like the target, which is the central argument of the feeling as information literature.

Surprisingly, direct empirical tests of the multiple roles that affect plays are scanty. Preliminary support was documented by Petty et al. (1993). Their first experiment demonstrated that when participants had high need for cognition, which was assumed to mean they were highly motivated to elaborate on messages, their affect primed congruent cognitive responses which biased their attitudes. In contrast, when participants had low need for cognition, their affect directly impacted their attitudes without the mediation of cognitive responses, suggesting that affect functioned as a peripheral cue. Furthermore, Petty et al.'s (1993) second experiment concerning participants' responses to advertisements showed that when participants were highly involved, their affect primed congruent cognitive responses which influenced their product attitudes. In contrast, when participants were not highly involved, their affect directly impacted their product attitudes.

Affect and Responses to Advertising

Except for Petty et al. (1993), little empirical research in advertising simultaneously

tests the different roles of affect. Yet, a significant pool of research (reviewed below) has tried to understand the influence of affect, both ad-evoked and context-evoked, on ad perceivers' responses to ads.

Ad-evoked affect can influence how ad perceivers evaluate the ad and the advertised product. Past literature has indicated that ad-evoked affect biases ad and brand evaluations in an affect-congruent way (e.g., Aaker, Stayman, & Hagerty, 1986; Batra & Ray, 1986; Edell & Burke, 1987; Machleit & Wilson, 1988). To the extent that more positive affect is generated, ad readers express more favorable responses to the ad and brand. Chang (2002b) suggested that ad-evoked affect influences ad perceivers' responses to the ad and brand via an affect priming process. She demonstrated that ads that evoke positive affect prime more positive cognitive thoughts and lead to more favorable evaluations of the ad and brand, whereas ads that evoke negative affect prime more negative cognitive response and result in less favorable ad and brand attitudes.

Research has demonstrated that context-induced affect determines ad perceivers' processing strategies as well. For example, Chang (2002a) showed that when context-evoked affect was positive, participants were less likely to elaborate on ad messages and thus relied on ad-self congruency as a cue in formulating their ad and brand judgments. Martin (2003) found that a context-induced positive affective state discouraged participants from elaborating on ad messages and encouraged them to evaluate the ads on the basis of heuristic cues. Batra and Stayman (1990) documented that, in comparison to neutral affect, positive affect reduced message elaboration and attenuated the effects of strong arguments.

Other studies have shown that context-induced affective states directly influence how ad perceivers evaluate embedded advertisements (e.g., Goldberg & Gorn, 1987; Mathur & Chattopadhyay, 1991). Goldberg and Gorn (1987) suggested that context-induced affect rendered mood congruent memories more accessible, which thus encouraged congruent cognitive responses and evaluations. Their study showed that when a program preceding an ad evoked positive affect, participants generated more favorable cognitive responses and ad evaluations than when the program evoked negative affect. Other studies have revealed similar effects, indicating that program-evoked affect encourages cognitive responses of the same valence as the affect (Mathur & Chattopadhyay, 1991) and generates more favorable brand attitudes (Gardner & Wilhelm, 1986).

Product Involvement

It does not seem easy for advertisers to obtain information regarding consumers' psychological traits, such as need for cognition orientation, or to manipulate consumers' processing motivations or capacities as done in experimental studies. Yet, it is well accepted that product characteristics can induce different levels of consumer involvement. Therefore, this study will explore the different patterns of influence exerted by affect for high and low involving products.

Chang (2002a) demonstrated that product involvement moderates ad perceivers' responses to context-induced affect. Her findings showed that participants processing ad messages for a low involving product were influenced by context-induced affect. However, participants processing ad messages for a high involving product were more likely to elaborate on the messages and were not influenced by context-induced affect. It appears that product involvement influences the extent to which ad perceivers elaborate on messages, which may further determine the role that affect plays in ad processing.

High Involving Products - Affect Determines Processing Strategies

Advertising exposure is accidental, and consumers cannot anticipate when and where they will encounter ads for certain products. Therefore, it does not seem very likely that ad processing in a media viewing context can be very self-relevant or as highly involving as a situation where message perceivers examine product information at the store before they make a purchase. As a result, a high elaboration mode of ad processing may be uncommon. Instead, ad processing is better characterized by low or moderate elaboration involvement.

In line with this discussion, it is proposed that high involving products will motivate ad perceivers to engage in moderate message elaboration. Based on the multiple roles of affect in the ELM proposed by Petty, Cacioppo, and their colleagues, given moderate elaboration, it is expected that affective states evoked by editorial context will influence ad perceivers' information processing strategies, which will in turn influence the effects of argument strength and cue valence. Specifically, participants in a negative affective state will engage in systematic information processing. As a result, a significant main effect of argument strength will emerge but a main effect of cue valence will not.

On the contrary, participants in a positive affective state will engage in a heuristic mode of processing, relying on valenced cues for judgments. This suggests a main effect of cue valence. However, Batra and Stayman (1990) showed that when featured arguments in a message were strong, the influence of affect on brand evaluations did not emerge, whereas when the message arguments were weak, the influence of affect was significant. This suggests that strong arguments will discourage affect-based judgments. Therefore, it is proposed in this study that when participants are in a positive affective state, valenced cues will not generate effects when argument strength is strong but will generate effects when argument strength is weak. In other words, a significant interaction between cue valence and argument strength, rather than a main effect of cue valence, will be generated.

Hypothesis 1: When products are high involving, a three-way interaction for ad attitudes (H1a) and brand attitudes (H1b) will emerge. For participants in a positive affective state, there will be a cue valence by argument strength interaction. For participants in a negative affective state, only the main effect of argument strength will be significant.

Low Involving Products - Affect as a Peripheral Cue

A low involving product in a natural viewing context probably will only motivate ad perceivers to engage in low message elaboration. According to Petty, Cacioppo, and Baker (1991), under such conditions, affect will function as a peripheral cue and will directly influence ad and brand evaluations. In other words, a main effect of affect will emerge.

Hypothesis 2: When products are low involving, the main effect of affect on ad attitudes (H2a) and brand attitudes (H2b) will be significant.

Methods

Design

This experiment had a 2 x 2 x 2 x 2 mixed design. The three between-subjects factors were affective state (positive vs. negative), argument strength (weak vs. strong), and cue valence (positive vs. negative). The within-subjects factor was product

involvement (low vs. high).

Participants

Participants ($N = 184$) were recruited from a college in a metropolitan area in Taiwan. Forty-nine percent of the participants were male. Participants were randomly assigned to one of the eight between-subjects conditions, twenty-four in each cell. Due to missing responses from one participant, analyses were based on only 183 participants.

Stimuli Development

Magazines Articles

Magazine articles served as the affect-evoking context materials. Each participant read two magazine articles derived from real-life stories, which were pre-tested to verify they elicited the assigned emotion.

Stimuli Ads

Stimuli ads were created by professionals working at an ad agency. The high and low involving products were determined by pre-tests, which will be described in detail later. Visuals and layouts were similar for ads in different conditions in order to reduce possible confounding effects. Either strong or weak arguments regarding product attributes were listed. To improve external validity, the ads were inserted between two real filler ads.

Procedures

A mock magazine containing two magazine stories, the first stimuli ad, one filler ad, the second stimuli ad, and the other filler ad were created for each condition. One stimuli ad was for the high involving product, and the other was for the low involving product. The order of the two stimuli ads was random. Since the magazine articles were about real people, similar to stories appearing in *Reader's Digest*, participants were told that a new magazine, called *International Student Reader's Digest*, would be launched in the near future, and that the advertiser would like to know whether the proposed layout of the new magazine would appeal to the target audience of college students. Participants were then instructed to read the articles as they might at home. After reading the two magazine

articles they were asked to write down what the articles were about, in order to involve them more with the stories and reinforce the mood manipulation. This is a procedure similar to that adopted by Strack, Schwarz, and Gschneidinger (1985). Participants also rated their mood and how much they liked the magazine articles. Then, after reading each ad, participants rated measures for manipulation checks and rated how much they liked the ad and the product.

Independent Variables

The translation and translation back procedure suggested by Brislin (1987) was adopted to create the Chinese versions of all measures used in this experiment.

Affective State: Positive vs. Negative

As discussed in the procedures, happy and sad magazine articles were used to evoke affective states. Twelve items from the UWIST mood adjective checklist (Matthews, Jones, & Chamberlain, 1990) were used to measure affective state. The positive items included: “pleased,” “cheerful,” “happy,” “satisfied,” “contented,” and “optimistic.” The negative items included “low spirited,” “depressed,” “sad,” “gloomy,” “dissatisfied,” and “sorry.” Reliability for the positive and negative mood measures was satisfactory, with Cronbach’s alphas of .92 and .94, respectively. Participants’ responses to the positive items and reversed responses to the negative items were summed and then averaged to represent their affective states. ANOVA indicated that the effect of the mood manipulation on affective state was significant, $F(1, 161) = 80.50, p < .01, M_{\text{positive}} = 5.05, SD = 1.08, M_{\text{negative}} = 3.47, SD = 1.16$.

Product Involvement: High Involving vs. Low Involving Products

A pre-test ($N = 40$) asked participants to check whether they had ever purchased a number of different products on a list and then to rate the products in terms of how involving they were on the basis of Laurent and Kapferer’s (1985) product involvement scale. Only products that had been purchased by 80% of the respondents were considered for the experiment. Based on the results of participants’ usage frequency and product involvement ratings, an electronic dictionary was selected as the high involving product and chocolate was selected as the low involving product. To reduce bias due to existing brand attitudes, two fictitious brands were used.

Participants in the main experiment also rated the products on seven-items adopted

from Laurent and Kapferer's (1985) product involvement scale: "When you choose _____, it is not a big deal if you make a mistake," "It is really annoying to purchase _____ that are not suitable," "If, after I bought _____, my choice(s) prove to be poor, I would be really upset," "Whenever one buys _____, one never really knows whether they are the ones that should have been bought," "When I face a shelf of _____, I always feel a bit at a loss to make my choice," "Choosing _____ is rather complicated," "When one purchases _____, one is never certain of one's choice." Cronbach's alphas for the high involving product and the low involving product were .75 and .84, respectively, indicating satisfactory reliability. A repeated measures ANOVA indicated that the main effect of product involvement was significant, $F(1, 162) = 107.32, p < .01, M_{\text{high}} = 5.17, SD = 0.92, M_{\text{low}} = 4.13, SD = 1.26$.

Argument Strength: Weak vs. Strong

Pre-tests were conducted to determine strong and weak arguments for both products. The strong arguments for the electronic dictionary were a collection of 300,000 words, translations to Chinese at one-click, and an encyclopedia database. The weak arguments were inclusion of sample General English Proficiency Tests, adjustable windows, and a free leather case.

The strong arguments for the chocolate were a wide selection of flavors, made from fresh coca beans, and rich / delicious. The weak arguments were a Chinese version of the ingredients chart, each piece of chocolate is individually packaged, and the label is marked with the manufacturer's stamp.

Participants in the main experiment were also asked how important they regarded the three strong and three weak arguments when evaluating the electronic dictionary and chocolate. The importance ratings for the three strong arguments were averaged, and the ratings for the three weak arguments were averaged. Findings showed that, as expected, participants rated the three strong arguments for the electronic dictionary as more important than the three weak arguments, $t(162) = 21.32, p < .01, M_{\text{strong}} = 5.84, SD = 0.92, M_{\text{weak}} = 3.53, SD = 1.26$. Similarly, participants rated the three strong arguments for the chocolate as more important than the three weak arguments, $t(162) = 16.57, p < .01, M_{\text{strong}} = 5.66, SD = 0.88, M_{\text{weak}} = 3.81, SD = 1.36$. Therefore, the manipulation was deemed satisfactory.

Cue Valence: Positive vs. Negative

For the electronic dictionary, the valence of a consensus cue was manipulated. The positive consensus cue suggested that the dictionary was rated by a majority of college student users to be their top choice. The negative consensus cue suggested that the dictionary was rated by a majority of junior high school students to be their top choice. Participants rated on a seven-point scale how much they would favor the product if it were the top choice of college students and junior high school students. The ratings differed significantly for a college consensus versus a junior high school consensus, $t(162) = 2.21, p = .03, M_{\text{positive cue}} = 4.26, SD = 1.80, M_{\text{negative cue}} = 3.82, SD = 1.89$. Therefore, the cue valence manipulation for the dictionary was satisfactory.

Since consensus cues are less common in chocolate advertisements than country-of-origin (COR) cues, the valence of a COR cue was manipulated in the chocolate ads. The positive COR cue suggested that the product was imported from Switzerland. The negative COR cue suggested that the product was imported from Malaysia. Participants favored the product more if it was imported from Switzerland than Malaysia, $t(162) = 10.23, p < .01, M_{\text{positive cue}} = 4.57, SD = 2.22, M_{\text{negative cue}} = 3.01, SD = 1.89$. Therefore, the cue valence manipulation for chocolate was satisfactory.

Dependent Variables

Ad Attitudes

Participants rated their attitudes toward the ads on a five-item seven-point Likert scale. The five items adopted from Madden, Allen, and Twible (1988) and Mitchell and Olson (1981) included “interesting,” “good,” “likable,” “favorable,” and “pleasant.” Cronbach’s alphas were .91 and .92 for the high and low involving products respectively, indicating satisfactory reliability.

Brand Attitudes

Brand attitudes were measured with a five-item seven-point Likert scale. The items adopted from Mitchell and Olson (1981) and Holbrook and Batra (1987) included “good,” “likable,” “pleasant,” “positive,” and “high quality.” Cronbach’s alphas were .88 and .90 for the high and low involving products respectively, indicating satisfactory reliability.

Results

Hypothesis 1 proposed a three-way interaction on ad and brand attitudes between affective state, argument strength, and cue valence for high involving products. When responses to ads featuring a high involving product are considered, a cue valence by argument strength interaction is expected to emerge for participants in a positive affective state. In contrast, only the main effect of argument strength is proposed to be significant for participants in a negative affective state.

As expected, ANOVA showed a significant three-way interaction for ad attitudes between affective state, argument strength, and cue valence, $F(1, 162) = 6.83, p < .01$. Further analyses showed that, for participants in a positive affective state, consistent with expectations, the two-way interaction between argument strength and cue valence was significant, $F(1, 76) = 11.01, p < .01$. Simple effect analyses demonstrated that cue valence had a significant effect on ad attitudes when arguments were weak, $F(1, 38) = 14.40, p < .01, M_{\text{positive cue}} = 4.21, SD = 0.96, M_{\text{negative cue}} = 3.07, SD = 0.94$, but cue valence was not significant when arguments were strong, $F(1, 38) = 1.52, p = .23, M_{\text{positive cue}} = 3.33, SD = 1.31, M_{\text{negative cue}} = 3.80, SD = 1.08$. However, contrary to expectations, for participants in a negative affective state, the main effect of argument strength on ad attitudes was not significant, $F(1, 79) = 1.18, p = .28$. The results supported Hypothesis 1a predictions regarding the effects of context-induced positive affect but not predictions regarding the effects of negative affect.

Tests of Hypothesis 1b, consistent with expectations, showed a significant three-way interaction for brand attitudes among affective state, argument strength, and cue valence, $F(1, 162) = 7.93, p < .01$. Further analyses showed that, for participants in a positive affective state, as expected, the two-way interaction between argument strength and cue valence was significant, $F(1, 76) = 6.80, p < .01$. Simple effect analyses showed that cue valence had a significant effect on brand attitudes when arguments were weak, $F(1, 38) = 6.16, p = .02, M_{\text{positive cue}} = 4.29, SD = 0.89, M_{\text{negative cue}} = 3.55, SD = 1.00$, whereas cue valence was not significant when arguments were strong, $F(1, 38) = 1.82, p = .19, M_{\text{positive cue}} = 3.66, SD = 1.17, M_{\text{negative cue}} = 4.11, SD = 1.17$. On the contrary, for participants in negative affective states, only the main effect of argument strength on brand attitudes was significant, $F(1, 79) = 4.81, p = .03, M_{\text{strong}} = 4.23, SD = 0.85, M_{\text{weak}} = 3.79, SD = 1.04$, which was consistent with expectations. The findings fully supported Hypothesis 1b.

For low involving products, it was hypothesized that the main effect of context-induced affective state would be significant for ad attitudes (H2a) and brand attitudes (H2b). However, contrary to expectations, affective state did not significantly influence ad attitudes, $F(1, 162) = 1.62, p = .20, M_{\text{positive}} = 4.20, SD = 1.22, M_{\text{negative}} = 4.44, SD = 1.13$, or brand attitudes, $F(1, 162) = 0.11, p = .75, M_{\text{positive}} = 4.56, SD = 1.20, M_{\text{negative}} = 4.62, SD = 1.11$.

Discussion

The findings of this experiment suggest that the influences of affect on ad judgments are indeed very complex. The hypotheses regarding the high involving product were generally supported, whereas the hypotheses pertaining to the low involving product were not. The research on affect and cognition is very active and constantly evolving. New findings are continually being introduced, and old findings are challenged or refined to better our understanding of the complicated interaction between affect and cognition. For example, this study supported the idea that negative affective states encourage participants to engage in a systematic mode of processing and thus rely on argument strength to form their brand evaluation, consistent with research documented in the late 1980s and early 1990s. However, more recent research has challenged this view by suggesting that individuals' motivations to engage in message elaboration may depend on the hedonic value of the message being processed (Wegener & Petty, 1994; Wegener, Petty, & Smith, 1995). When messages are hedonic in nature, individuals in positive affective states may be further encouraged to engage in elaborative message processing. More advertising research is necessary to untangle the complex relationship between affect and cognition.

As expected, in the high involving condition, sad participants relied on argument strength to formulate their brand attitudes. However, different from expectation, sad participants in the high involving condition did not rely on argument strength to formulate their ad attitudes. It is likely that argument strength pertains directly to the product and thus was taken into account only when participants develop brand attitudes, but not when they form attitudes toward the ad.

A positive influence of positive affective states as opposed to negative affective states on ad and brand judgments was not found for the low involving product. On the contrary, although not significantly different, the means indicated that participants in the

negative affect condition generated more favorable responses to the low involving product than did participants in the positive affect condition. This may suggest that processes other than affect as information were occurring in the context of the experiment. For example, Chang (2006) showed that ad exposure serves a mood-repairing function. Participants who were sad were more likely to experience enhanced mood change in the positive direction and attributed this mood change to their liking of the ad or product, resulting in more favorable responses to the ad and brand. It seems that the multiple roles of affect integrated into the ELM are not sufficient to incorporate all the complex processes triggered by affect. Most theories regarding the interaction between affect and cognition are being developed in the social psychology domain. Therefore, some of the theoretical models may not be directly employed to explain the influence of affect in processing advertising. More advertising research is warranted to develop unique models of the interaction between affect and cognition in processing advertising. Specifically, this study suggests that future research should take participants' mood management motives into account when exploring the influence of context-induced negative affect.

It is important to note that, in their discussions of the multiple roles of affect in the ELM, Petty, Cacioppo, and their colleagues have specified the different influences exerted by relevant affect (affect evoked by the target) and irrelevant affect (affect elicited by context). If relevant and irrelevant affect influence ad responses via different mechanisms, this should be of significance for advertising researchers. There are two important sources of affect in an ad-viewing context, ad-induced affect (relevant) and context-induced affect (irrelevant). Unfortunately, the ELM does not specify how the roles played by these two types of affect may change when elaboration likelihood varies. Therefore, when developing unique models to explain the interaction between affect and cognition in ad processing, the different impacts of ad-induced and context-induced affect should be well considered. This can be an important future direction. A model that can explain the influence of affect on advertising processing is warranted. When developing this model, researchers should: first, distinguish context-induced affect from ad-induced affect; second, understand the possible mood management functions of ad exposure.

Findings of this study have direct implications for practitioners. For example, when products are high involving in nature but have no unique or strong product attributes, the best strategy should be to include positive cues and place them in a positive program context. Under such condition, consumers will engage in heuristic processing and rely on cue valence for judgments. Nevertheless, findings of this study should be interpreted

within its limitations. First, college students may have already purchased electronic dictionaries and, when evaluating the involvement scale, they might refer to their past experiences, which may not be the same as the degree of involvement they feel now. Second, only one type of high and low involving products was explored. It is not difficult to rule out the possibility that the idiosyncratic characteristics associated with the selected product might influence the results. Therefore, future research should replicate this study by exploring other product categories.

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情境引發情感對於高低涉入 商品廣告效果之影響

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《摘要》

本研究以 Petty, Cacioppo 等人在思維可能性模式架構下所提出的多元情感角色模式 (Petty, Cacioppo, & Kasmer, 1987; Petty, Cacioppo, Sedikides, & Strathman, 1988; Petty, DeSteno, & Rucker, 2001; Petty, Gleicher, & Baker, 1991) 為基礎，來探討情境引發情感在處理高低涉入商品廣告時所產生的影響。正如假設所預期，本研究結果顯示：當閱聽眾處理高涉入商品的廣告，同時廣告呈現弱論點時，快樂的受試者對於有正面的線索的廣告產生較佳態度並對商品形成較高評價；但是當廣告呈現強論點時，正負面線索則不會對廣告態度或商品評估產生影響。對於憂傷的受試者而言，強論點的廣告較弱論點的廣告令其對於商品形成較佳的態度，但是廣告中的正負線索對於其商品態度形成則無差異影響。此外，本研究推論：情境引發情感會影響到受試者的廣告反應，但是此假設並未獲得驗證。本研究結果的學術價值與應用性將在討論中闡述。

關鍵字：論點強弱、情境引發情感、商品涉入

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