

How Individuals Develop Brand Evaluations in Different Contexts—The Relative Impacts of Affect, Self-Relevant Thoughts, and Product-Attribute Thoughts

Chingching Chang, National Chengchi University

ABSTRACT

This study is an examination of the impacts of affect, self-relevant thoughts, and product attribute thoughts for high-involved and low-involved participants in positive and negative affective conditions. Results indicate that context-induced emotions exert a direct impact on brand evaluations when participants are both in positive affective states and not highly involved with the advertised product category. On the other hand, context-induced emotions, either positive or negative, exert an indirect impact on participants' brand evaluations via priming affect-congruent attribute-related thoughts when participants are highly involved with the product category. Self-relevant thoughts determine brand evaluations under all conditions except the condition in which participants are both highly involved and their affective states are negative. In addition, product attribute thoughts affect brand evaluations only when participants are highly involved. Finally, this study also shows that an interaction between context-induced emotions and self-referencing emerges under all conditions except the condition in which participants are relatively less involved and their affective states are negative. Theoretical bases for these findings were also provided.

It has been well established that individuals' responses to ad messages are determined by their product involvement (e.g., Laczniak, Kempf, & Muehling, 1999; Muehling & Laczniak, 1988). High-involved participants are more likely to elaborate on product information than low-involved participants. On the other hand, it has been demonstrated that individuals' positive and negative affective states determine their message-processing strategies and thus alter the way they respond to advertising messages (Martin, 2003). It is also likely that individuals rely on their affective states as judgment inputs when they formulate product evaluations (Pham, 1998). The question that naturally follows then is how individuals with different levels of product involvement, in either positive or negative affective states, will develop their brand attitudes in the ad exposure process.

The ads explored in this study are image ads that depict product-user images. Past research has indicated that the effectiveness of image ads varies as a function of ad-self-congruency (e.g., Hong & Zinkhan, 1995). The congruency ratings between ad perceivers' self-images and ad images have been shown to motivate ad perceivers' self-referencing during ad exposure, which further leads to more positive emotional responses and more favorable brand evaluations (Chang, 2000a). In addition to self-referencing and emotional responses, the influence of ad-self-congruency on valenced self-thoughts will be explored in this study. Moreover, drawing upon Adval's affect confirmation theory, it is proposed in this study that there will be an interaction between participants' affective states and the degree of their self-referencing. Specifically, self-referencing is associated with more positive emotions (Baumgartner, Sujan, & Bettman, 1992; Sujan, Bettman, & Baumgartner, 1993). Therefore, the higher degree a participant refers to an ad, the more positive the affective responses will be, and this result enhances the likelihood that such participants will also rely on their context-evoked affective states to confirm how they feel about the brand.

Integrating past findings from emotion literature, involvement literature, and ad-self-congruency literature, this study will exam-

ine the influences of context-induced emotions, the interactions between context-induced emotions and self-referencing, valenced self-relevant thoughts and valenced product thoughts on product judgments under four conditions in which participants have either high- or low-involvement levels with the product category and their context-induced affective states are either positive or negative.

THE INFLUENCE OF AFFECT ON MESSAGE PROCESSING

Affect-as-Information

Schwarz and Clore (1983, 1988) asserted that affective states had informative functions in inference making. Rather than calculate features of information regarding the target, individuals may simply ask themselves, "How do I feel about it?" (Schwarz & Clore, 1988). To the extent that they feel more positive, they will generate more positive evaluations of the target being evaluated. Affect-as-information effects have been demonstrated in assessments of life satisfaction (Strack, Schwarz, & Gschneidinger, 1985), in judgments about the frequency of undesirable events (Johnson & Tversky, 1983), and in evaluations of heard music (Gorn, Goldberg, & Basu, 1993).

However, the influence of affect-as-information is not robust. Pham (1998) has reasoned that for feelings to be treated as inputs in a person's judging of a product, these feelings must be perceived to be relevant to the judgment. Pham demonstrated that when judgments were consummatory in nature, as opposed to instrumental in nature, reliance on the "how-do-I-feel-about-it" heuristic was more likely. It is argued in this study that ad perceivers in a natural ad viewing context seek entertainment in advertisements. Under such conditions, participants' affective states are more likely to be taken as judgment inputs.

Negative Affect and Message-Processing Strategies

In addition to serving as information input for evaluations, individuals' affective states can exert influences on message processing in other significant ways. One such way with which this study deals pertains to the different processing modes that are encouraged by positive and negative affective states. It has been well established in psychology literature that how a person feels may influence how he or she processes information (see Schwarz, 1990; Schwarz & Bless, 1991 for reviews). When individuals are in positive affective states, they are more likely to rely on heuristic cues and to pay less attention to details, whereas individuals who are in negative affective states are more likely to engage in systematic and detail-oriented processing (e.g., Bless, Bohner, Schwarz, & Strack, 1990).

The difference in terms of processing strategies can be attributed to motivation differences when individuals are in positive affective states as opposed to negative affective states (see Schwarz, 1990; Schwarz & Bless, 1991 for discussions). This explanation rests on the argument that individuals' affective states signal important information. When individuals are in positive affective states, they will probably perceive that there are no threats in the environment and thus will not be motivated to be alert. In contrast, when individuals are in negative affective states, they perceive that the environment is threatening and that they should therefore remain alert to avoid negative consequences. Therefore, they will

systematically elaborate on messages and engage in detail-oriented analytical processing (e.g., Bless et al., 1990).

Taken together, positive affective states increase individuals' motivation to process information on the basis of heuristic cues, whereas negative affective states reduce the likelihood that individuals will be engaged in heuristic-based processing. Even though affect-as-information can be treated as a readily accessible heuristic cue, it is hypothesized that negative context-induced affective states will reduce the likelihood that participants will engage in heuristic-based processing. Therefore, participants are less likely to simply rely on their feelings as information inputs for judgments.

H1a: For happy low-involved participants, but not for sad low-involved participants, context-induced emotions will influence brand attitudes.

Affect Priming Under Substantial Processing

Forgas (1995) has argued that, under substantial processing, in which individuals extensively process information by integrating upcoming information and preexisting knowledge structures, affect infusion may occur and exert an influence on judgments. According to Forgas, in situations in which substantial processing is engaged, affective states facilitate recall or activation of information that is congruent with the affective states, and this information can be further incorporated into judgments. Within the Elaboration Likelihood Model (ELM), it has been shown that, under conditions of low involvement, participants' positive affective states exert a direct impact on judgments, whereas under conditions of high involvement, positive affective states facilitate the recall of positive material in memory and lead to positive evaluations of message content (Petty, Schumann, Richman, & Strathman, 1993). That is, affective states can exert an indirect impact on judgments by encouraging affect-congruent thoughts.

Drawing upon Forgas' discussions, I argue in this paper that, when participants are highly involved with the product category, participants' substantial processing of the ad is likely. Under these conditions, context-induced emotions influence product judgments via priming affect-congruent information. As a result, context-induced emotions, specifically, will have a significant impact on the relative amount of positive or negative product-attribute-related cognitive responses, a result that further alters brand attitudes.

H1b: For high-involved participants, context-induced emotions will influence brand attitudes.

H2: For high-involved participants, context-induced emotions will influence valenced attribute-related thoughts.

THE INFLUENCE OF PRODUCT INVOLVEMENT

Consumers' processing strategies are influenced both by consumers' motivations and by consumers' ability to engage in message processing (e.g., Batra & Ray, 1986). One important factor that determines message perceivers' motivation to process messages is their involvement with the information stimuli (Celsi & Olson, 1988). Involvement is generally believed to be the degree to which an individual perceives the information stimuli to be personally relevant or instrumental in achieving self-related goals or values (Celsi & Olson, 1988; Zaichkowsky, 1985).

In advertising literature, a consumer's involvement has been shown to determine the manner in which he or she processes and responds to advertising messages (e.g., Celsi & Olson, 1988; Laczniaik et al., 1999; Petty & Cacioppo, 1988; Petty, Cacioppo, & Schumann, 1983). For example, Celsi and Olson (1988) showed that high-involved participants were more attentive to product

information, generated greater numbers of cognitive responses, and focused more of their comprehension processes on interpreting the product-related information than did low-involved participants. Laczniaik, Kempf, and Muehling (1999) demonstrated that the higher participants' product-class involvement was, the more brand-related cognitive responses they generated. High-involved participants and low-involved participants also developed their product judgments in different ways. Muehling and Laczniaik's (1988) study indicated that, for high-involved participants, but not for low-involved participants, product beliefs significantly determined their brand evaluations. It is thus argued that when participants are highly involved with the product category, their valenced thoughts regarding product attributes will exert significant influences on their brand evaluations.

H3: For high-involved participants, valenced attribute-related thoughts will affect their brand attitudes; for low-involved participants, valenced attribute-related thoughts will not affect their brand attitudes.

THE INFLUENCE OF SELF-CONCEPTS

Ad-Self-Congruency on Self-Referencing, Valenced Self-Related Thoughts and Emotions

A fair amount of research has indicated that self-congruent ads and brands are evaluated more favorably than self-incongruent ads and brands (e.g., Hong & Zinkhan, 1995; Wang & Mowen, 1997). Different mechanisms have been proposed to explain the effectiveness of ad-self-congruency effects. For example, Chang (2000b) suggested that self-congruent messages activated participants' self-concepts and encouraged them to relate ad messages to their self-concepts. In the process, participants generated higher levels of self-referencing, which in turn led to more positive advertising evaluations. In replicating her study, I contend that ad-self-congruency will lead to higher levels of self-referencing,

H4a: Ad-self-congruency will generate higher levels of self-referencing.

However, her study did not directly explore participants' cognitive responses. It is argued in this study that the degree of self-referencing can be reflected in the amount of, and in the valence of, self-related thoughts. Past literature has indicated that self-referencing to personal experiences is associated with positive affect (Baumgartner et al., 1992; Sujan et al., 1993). Baumgartner et al. (1992) argued that the reason why self-referencing autobiographical memories are associated with positive affects is that people are biased toward remembering positive life episodes and experiences. Krishnamurthy and Sujan (1999) also proposed that either relating the self to past scenarios or imagining future self-related experiences may evoke positive emotions. Therefore, it is proposed that to the extent that the ad image and the self image are congruent, participants will generate also more positive self-related thoughts in relative to negative self-related thoughts.

H4b: Ad-self-congruency will generate more positive self-related thoughts.

In line with Baumgartner et al.'s (1992) and Sujan et al.'s (1999) findings that referring to personal experiences is associated with positive affect, I also hypothesize that self-congruent ad messages will increase self-referencing and that this increase will, in turn, engender more positive affective responses. Therefore, to

the degree that higher levels of self-referencing are induced, more positive emotional responses associated with self-related memories will be elicited.

H4c: Self-referencing leads to more positive ad-evoked emotions.

The Interaction Between Context-Induced Affect and Self-Referencing

In addition, Adaval's (2001) affect confirmation theory suggests that individuals base their product evaluations on their affective reactions only when the affect is similar in valence. Therefore, it is argued in this study that, to the extent that a person's self-referencing evokes higher levels of positive emotional responses, the person's context-induced affective states are more likely to confirm how he or she feels about the ad, since the valence of the induced affect is consistent with the person's responses to the ads. Therefore, it is proposed in this study that an interaction between self-referencing and affective states on brand attitudes will emerge when positive affective states are induced.

H5a: For happy low-involved participants and happy high-involved participants, a significant interaction between context-induced emotions and self-referencing on brand evaluations will emerge.

It is important to note that self-other differences have been documented in research that explores affect priming under substantial processing. For example, in Forgas, Bower, and Krantz's (1984) investigation, happy participants see a greater number of skilled and positive behaviors in themselves and in their partners, whereas sad participants see fewer skilled and negative behaviors in themselves than in their partners. Similarly, Forgas, Bower, and Moylan (1990) have shown that negative affective states lead to self-critical attributions and other-enhancing attributions. These findings suggest that negative evaluation effects that are primed by negative affect are stronger when self-related judgments are involved. Extending this line of findings further, it is argued that, when more negative affective states are induced, higher levels of self-referencing will lead to more critical judgments of the ads that appeal to self-images. However, as reviewed, this phenomenon is limited to the context in which participants engage in substantial processing.

H5b: For sad high-involved participants but not sad low-involved participants, an interaction between context-induced emotions and self-referencing on brand evaluations will emerge.

The Influence of Valenced Self-Related Thoughts

Self-concepts are believed to be highly accessible constructs and have implications for judgments and information processing (Fiske & Taylor, 1991). It is therefore hypothesized that when participants, regardless of their affective states, are not highly involved with the target product category, conditions under which motivation to elaborate on product attribute messages is low, participants' valenced self-related thoughts will influence their brand attitudes.

On the other hand, for high-involved individuals, whether valenced self-related thoughts will influence their brand evaluations is determined by the valence of their affective states. When high involving participants are in positive affective states, as opposed to negative affective states, they are more likely to attend to the

hedonic nature of the product in determining product evaluations, which may involve more of their self-relevant cognitive responses. Therefore, the greater number of positive self-relevant thoughts that are generated, the more favorably participants will evaluate the product. In contrast, self-relevant thoughts should be relatively less salient and less important in product judgments in a high-involving and negative context. As a result, valenced self-relevant thoughts will not predict brand evaluations.

H6: For happy low-involved participants, sad low-involved participants, and happy high-involved participants, but not sad high-involved participants, valenced self-related thoughts will affect brand attitudes.

METHODOLOGY

Design

This study had a three factor between-subject design. The two manipulated factors were ad difference (feminine user profile vs. masculine user profile) and context-induced emotions (positive vs. negative). In addition, participants were categorized as either high-involved or low-involved based on a median split of their product involvement ratings.

Stimuli

Professionals wrote ad messages to fit different personality portrayals (feminine users vs. masculine users) and created visuals to fit message descriptions. Visuals and layouts were similar for ads with different user portrayals so that any possible confounding effects would be reduced. The products used in this study were sneakers. The same product attribute information was included in each of the two ads.

Participants & Procedures

A total of three hundred participants were recruited for this study from the campus of a large university in Taipei and were paid for their participation. Forty-five percent of the participants were male.

At the recruiting stage, potential participants were contacted and asked questions regarding their involvement with different product categories and other irrelevant questions that were included to distract participants' attention from the target involvement scale. Participants rated how involved they were with the advertised product category, sneakers, on a 10-item 7-point scale. The ten items were adopted from Laurent and Kapferer (1985). Cronbach's reliability alpha was satisfactory at .82. Participants were categorized into two groups based on a median split.

In the main experiment, high-involved and low-involved participants were randomly assigned to the four manipulated conditions (ad differences by affective states). Participants were informed that the main experiment involved three parts. First, participants were told that a professor from the department of psychology was collecting happy and sad life events for use in experiments, and participants were asked to do the professor a favor by writing down a real life event that they had experienced. This mood induction procedure was adopted from research conducted by Strack et al. (1985). Items were selected from the UWIST mood adjective checklist (Matthews, Jones, & Chamberlain, 1990) for manipulation checks. The three items were "happy," "cheerful," and "contented." The three negative items were "dissatisfied," "depressed," and "sad." Cronbach's reliability alphas for positive emotions and negative emotions were satisfactory at .89 and .78 respectively. ANOVA indicated that participants in the positive affective state

condition had significantly higher ratings on the subscale of positive emotions, $F(1, 299)=26.27, p<.01, M_{\text{positive}}=4.54, M_{\text{negative}}=3.94$, than did those in the negative affective state condition. Similarly, participants in the negative affective state condition generated significantly higher ratings on the subscale of negative emotions, $F(1, 299)=23.20, p<.01, M_{\text{positive}}=3.21, M_{\text{negative}}=3.93$, than did those in the positive affective state condition. Therefore, the results of the manipulation checks were satisfactory. All the items in the positive emotion factor were significantly negatively correlated with all the items in the negative emotion factor (all $ps<.01$). Therefore, ratings on items in the positive emotion subscale, as well as the reversed ratings on items in the negative emotion subscale, were summed and averaged to represent context-induced emotional responses.

The second part of the study started with participants' rating of their affective states. Then, the second coordinator told them that the primary study was designed so that the effect of various ad formats or layouts on readers' responses could be examined. Then, participants read a filler ad followed by the stimuli ad and another filler ad. After reading the ads, participants provided their cognitive responses. Next, participants rated both their self-referencing levels to the ads and their perceptions of the user images in the ads, after which they rated their ad attitudes and product attitudes. Finally, participants were told that the same researcher was conducting a survey regarding college students' values and lifestyles. The students were asked to rate themselves on Bem's Sex Role Inventory (1974) as well as other self-related filler scales. The purpose of including irrelevant scales was to reduce participants' sensitivity to the scale that they had used to rate the product users portrayed in the ads and the one that they were about to use to rate their self-concepts.

Measures

Ad-Self-Discrepancy

Two ad-self-discrepancy scores were calculated, one for the masculinity dimension and the other for the femininity dimension. Ad-self-discrepancy on masculinity was first calculated by subtracting the mean ratings of the portrayed users with regard to masculinity from the mean ratings of the self with regard to masculinity. The sum was then squared because the study concerned only the degree of discrepancy, not the direction of discrepancy. Similarly, ad-self-discrepancy on femininity was first calculated by subtracting the mean ratings of the portrayed users with regard to femininity from the mean ratings of the self with regard to femininity, and the difference was squared.

Self-Referencing

Participants rated how they related themselves to the users described in the ads using a 10-item 7-point Likert scale. Four of the items were adopted from Debevec and Iyer (1988). They were: "picture oneself in setting," "picture oneself in position of ad character," "similarity to life experience," and "similarity to ad character." The other six items were invented for the purpose of the study. They were "feel as if I have gone through the same thing as the ad character," "feel like experiencing the same thing that the ad character experienced," "can easily imagine myself being in the same situation," "the ad reminds me of my past experiences," "the ad makes me imagine possible experiences in the future," and "the ad makes me feel that the portrayed content is for someone like me." Cronbach's reliability alpha was satisfactory at .92.

Ad-Evoked Emotions

Participants rated how the ad made them feel on a 10-item 7-point Likert scale. The items were selected from Edell and Burke (1987). The five positive items were "happy," "joyful," "cheerful,"

"delighted," and "satisfied." The five negative items were "annoyed," "bored," "depressed," "dull," and "sad." Responses to the positive items and the reversed negative items were summed and averaged to be the index for ad-evoked emotions.

Cognitive Responses

Participants were asked to provide their cognitive responses to the ad and the advertised products. Two coders who were not aware of the research purposes coded their responses. The coding units were "sentences." First, the two coders coded one-third of the responses independently for inter-coder reliability checking. Cohen's Kappa (Cohen, 1960) was employed to assess inter-coder reliability. Cohen's Kappa was deemed satisfactory at .87. Then, the two coders split up and coded the rest of the responses.

Valenced self-related thoughts (VST). Participants' cognitive responses were categorized as either self-relevant or self-irrelevant. Self-related cognitive responses were further categorized into positive cognitive responses, negative cognitive responses, and neutral cognitive responses. VST were calculated by subtracting negative self-related responses from positive self-related responses.

Valenced attribute-related thoughts (VPT). Participants' cognitive responses were categorized as either product attribute-related or ad-related. Product attribute-related cognitive responses were further categorized into positive, negative, and neutral cognitive responses. VPT were calculated by subtracting negative product attribute-related cognitive responses from positive product attribute-related cognitive responses.

Brand Attitudes

Brand attitudes were measured with a 5-item 7-point Likert scale. The items were adopted from Mitchell and Olson (1981) and Holbrook and Batra (1987). They were "good," "like," "pleasant," "positive," and "high quality." Cronbach's reliability alpha of this scale was deemed satisfactory at .94.

RESULTS AND ANALYSES

For happy low-involved participants, when brand attitudes were regressed upon context-induced emotions, the interaction between context-induced emotions and self-referencing, VST and VPT, the impact of context-induced emotions was significant, $\beta=.45, t=1.97, p=.05$ (H1a), and the impact of the interaction between the context-induced emotions and self-referencing was significant, $\beta=1.05, t=2.78, p=.01$ (H5a), as was the impact of VST, $\beta=.21, t=2.29, p=.02$ (H6). On the other hand, but also consistent with expectations, the impact of VPT was not significant, $\beta=.11, t=1.20, p=.20$ (H3).

For sad low-involved participants, the impact of context-induced emotions was not significant, $\beta=-.34, t=-1.23, p=.22$ (H1a). The impact of the interaction between the context-induced emotions and self-referencing was not significant, $\beta=.77, t=1.63, p=.11$, either (H5b). In contrast, the impact of VST was significant, $\beta=.24, t=2.12, p=.04$ (H6). Finally, consistent with expectations, the impact of VPT was not significant, $\beta=.17, t=1.66, p=.10$ (H3).

When responses of happy high-involved participants were analyzed, consistent with expectations, the impact of context-induced emotions was significant, $\beta=.59, t=2.33, p=.02$ (H1b); the impact of the interaction between the context-induced emotions and self-referencing approached the significant level, $\beta=1.00, t=1.87, p=.07$ (H5a); and the impact of VST was significant, $\beta=1.41, t=3.23, p=.01$ (H6). In contrast, but also consistent with expectations, the impact of VPT was significant, $\beta=.18, t=2.17, p=.03$ (H3).

For sad high-involved participants, the direct impact of context-induced emotions was significant, $\beta=-.67, t=-2.02, p=.05$ (H1b); the impact of the interaction between the context-induced emotions

and self-referencing was significant, $\beta=1.10$, $t=2.21$, $p=.03$ (H5b); and the impact of VPT was significant, $\beta=.41$, $t=3.87$, $p=.01$ (H6). In contrast, but consistent with expectations, the impact of VST was not significant, $\beta=.14$, $t=1.21$, $p=.23$ (H3).

For happy high-involved participants, when context-induced emotions were regressed upon VPT, as expected, the impact of the context-induced emotions approached the significant level, $\beta=.22$, $t=1.95$, $p=.06$. Similarly for sad high-involved participants, when context-induced emotions were regressed upon VPT, as expected, the impact of context-induced emotions was significant, $\beta=.22$, $t=2.02$, $p=.05$. H2 was supported.

Regression analyses indicated that ad-self-discrepancy with regard to masculinity had a significant negative impact on self-referencing, $\beta=-.21$, $t=-3.70$, $p=.01$. Similarly, ad-self-discrepancy with regard to femininity had a significant negative impact on self-referencing, $\beta=-.29$, $t=-4.93$, $p=.01$. These findings indicated that the lower the discrepancy, the greater the degree of self-referencing that was evoked. Therefore, H4a was fully supported. Regression analyses indicated that the impact of ad-self-discrepancy with regard to masculinity on VST approached the significant level, $\beta=-.11$, $t=-1.83$, $p=.07$. On the other hand, ad-self-discrepancy on femininity had a significant negative impact on VST, $\beta=-.20$, $t=-3.36$, $p=.01$. These findings suggested that the lower the discrepancy, the higher the number of positive self-related thoughts there were in relation to negative self-related thoughts. Therefore, H4b was mostly supported. Finally, regression analyses indicated that participants' self-referencing had a significant impact on ad-evoked emotions, $\beta=.58$, $t=12.74$, $p=.01$, and this finding supported H4c.

CONCLUSIONS

The role of affect in persuasion has drawn increasing research interest. Two patterns of influences exerted by affective states were found in this study. First, context-induced affective states exerted a direct impact on brand evaluations in contexts where low-involved participants were in positive affective states. Second, context-induced affective states exerted an indirect influence on brand evaluations via priming affect-congruent attribute-related thoughts in contexts in which participants were highly involved with the advertised product. The findings provided additional support to Petty, Schumann, Richman, and Strathman's (1993) assertions regarding the multiple role of affect in ELM.

Consumption is in service of the self (Sirgy, 1982). Self-related thoughts appear to be important predictors of brand evaluations. Moreover, the context-induced emotions interacted with participants' self-referencing and, together, determined brand evaluations. The interplay between affect and self is also a relatively less explored area in advertising. Social psychology literature has shown that, in processing self-relevant information, affect plays an important role (e.g., Trope, Ferguson, & Raghunathan, 2001). In light of newly-ignited research interest in the interaction between affect and self in social psychology, it seems that the interaction between affect and self may warrant attention as an important area to be investigated for advertising researchers, as well.

REFERENCES

- Adaval, R. (2001). Sometimes it just feels right: The differential weighting of affect-consistent and affect-inconsistent product information. *Journal of Consumer Research*, 28, 1-17.
- Batra, R., & Ray, M. (1986). Situational effects of advertising repetition: The moderating influence of motivation, ability, and opportunity to respond. *Journal of Consumer Research*, 13, 234-249.
- Baumgartner, H., Sujan, M., & Bettman, J. R. (1992). Autobiographical memories, affect, and consumer information processing. *Journal of Consumer Psychology*, 1, 53-82.
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, 42(2), 155-162.
- Bless, H., Bohner, G., Schwarz, N., & Strack, F. (1990). Mood and persuasion: A cognitive response analysis. *Personality and Social Psychology Bulletin*, 16, 331-345.
- Celsi, R. L., & Olson, J. C. (1988). The role of involvement in attention and comprehension processes. *Journal of Consumer Research*, 15, 210-223.
- Chang, C. (2000a). *The role of self in processing advertising messages: An exploration of gender schema*. Poster session presented at the annual meeting of the Association for Education in Journalism and Mass Communication, Phoenix City.
- Chang, C. (2000b). The effects of personality on product evaluations. *Advances in Consumer Research*, 28, 26-33.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20(1), 37-47.
- Debevec, K., & Iyer, E. (1988). Self-referencing as a mediator of the effectiveness of sex-role portrayals in advertising. *Psychology and Marketing*, 5, 71-84.
- Edell, J. A., & Burke, M. C. (1987). The power of feelings in understanding advertising effects. *Journal of Consumer Research*, 14, 421-433.
- Fiske, S. T., & Taylor, S. E. (1991). *Social Cognition* (2nd ed.). New York: McGraw Hill.
- Forgas, J. P. (1995). Mood and judgment: The affect infusion model (AIM). *Psychological Bulletin*, 117(1), 39-66.
- Forgas, J. P., Bower, G. H., & Krantz, S. E. (1984). The influence of mood on perceptions of social interactions. *Journal of Experimental Social Psychology*, 20, 497-513.
- Forgas, J. P., Bower, G. H., & Moylan, S. J. (1990). Praise or blame? Affective influences on attributions for achievement. *Journal of Personality and Social Psychology*, 59(4), 809-819.
- Gorn, G. J., Goldberg, M. E., & Basu, K. (1993). Mood, awareness and product evaluation. *Journal of Consumer Psychology*, 2(3), 237-256.
- Holbrook, M. B., & Batra, R. (1987). Assessing the role of emotions as mediators of consumer responses to advertising. *Journal of Consumer Research*, 14, 404-420.
- Hong, J. W., & Zinkhan, G. M. (1995). Self-concept and advertising effectiveness: The influence of congruency, conspicuousness, and response mode. *Psychology and Marketing*, 12, 53-77.
- Johnson, E. J., & Tversky, A. (1983). Affect, generalization, and the perception of risk. *Journal of Personality and Social Psychology*, 45(1), 20-31.
- Krishnamurthy, P., & Sujan, M. (1999). Retrospection versus anticipation: The role of the ad under retrospective and anticipatory self-referencing. *Journal of Consumer Research*, 26, 55-69.
- Laczniak, R. N., Kempf, S. D., & Muehling, D. D. (1999). Advertising message involvement: The role of enduring and situational factors. *Journal of Current Issues and Research in Advertising*, 21(1), 51-61.
- Laurent, G., & Kapferer, J.-N. (1985). Measuring consumer involvement profiles. *Journal of Marketing Research*, 22, 41-53.

- Martin, B. A. S. (2003). The influence of gender on mood effects in advertising. *Psychology & Marketing*, 20(3), 249-273.
- Matthews, G., Jones, D. M., & Chamberlain, A. G. (1990). Refining the measurement of mood: The UWIST mood adjective checklist. *British Journal of Psychology*, 81, 17-42.
- Mitchell, A. A., & Olson, J. C. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitudes? *Journal of Marketing Research*, 18, 318-322.
- Muehling, D. D., & Laczniak, R. N. (1988). Advertising's immediate and delayed influence on brand attitudes: Considerations across message-involvement levels. *Journal of Advertising*, 17(4), 23-34.
- Petty, R. E., & Cacioppo, J. T., (1988). Affect and persuasion. *American Behavioral Scientist*, 31(3), 355-371.
- Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, 10, 135-146.
- Petty, R. E., Schumann, D. W., Richman, S. A., & Strathman, A. J. (1993). Positive mood and persuasion: Different roles for affect under high-and low-elaboration conditions. *Journal of Personality and Social Psychology*, 64(1), 5-20.
- Pham, M. T. (1998). Representativeness, relevance, and the use of feelings in decision making. *Journal of Consumer Research*, 25, 144-159.
- Schwarz, N. (1990). Feeling as information: Informational and motivational functions of affective states. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behaviors* (Vol. 2, pp. 265-295). New York: Guilford.
- Schwarz, N., & Bless, H. (1991). Happy and mindless, but sad and smart? The impact of affective states on analytical reasoning. In J. P. Forgas (Ed.), *Emotion and social judgment* (pp. 55-71). Oxford: Pergamon.
- Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgments of well-being: Information and directive functions of affective states. *Journal of Personality and Social Psychology*, 45(3), 513-523.
- Schwarz, N., & Clore, G. L. (1988). How do I feel about it? The informative function of affective states. In K. Fiedler & J. P. Forgas (Eds.), *Affect, cognition, and social behavior* (pp. 44-62). Toronto, Hogrefe.
- Sirgy, M. J. (1982). Self-concept in consumer behavior: A critical review. *Journal of Consumer Research*, 9, 287-299.
- Strack, F., Schwarz, N., & Gschneidinger, E. (1985). Happiness and reminiscing: The role of time perspective, affect and mood of thinking. *Journal of Personality and Social Psychology*, 49(6), 1460-1469.
- Sujan, M., Bettman, J. R., & Baumgartner, H. (1993). Influencing consumer judgments using autobiographical memories: A self-referencing perspective. *Journal of Marketing Research*, 30, 422-436.
- Trope, Y., Ferguson, M., & Raghunathan, R. (2001). Mood as a resource in processing self-relevant information. In J. P. Forgas (Ed.) *Handbook of affect and social cognition* (pp. 256-274). Hillsdale, NJ: Laurence Erlbaum.
- Wang, C. L., & Mowen, J. C. (1997). The separateness-connectedness self-schema: Scale development and application to message construction. *Psychology and Marketing*, 14, 185-207.
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12, 341-352.