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## Affect and Persuasion

### A Contemporary Perspective

RICHARD E. PETTY

*Ohio State University*

JOHN T. CACCIOPPO

*University of Iowa*

CONSTANTINE SEDIKIDES

ALAN J. STRATHMAN

*Ohio State University*

The idea that attitudes can be based on affective as well as cognitive and behavioral information has a long history in the social and behavioral sciences (Allport, 1935; McGuire, 1969). Furthermore, the accumulated research over the past several decades has clearly indicated that our evaluations of people, objects, and issues can be influenced by our feelings, moods, and emotions, whether or not the affect is actually relevant to the attitude object under consideration. Many of the early studies were based on classical conditioning notions and demonstrated that evaluations of words, people, political slogans, and persuasive communications could be modified by pairing them with such affect-producing stimuli as unpleasant odors (Razran, 1940) and temperatures (Griffit, 1970), the onset and offset of electric shock (Zanna et al., 1970), harsh sounds (Staats et al., 1962), and elating and depressing films (Gouaux, 1971). McGuire (1985: 285) recently summarized the literature on affect and persuasion as follows:

Persuasive impact is greater if the person is in a happy, benevolent mood when the message comes, noshing on peanuts and soda (Janis et al., 1965), watching a good program (Krugman, 1983), and with pleasant musical background (Galizio and Hendrick, 1972), an appropriately scented other (Baron, 1983), a smile on one's

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face (Laird, 1974), nodding one's head (Wells and Petty, 1980), or relaxed in posture (Petty, Wells, Heesacker, Brock, and Cacioppo, 1983).

Although the research on affect and influence is generally consistent with the reasonable proposition that positive affective experiences and states tend to be associated with enhanced persuasion and more favorable attitudes, whereas negative affective states tend to be associated with reduced persuasion and less favorable attitudes, various exceptions to this principle exist. Specifically, some investigations have failed to show any effect of affective states on attitudes (see Gardner, 1985), and, more interestingly, some research has demonstrated that negative affective states (e.g., fear) can be associated with increased influence (see Rogers, 1983). Unfortunately, the conditions under which these different effects are likely to occur and the processes underlying them have received relatively little research attention. Interestingly, this is not unlike the situation that has existed for many other variables in the persuasion literature. For example, in separate studies, source credibility has been shown to increase, decrease, and have no effect on influence. A complete understanding of the role of affect in persuasion requires an overall conceptual framework that accounts for the diverse effects of affect, and specifies the processes by which affect and other variables modify attitudes. A major goal of this article is to provide a brief outline of a possible integrating framework called the Elaboration Likelihood Model (ELM) of persuasion (Petty and Cacioppo, 1981, 1986b).

A second factor that has hindered progress in understanding the role of affect in persuasion is that there has been disagreement regarding the conceptual definition of affect, appropriate procedures for assessing it, and its distinction from the concept of attitude (Cacioppo and Petty, 1982a, forthcoming). For example, several social psychological conceptualizations of affect view it as isomorphic with the "evaluative" component of attitudes. Thus Fishbein and Ajzen (1975) write, "The terms *affect* and *evaluation* are used synonymously. . . . There is little evidence that a reliable empirical distinction between these two variables can be made" (p. 11; see also Fazio, 1986). Other theorists have appeared to reserve more specialized meaning for the affect construct, but have nevertheless employed the same assessment instruments. For example, although Rosenberg and Hovland (1960) noted that affect refers to a person's "*feeling*" about the object or issue of concern" (p. 5; emphasis added) and suggested that "an individual's affective response toward another individual may be inferred from measures of such

physiological variables as blood pressure or galvanic response" (p. 3), they also admitted that most attitude researchers have employed verbal measures of "evaluation" to assess the affective aspect of attitudes (p. 5). In a similar vein, Triandis (1971) defined affect as "the emotion that charges the idea. If a person 'feels good' or 'feels bad' when he thinks about the category we would say that he has a positive or negative affect toward the members of this category" (p. 3).

Interestingly, Triandis goes on to recommend that "the most general method for the measurement of affect is the Semantic Differential Scale" (p. 47), whereas Rosenberg and Hovland (1960) argue that "the semantic differential technique may be interpreted as illuminating some of the major *cognitive* dimensions of attitudes" (p. 5, emphasis added).<sup>1</sup> Before returning to the role of affect in persuasion, we address some conceptual and methodological issues regarding the concept of affect.

#### CONCEPTUALIZATION AND ASSESSMENT OF AFFECT

We use *affect* as a superordinate construct to encompass emotions and relatively transient moods and feelings. Attitudes, on the other hand, refer to global and enduring evaluations of attitude objects.<sup>2</sup> A person's general evaluations or attitudes can be based on a variety of behavioral, affective, and cognitive experiences, and are capable of guiding behavioral, affective, and cognitive responses. Thus a person may come to like a new political candidate because he or she just donated money to the campaign (behavioral influence), because a recently viewed family-oriented commercial induced feelings of warmth (affective influence), or because a new campaign brochure articulated the candidate's issue-positions in a cogent manner (cognitive influence). Similarly, if a person already likes a candidate, he or she may agree to help distribute campaign posters (behavioral influence), may feel happiness upon seeing the candidate (affective influence), and may recall more of the candidates' positions than those of competing candidates (cognitive influence). An implication of this is that two global evaluations of an object, issue, or person that are identical when assessed on an overall favorable-unfavorable scale may be based on quite different experiences and may have quite different implications (Millar and Tesser, 1986).

In order to study affective processes in persuasion, it is crucial to be able to assess affect and distinguish it from related concepts. In addition to the confusion regarding the relationship between affect and evaluation noted above, there has also been confusion between the concepts of affect and arousal (e.g., Rosenberg and Hovland, 1960). Although affective states may often be associated with physiological (autonomic, cortical) arousal, there are at least two reasons to question views that equate affect and arousal (Cacioppo and Petty, forthcoming). First, affective states that are evoked by mildly pleasant and unpleasant stimuli can be accompanied by rudimentary expressions of emotion that are detectable even in the absence of reliable increases in electrodermal or cardiac activity (i.e., in the absence of diffuse autonomic arousal). Specifically, in a series of studies we have shown that distinctive patterns of facial electromyographic (EMG) activity can be employed as a marker of both the intensity and direction of affective states that are too mild to invoke diffuse autonomic activity or the subjective perception of arousal (e.g., Cacioppo et al., 1986; see Cacioppo and Petty, 1981, 1987, for reviews). A second argument against equating affect and arousal is that autonomic activity has been shown to accompany cognitive as well as affective responses (e.g., Cacioppo and Sandman, 1978; Lacey et al., 1963). This fact cautions against the assumption that autonomic activation invariably signals the presence of affect.

### THE ROLE OF AFFECT IN PERSUASION

Now that affect has been distinguished from the attitude (evaluation) and arousal concepts, we turn to the Elaboration Likelihood Model (ELM) of persuasion and its analysis of the role of affect.

#### THE ELABORATION LIKELIHOOD MODEL OF PERSUASION

Although it is impossible to present a complete explication of the ELM and the research supporting it here (interested readers should consult Petty and Cacioppo, 1986a, for a detailed treatment), we provide a brief description of the model before proceeding to our analysis of the role of affect in persuasion. The ELM represents an attempt to integrate the many seemingly conflicting findings in the

persuasion literature under one conceptual umbrella by specifying a finite number of ways in which source, message, and other variables have an impact on attitude change (Petty and Cacioppo, 1981, 1986b). The ELM is based on the notion that people want to form correct attitudes (i.e., those that will prove useful in functioning in one's environment) as a result of exposure to a persuasive communication, but there are a variety of ways in which a reasonable position may be adopted.

The most effortful procedure for evaluating an advocacy involves drawing upon prior experience and knowledge to carefully scrutinize and elaborate the issue-relevant arguments in the persuasive communication along the dimensions that are perceived central to the merits of the attitude object. According to the ELM, attitudes formed or changed via this *central route* are postulated to be relatively persistent, predictive of behavior, and resistant to change until they are challenged by cogent contrary information along the dimension or dimensions perceived central to the merits of the object. Importantly, it is neither adaptive nor possible for people to exert considerable mental effort in processing all of the persuasive communications to which they are exposed. Indeed, people often act as "lazy organisms" (McGuire, 1969) or "cognitive misers" (Taylor, 1981). This does not mean that people never form attitudes when motivation and/or ability to scrutinize a message are low, but rather that attitudes may be changed as a result of relatively simple associations (as in classical conditioning; Staats and Staats, 1958), inferences (as in self-perception; Bem, 1972), or heuristics (such as "experts are correct;" Chaiken, 1987) in these situations. Attitudes formed or changed via this *peripheral route* are postulated to be relatively less persistent, resistant, and predictive of behavior.

This discussion highlights two ways in which variables can have an impact on persuasion. Variables may serve as persuasive *arguments*, providing information as to the central merits of an object or issue, or they may serve as peripheral *cues*, allowing favorable or unfavorable attitude formation in the absence of a diligent consideration of the true merits of the object or issue. According to the ELM, the third way in which a variable can have an impact on persuasion is by affecting the extent or direction of argument *elaboration* (i.e., the extent to which the person thinks about and evaluates the central merits of the issue-relevant information presented).<sup>3</sup> The ELM holds that as the likelihood of elaboration is increased, the quality of the issue-relevant arguments presented becomes a more important determinant of persuasion. As the

likelihood of elaboration is decreased, however, peripheral cues become more important. That is, when the elaboration likelihood is high, the central route to persuasion dominates, but when the elaboration likelihood is low, the peripheral route takes precedence. There are, of course, many variables capable of moderating the route to persuasion. Some variables, like personal relevance (Petty and Cacioppo, 1979), personal responsibility (Petty et al., 1980), and an individual's level of "need for cognition" (Cacioppo and Petty, 1982b) determine one's overall *motivation* to process issue-relevant arguments. Other variables, like message repetition (Cacioppo and Petty, 1985), distraction (Petty et al., 1976), and extent of issue-relevant knowledge (Wood et al., 1985) determine a person's overall *ability* to process issue-relevant arguments.

One of the intriguing, albeit complicating, features of the ELM is that it holds that any one variable can serve in each of three distinct roles. That is, a variable can serve as persuasive argument in some situations, act as a peripheral cue in others, and affect the extent or direction of argument elaboration in still other contexts. For example, in our own research, we have observed that source attractiveness can serve in each of these three roles. In one study, people who were high and low in their need for cognition (Cacioppo and Petty, 1982b) were exposed to an advertisement for an electric typewriter (Haugtvedt et al., forthcoming). One version of the ad featured two very attractive endorsers of the product and the other ad featured two unattractive endorsers. As expected, subjects who were low in need for cognition were influenced by the simple cue of attractiveness, but people who characteristically enjoyed thinking were not. In this study, the attractiveness of the endorsers was completely peripheral to the merits of the attitude object (typewriter). For some objects, however, source attractiveness may provide information that is central to an evaluation of merit. In this situation, source attractiveness should be an important determinant of attitudes when the elaboration likelihood is high. In a study relevant to this notion, we exposed students to an advertisement for a new shampoo product that featured either two very attractive or two unattractive endorsers (Petty and Cacioppo, 1980). Unlike the typewriter study, in this research the attractiveness of the endorsers is potentially relevant to determining the merits of the product (e.g., "Will the shampoo will make my hair look like that of the endorsers?") Consistent with this reasoning, attitudes toward the shampoo were affected by endorser attractiveness to an equivalent extent whether involvement was high or low. This is the expected result if attractiveness served as a peripheral cue under low involvement conditions, but served as a pertinent product argument

under high involvement.

Finally, we have also observed that source attractiveness can affect the extent of argument processing. In this study, the subjects were led to believe that they were evaluating essays produced by students in an evening continuing education course (Puckett et al., 1983). All essays argued that seniors should be required to pass a comprehensive exam in their major area as a prerequisite for graduation and employed either strong or weak arguments.<sup>4</sup> The essays were accompanied by author information cards that among other things provided a picture of the source of the essay (attractive or unattractive). The major result of this study was that the message arguments were more carefully processed when they were associated with the attractive than the unattractive sources.

Given these complications, it is crucial to specify the general conditions under which variables such as a person's affective state act in each of the three distinct roles. For source attractiveness, the results can be summarized as follows: Under conditions of relatively low elaboration likelihood, increased source attractiveness, if it has any impact at all, will serve as a peripheral cue, enhancing attitudes regardless of whether a message contains strong or weak arguments. Under conditions of high elaboration likelihood, source attractiveness will be less important as a peripheral cue, and may serve as a persuasive argument if it provides information central to the merits of the attitude object. Finally, under conditions of moderate elaboration likelihood, source attractiveness will affect the extent of argument elaboration, increasing persuasion if the arguments are strong, but decreasing persuasion if the arguments are weak.

More generally, the ELM holds that when the elaboration likelihood is high (e.g., high personal relevance, high knowledge, simple message, no distractions, etc.), people typically know that they want and are able to evaluate the merits of the arguments presented and they do so. Simple peripheral cues have relatively little impact on evaluations. On the other hand, when the elaboration likelihood is low (e.g., low personal relevance, low knowledge, complex message, many distractions, etc.), people know that they do not want and/or are not able to evaluate the merits of the arguments presented (or they do not even consider exerting effort to process the message). Thus, if any evaluation is formed, it is likely to be the result of relatively simple associations or inferences. When the elaboration likelihood is moderate (e.g., uncertain personal relevance, moderate knowledge, moderate complexity, etc.), however, people may be uncertain as to whether or not the message warrants or

needs scrutiny and whether or not they are capable of providing this analysis. In these situations, they may examine the persuasion context for indications (e.g., is the source credible?) of whether or not they should attempt to process the message (Petty and Cacioppo, 1984).

Although a number of studies have examined the impact of variables at two levels of elaboration likelihood (high and low), and have provided evidence for the general ELM postulates (Petty and Cacioppo, 1984, 1986a), we are aware of only one study that has examined the multiple effects of a variable (source credibility) across three distinct levels of elaboration likelihood. This study (Moore et al., 1986) provided support for the ELM predictions outlined above (see discussion by Petty et al., 1987).

#### AFFECTIVE PROCESSES IN THE ELM

As we noted in beginning this article, the accumulated persuasion literature clearly suggests that reactions to a persuasive communication can be modified by pairing the message with an affect eliciting stimulus (Petty and Cacioppo, 1981; McGuire, 1985). However, the direction of the effects observed have sometimes appeared puzzling, and the processes mediating these effects have not been clear.

Based on our presentation of the Elaboration Likelihood Model, it should be quite clear what roles the model reserves for affect. Specifically, the ELM holds that affect may serve as a persuasive argument, it may serve as a peripheral cue, or it may affect the extent or direction of argument processing (Cacioppo and Petty, forthcoming; Petty et al., 1987). Importantly, the ELM specifies the general conditions in which affect serves in these capacities. In the remainder of this article, we will comment briefly on how affect can serve in each of these roles.<sup>5</sup>

#### Affect Under Conditions of High Elaboration Likelihood

Earlier we noted that for some people or in some situations, a determination of the central merits of an attitude object might entail an analysis of one's *feelings* rather than one's beliefs or behaviors. Thus attitudes toward a roller coaster might be based on the extent to which it makes one feel excited rather than nauseous or fearful; attitudes toward a potential spouse might be based on the extent to which one feels love

and warmth in his or her presence. In these instances, affect is serving as an argument that is central to the merits of the object. Importantly, the fact that some attitudes are based on the affective properties of the attitude object does not mean that people carry this affect with them at all times. Rather, it means that attitude *change* likely will be based on a reconsideration of the affective properties of the stimulus (e.g., Am I still afraid of roller coasters? Do I still love you? Cacioppo and Petty, 1982a; Petty et al., 1987). This consideration of affect as it relates to the central merits of the object should become more consuming, for example, as the object increases in personal relevance or consequences (e.g., as approaching the waiting line for the roller coaster; as the date for the marriage comes closer).

Research is consistent with the view that when affect is relevant to an evaluation of the central merits of an involving issue, it can serve an informational function. Perhaps the most abundant literature relevant to this issue is that dedicated to the study of fear arousing communications. The typical fear communication employed in social psychological research presents the noxious (fear arousing) consequences resulting from specific behaviors (e.g., smoking, failure to wear seatbelts, etc.; see Beck and Frankel, 1981). Interestingly, recent reviews of this literature have concluded that the arousal of fear has no direct effect on attitude change, "but only an indirect effect via the cognitive appraisal of the severity of the threat" (Rogers, 1983: 165; see also, Leventhal, 1970). In short, the fear experienced by a message recipient can be used to judge the validity of some of the information presented in the message (see also Schwarz et al., 1985).<sup>6</sup>

In the research on fear communications, the fear experienced by message recipients was directly *relevant* to evaluating the merits of some of the arguments in the message (e.g., the aversive consequences of smoking). However, *irrelevant* affective states may also be introduced under conditions of high elaboration likelihood. Under these conditions, affect is expected to color or bias the ongoing information processing activity. That is, when people are actively processing a message, affect can serve as a retrieval cue for material in memory, influencing what comes to mind. In general, positive affect should enhance the accessibility of positive associations, and negative affect should enhance the accessibility of negative associations (Bower, 1981; Clark and Isen, 1982).

As an example of the rather general biasing properties of affect, consider a series of studies by Johnson and Tversky (1983). In this research, affect was manipulated by having subjects read newspaper

stories (e.g., describing tragic or happy events) that produced either positive or negative affect. Following exposure to the stories, subjects were asked to provide frequency estimates of a number of negative occurrences (e.g., fatalities due to heart disease, floods) that were either related or unrelated to the newspaper accounts. The induction of negative affect produced a global increase in the estimated frequency of the negative events, but positive affect produced a global decrease in estimates of these events. In short, the induced affect colored subjects' judgments. A potential implication for persuasion of this research is that arguments stressing the positive consequences (e.g., living longer) of carrying out a recommendation (e.g., stopping smoking) should be more persuasive for people in a good mood, but arguments stressing the negative consequences (e.g., lung cancer) of failing to carry out a recommendation should be more persuasive for people in a bad mood.

Evidence for irrelevant affect biasing information processing in a persuasion situation was obtained in a recent experiment by Schumann (1986). In this study, subjects were exposed to a commercial for a new pen in the context of either a liked or a disliked television show. The liked show induced a positive mood in subjects, whereas the negative show induced a negative mood. The likelihood of elaboration of the pen ad was manipulated by varying whether subjects were expecting to make a choice after the experiment about which brand of pen to select as a free gift (high elaboration likelihood) or which brand of coffee (low elaboration likelihood; see Petty et al., 1983). Following exposure to the ads in the context of the television program, subjects listed their thoughts about the product and commercial. Although the nature of the program tended to modify evaluations of the pen under both low and high relevance conditions, the program had an impact on subjects' thoughts only when the elaboration likelihood was high. For example, under high relevance conditions, subjects generated more favorable thoughts about the brand and fewer negative thoughts about the commercial when the program-induced mood was positive rather than negative. Under low relevance, thoughts were unaffected by the program.

#### **Affect Under Conditions of Moderate Elaboration Likelihood**

When the elaboration likelihood is moderate, affect is postulated to have an effect on the extent of information processing activity. Both the

intensity and the valence of affect can be considered in this regard. A common assumption of arousal theories is that moderate arousal is most conducive to optimal performance (e.g., Yerkes and Dodson, 1908). If so, relatively low and high levels of affect would be expected to hinder or disrupt information processing or any ongoing behavior (Easterbrook, 1959; Young, 1961). In a study examining the ELM, Sanbonmatsu et al. (1986) studied the susceptibility to persuasive arguments (strong or weak) and peripheral cues (high or low credible source) of subjects who were high or moderate in overall arousal. Arousal was manipulated by having subjects engage in bicycle riding and then exposing them either immediately (high arousal) or after a delay (moderate arousal) to a persuasive communication. High arousal subjects were significantly less influenced by the quality of the arguments in the message than moderate arousal subjects, and they tended to be more influenced by the peripheral source cue.<sup>7</sup>

Research on the information processing effects of affective valence (positive or negative) are somewhat inconsistent at present (Isen, 1984). Although some research has indicated that positive affect is associated with more creative responses than negative affect (e.g., Isen et al., 1987), other studies have suggested that positive affect is associated with attempts to reduce the load on working memory and the complexity of decisions, resulting in quicker judgments than under conditions of negative affect (e.g., Forgas and Bower, 1987; Isen and Means, 1983). The latter implies that positive affective states may reduce argument processing and increase reliance on peripheral cues relative to neutral or negative affect. In a study based on this reasoning, Worth and Mackie (1987) found that subjects who experienced positive affect (winning \$1) prior to a communication reported attitudes that were based significantly less on argument quality and somewhat more on source expertise than subjects who were in a neutral mood. In short, both the intensity and valence of affect appear to be capable of moderating the route to persuasion.

#### **Affect Under Conditions of Low Elaboration Likelihood**

According to the ELM, if people have relatively low motivation and ability to process a persuasive communication, then affect, to the extent that it has any effect at all, should serve as a simple peripheral cue. As a

cue, affect would induce change that was consistent with its direction—the presence of positive affect would lead to more favorable attitudes than if no affect was present, but the presence of negative affect would lead to more unfavorable attitudes than if no affect was present.

In addition to the studies on classical conditioning of attitudes noted earlier, a number of other studies are also consistent with the view that affect can serve as a relatively simple cue in a persuasion context when the elaboration likelihood is low. For example, Gorn (1982) manipulated the relevance of an advertisement for a pen by telling some subjects that they were serving as consultants to an advertising agency and that they would later get to choose a pack of pens as a gift (high relevance), whereas other subjects were given little reason to process the target pen ad (low relevance). All subjects were exposed to two different ads for a pen. One ad was attribute oriented and provided information relevant to evaluating the product, whereas the other ad featured pleasant music rather than information. About one hour after ad exposure, subjects were given a choice between the two brands of advertised pens. When conditions were of low relevance, subjects favored the pen advertised with the pleasant music (peripheral route); however, under high relevance conditions, they favored the pen advertised with the informational campaign (central route; see also Srull, 1983; Batra and Ray, 1984).

### SUMMARY

In this article, we have defined and distinguished the construct of "affect," presented a general conceptualization of the process by which persuasive communications induce attitude change, and have highlighted the role of affect in this framework. In particular, we have argued that affect has much in common with other variables known to modify attitudes in rather complex ways. In brief, we have argued that when people are highly motivated and able to process issue-relevant arguments, affect will either serve as an argument, if it is relevant to a determination of the central merits of the issue, or it will bias the ongoing information processing activity. When people lack the requisite motivation and/or ability to process issue-relevant arguments, affect may serve as a simple peripheral cue. Finally, when people are uncertain as to whether the message warrants or needs scrutiny, affect will be especially important as a moderator of the route to persuasion.

### NOTES

1. Our own view is closer to that of Komorita and Bass (1967), who argued that some scales (e.g., "pleasant-unpleasant") are more affective in nature whereas others are more evaluative (e.g., "valuable-worthless").
2. Ephemeral, transitory, or self-presentational expressions of global evaluation would not be considered expressions of attitudes because they would not be reliable and enduring. Of course, the notion of an "enduring" attitude is a relative concept. That is, attitudes can endure for varying lengths of time. For example, attitudes based largely on exposure to simple peripheral cues tend to endure for a shorter period of time than attitudes based on extensive issue-relevant thinking (Cacioppo and Petty, 1987, forthcoming; Petty and Cacioppo, 1986b).
3. According to the ELM, elaboration may proceed in a relatively objective or a relatively biased manner (see Petty and Cacioppo, 1986a, for details).
4. Strong arguments elicit primarily favorable thoughts when subjects are instructed to think about them whereas weak arguments elicit primarily unfavorable thoughts (see Petty and Cacioppo, 1986a, for details).
5. Our focus here is on the role of affect in modifying responses to persuasive messages. Affect can likewise modify attitudes in multiple ways when no explicit persuasive communication is provided and the affect is temporally paired with the attitude object (see Cacioppo and Petty, 1982a; Petty and Cacioppo, 1983, for details).
6. As specified by the ELM, fear should serve in this informational role primarily when the elaboration likelihood is high, the fear is relevant to an evaluation of the arguments presented, and is not so arousing as to disrupt information processing (see next section).
7. A person's overall level of arousal should also have some impact on information processing under conditions of high and low elaboration likelihood. However, if motivation and other ability factors are already quite low, the effects of arousal would be attenuated. When motivation and other ability factors are high, people may strive to overcome the limitations imposed by low or high arousal. Thus arousal may account for more variance in processing when other factors render the elaboration likelihood as moderate.

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