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CENTRAL AND PERIPHERAL ROUTES TO PERSUASION: APPLICATION TO COUNSELING

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An underlying assumption of this chapter is that the basic social psychological research on persuasion may be relevant for understanding and improving the processes of psychotherapy and counseling. For example, in the introductory chapter of their classic text on basic laboratory research in attitude change, *Communication and Persuasion*, Howard, Janis, and Kelley (1953) explicitly stated that, "It is the belief of the authors that most of the basic principles derived from studying one-way communication will prove applicable also to the type of persuasion involved in group discussions and psychotherapy" (p.5). This sentiment has been reciprocated by psychotherapists and counseling psychologists. Thus, Jerome Frank (1963), in his important comparative study of the various schools of psychotherapy, *Persuasion and Healing*, noted that the laboratory findings on persuasion were "pertinent to our interest...since in psychotherapy the therapist tries to influence his patients" (p.97). Within counseling psychology, both Goldstein (1966; Goldstein, Heller, & Sechrest, 1966) and Strong (1968, 1982) have been instrumental in advancing the view that counseling is an interpersonal influence process with many parallels to the social psychology of persuasion. As Strong (1968) has noted:

In opinion change research, a communicator attempts to influence his audience in a predetermined direction; in counseling, the counselor attempts to influence his client to attain the goals of counseling. In both fields... Characteristics of the communicator...the audience, and...the communication affect the success of influence attempts. (p.213).

Because of the many similarities between the social psychology of attitude change and the process of counseling, Strong (1978) has written recently that "psychotherapy can be viewed as a branch of applied social psychology" (p.101).

Although the idea that laboratory research on attitude change may be relevant to the practice of psychotherapy has been around for nearly three decades, it is only relatively recently that research has begun to accumulate that specifically explores the links between the social psychology of persuasion and the effectiveness of real life therapy. In reviewing the research in counseling and psychotherapy as a social influence process, two facts stand out. First, for any one persuasion variable that has been examined in a therapeutic context, a variety of empirical outcomes have been obtained. For example, when investigators have manipulated the presumed "expertise" of a therapist, some studies have found that expert therapists produce more attitude change than nonexperts (e.g., Heppner & Dixon, 1978; Strong & Schmidt, 1970), but other studies have found that both kinds of therapists produce about the same amount of change (e.g., Greenberg, 1969; Sprafkin, 1970). These conflicting results, of course, are not unlike the pattern observed in the social psychological literature where, in addition to the two results already mentioned, sometimes expert sources have been shown to produce *less* agreement than inexpert sources (see Sternthal, Phillips & Dholakia, 1978 for a review).

A second fact that stands out in reviewing this literature is that many different theories of persuasion have been employed to account for the diversity of findings obtained. Some clinicians have favored the message learning approach championed by Howard and his colleagues (e.g., Craighead and Craighead, 1980; DiMatteo & DiNicola, 1982); others have advocated Festinger's (1957) theory of cognitive dissonance as a basis for therapeutic intervention (e.g., S. Brehm, 1976; Strong, 1968), and still others have been more eclectic, indicating that perhaps all of the theories of persuasion have some applicability to clinical practice (e.g., Harvey, Weary, Maddux, Jordan, & Galvin, in press).

It is not our goal in this chapter to review all of the conflicting findings and theories in persuasion from social, clinical, and counseling psychology, since recent reviews of both the basic (e.g., Cialdini, Petty, & Cacioppo, 1981; Eagly and Himmelfarb, 1978) and applied (e.g., Corrigan, Dell, Lewis, & Schmidt, 1980; Heppner & Dixon, 1981) literatures are available elsewhere. Our primary goals in this chapter are to present a general framework for thinking about attitude change that we call the Elaboration Likelihood Model of persuasion (ELM), to review some empirical evidence for the model, and to address the relevance of the model for psychotherapy and counseling. In doing this we do not intend

to propose a new kind of therapy based on the ELM, but instead to argue that this framework may be useful in evaluating *what* variables are important in psychotherapy, and *when* and *why* they are important.

#### BACKGROUND OF THE ELM

As we noted above, the processes of psychotherapy and counseling have been directly linked to the psychology of persuasion, and there are many persuasion theories vying for the attention of researchers and practitioners. It is not uncommon for textbooks on the psychology of persuasion to describe from 10 to 20 unique theories of attitude change (Insko, 1967; Kirsler, Collins & Miller, 1969; Smith, 1982). In a recent review of the many approaches to persuasion, we have suggested that even though the different theories have different terminology, postulates, underlying motives, and particular "effects" that they specialize in explaining, the various approaches to persuasion can be thought of as emphasizing one of two distinct routes to attitude change (Petty & Cacioppo, 1981). One, called the *central route*, views attitude change as resulting from a diligent consideration of information that is central to what people feel are the true merits of an advocated position. The second, or *peripheral route*, views attitude change as occurring when an advocated position has been associated either with positive or negative cues, or when the person uses a simple decision rule to evaluate a persuasive message. These cues and decision rules may shape attitudes or allow a person to decide what attitudinal position to adopt without the need for engaging in extensive issue-relevant thinking.

The theoretical approaches to attitude change that fall under the central route have emphasized factors such as the cognitive justification of attitude-discrepant behavior (e.g., Festinger, 1957; Wicklund & Brehm, 1976) the comprehension, learning, and retention of issue-relevant information (e.g., Howland et al., 1953; McGuire, 1969), the nature of a person's idiosyncratic thoughts or "cognitive responses" to issue-relevant information (e.g., Greenwald, 1968; Petty, Ostrom, & Brock, 1981), and the manner in which a person combines and integrates issue-relevant information into an overall evaluative reaction (e.g., Anderson, 1971; Fishbein and Ajzen, 1975).

In contrast to this focus on the information and thought processes that are central to an evaluation of the true merits of an advocacy, the approaches that fall under the peripheral route have

emphasized factors such as whether or not one's attitude can be inferred from the simple observation of one's own behavior (e.g., Bem, 1972), whether or not the advocated position falls within one's predetermined latitude of acceptance or rejection (e.g., Sherif, Sherif, & Nebergall, 1965), and whether or not the advocacy is associated with basic cues such as food or pain (e.g., Janis, Kaye, & Kirschner, 1965; Zanna, Kessler, & Pilkonis, 1970), or more secondary cues such as credible, attractive, or powerful communicators (e.g., Kelman, 1961; Mills & Harvey, 1972). These variables can influence attitudes whether or not any information relevant to the merits of the issue are presented or considered (e.g., Maddux & Rogers, 1980; Staats & Staats, 1958). It is important to note that the various theoretical approaches to attitude change and the variables whose effects they try to explain, may not fall clearly under one or the other route in all circumstances. For example, the theoretical process of self-perception (Bem, 1972) might lead to attitude change via a simple inference under most circumstances, but to extended issue-relevant thinking at other times (Liebbart, 1979). Additionally, we note that the distinction we have made between the central and peripheral routes to attitude change has much in common with the recent psychological distinctions between "deep" vs. "shallow" processing (Crain & Lockhart, 1972), "controlled" vs. "automatic" processing (Schneider & Shiffrin, 1977), "systematic" vs. "heuristic" processing (Chaiken, 1980), "thoughtful" vs. "scripted" or "mindless" processing (Abelson, 1976; Langer et al., 1978), and earlier formulations on different "kinds" of persuasion (e.g., Kelman, 1961; Kelman & Eagly, 1965). For more details on similarities and differences among the approaches, see Petty and Cacioppo (in press).

Unfortunately, none of the unique theories of persuasion has yet provided a comprehensive view of attitude change. A general framework for understanding attitude change must consider that attitudes sometimes change in a thoughtful manner after a careful consideration of relevant arguments, but sometimes attitudes change as a result of simple inferences or the association of an issue position with positive or negative cues. A general framework for persuasion should also specify the variables that enhance as well as reduce the likelihood that extensive cognitive activity will accompany attitude change, and it should specify the consequences of thoughtful and non-thoughtful persuasion. Since a therapist or counselor can presumably induce an attitude change via either the central or the peripheral route, it becomes important to

understand the variables that determine which route to persuasion will be more likely, and it also becomes important to understand the differential consequences of the two routes to persuasion. Before turning to these issues, we first present some evidence for the existence of the two distinct routes to persuasion.

#### EVIDENCE FOR THE TWO ROUTES TO PERSUASION

Figure 1 presents an abbreviated diagram of the Elaboration Likelihood Model of attitude change specifying the two routes to persuasion (see Petty & Cacioppo, 1981, in press, for further details). In order for a person's attitude to be affected by a diligent consideration of issue-relevant information (central route) the person must have both the *motivation* and the *ability* to think about the arguments presented. We will refer to situations in which both motivation and ability to think are high as having a high elaboration likelihood. Similarly, we will refer to situations that are low in either motivation or ability as being low in elaboration likelihood. When the elaboration likelihood of a persuasion situation is low, attitude changes will not be based on a careful consideration of message arguments, but will be based instead on simple positive or negative cues or simple inferences that permit a quick assessment of the advocacy.

In short, the basic tenet of the Elaboration Likelihood Model is that, under certain circumstances, attitudes will be formed and changed depending primarily upon the manner in which a person understands, evaluates, and integrates the issue-relevant information presented, but at other times, attitudes will be formed and changed without any extensive cognitive work. Before proceeding with a more detailed assessment of the antecedents and consequences of the two routes of persuasion and the implications of each for therapy, it is important to document the proposition that these two different kinds of persuasion exist.

In order to provide an appropriate experimental test of the two routes, it is important to construct two different kinds of persuasion contexts: one in which the elaboration likelihood is high (i.e., a person is both highly motivated and able to engage in issue-relevant thought), and one in which the elaboration likelihood is low (i.e., either motivation or ability to think is absent or substantially reduced). In the two experiments that we describe next, a person's ability to think was held constant at a high level by removing all distractions and employing messages that were simple enough for all subjects to understand. Motivation to think

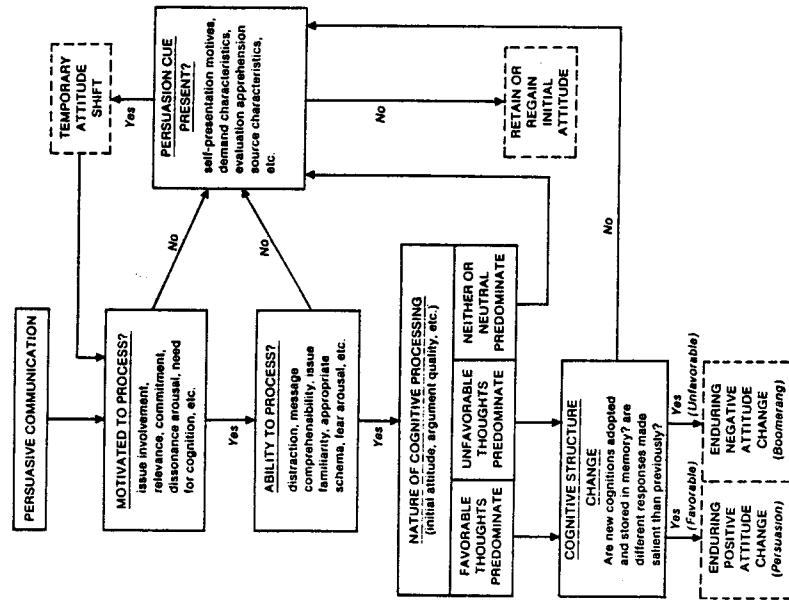


Fig. 1. The Elaboration Likelihood Model of Attitude Change.

was manipulated by varying the personal relevance of the opinion issue. Following a procedure introduced by Apsler and Sears (1968), subjects in the high and low relevance conditions were exposed to the same experimental stimuli, but subjects in the high relevance conditions were led to believe that the issue under consideration would have direct and relatively immediate personal consequences for them, whereas subjects in the low relevance con-

ditions were led to believe that the message would likely have no personal consequences. Given that all subjects have the ability to think about the message, subjects in the high relevance conditions should follow the central route to persuasion, and subjects in the low relevance conditions should follow the peripheral route.

In addition to manipulating personal relevance in each experiment, we also manipulated the quality of the arguments contained in the message, and a peripheral cue that would permit assessment of the message without the need for issue-relevant thinking. The manipulation of message quality allowed us to assess the extent to which subjects were carefully scrutinizing the message. The greater the scrutiny, the more they should realize the strengths of cogent arguments and the more they should realize the flaws in specious ones. Thus, the greater the scrutiny of the arguments, the more subjects' attitudes should differ as a function of argument quality. Furthermore, if these subjects are basing their attitudes on an assessment of the perceived validity of the arguments presented, the cue manipulation should have little effect on their attitudes. On the other hand, if subjects are not engaging in careful thought about the message, then their post-message attitudes should not differ greatly as a function of the strength of the arguments in the communication, but should differ as a function of the peripheral cue presented.

#### Source Cues

In our first experiment (Petty, Cacioppo, & Goldman, 1981), we had university undergraduates hear a message advocating that college seniors be required to pass a comprehensive exam in their major area as a requirement for graduation. In half of the experimental conditions, the speaker advocated that the policy be instituted next year, thereby affecting all of the students personally, and in half of the conditions the speaker advocated that the policy begin in ten years, thereby affecting no current students. Half of the students heard eight arguments that were pretested in order to ensure that they were cogent and compelling when thought about (e.g., graduate and professional schools prefer to admit undergraduates who have passed a comprehensive exam), and half the students heard eight arguments that were deemed specious when thought about (e.g., giving the exam to graduate but not undergraduates was as bad as racial discrimination). Finally, for half of the students, the source of the message was described as a Professor of Education at Princeton University (expert source),

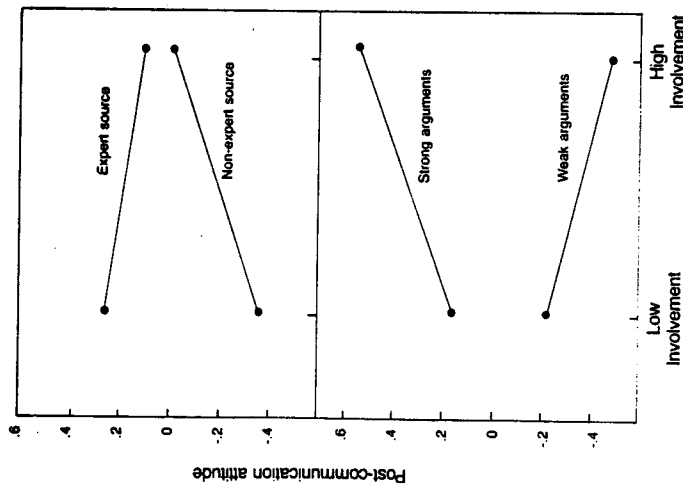


FIG. 2. Top, Persuasion as a function of the interaction of recipient involvement and the expertise of the message source. Bottom, Persuasion as a function of the interaction of recipient involvement and the quality of message arguments (data from Petty, Cacioppo, & Goldman, 1981).

and for the other half the source was described as a junior at a local high school (nonexpert source). The expertise of the message source provides a peripheral cue that permits an assessment of the advocacy without any need to think about the issue-relevant arguments.

The results of this study are graphed in Figure 2. When the students thought that the exam proposal had little relevance to them, their post-communication attitudes were influenced significantly only by the expertise of the message source (the peripheral

cue); the actual quality of the arguments had no effect (see top panel of Figure 2). On the other hand, when the students thought that the exam proposal had direct consequences for them their attitudes were affected significantly only by the quality of the issue-relevant information presented; the source expertise manipulation had no effect (see bottom panel of Figure 2).

#### Message Cues

Although in our first experiment, the peripheral cue resided in the source of the message, cues may also reside in the persuasive message itself. For example, in a second experiment (Petty & Cacioppo, 1984), we again exposed college students to a message advocating that seniors be required to pass a comprehensive exam in their major. We once again manipulated the personal relevance of the proposal and the quality of the arguments in support of the exam, but this time we included a peripheral cue within the message. Specifically, half of the subjects received a message containing three arguments and half received a message containing nine arguments. If a person is not thinking about the arguments in a message, then it is reasonable for the individual to infer that the more arguments in favor of the proposal, the better it must be. The results of this study are graphed in Figure 3. As expected by the ELM, when the issue had high relevance, subjects' attitudes were affected only by the quality of the arguments in the message; the number of arguments presented had no effect (central route; see bottom panel of Figure 3). On the other hand, when the issue was of low relevance, attitudes were affected by the mere number of arguments presented, but not by their quality (peripheral route; see top panel of Figure 3).

In sum, both of our experiments on the two routes to persuasion found that in high relevance conditions, subjects exerted the cognitive effort required to evaluate the issue-relevant arguments presented, and their attitudes were a function of this information processing (central route). Under low relevance conditions, however, attitudes were determined by salient peripheral cues (source expertise, number of arguments) but were unaffected by argument quality.

#### CONSEQUENCES OF THE TWO ROUTES TO PERSUASION

The research that we have just reviewed clearly indicates that different factors have an impact on persuasion under high and

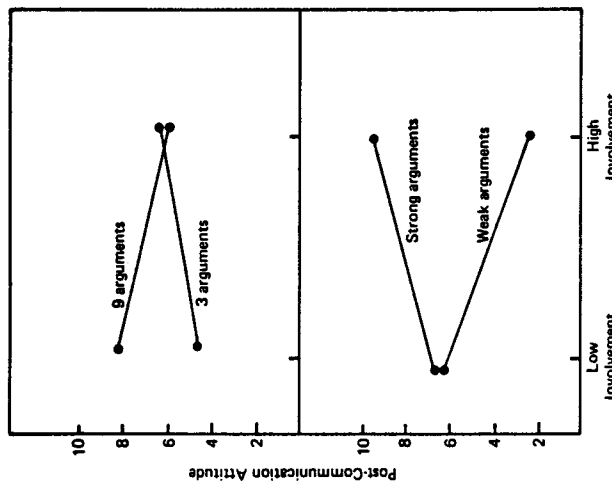


FIG. 3. Top, Persuasion as function of the interaction of recipient involvement and the number of message arguments employed. Bottom, Persuasion as a function of the interaction of recipient involvement and the quality of message arguments (data from Petty & Cacioppo, 1981).

low personal relevance conditions, and suggests that the distinction between the central and peripheral routes has some validity. Importantly, recent research also suggests two very important consequences of the two routes to persuasion: (1) attitude changes that occur via the central route may persist longer than attitude changes that occur via the peripheral route, and (2) attitudes formed via the central route may predict subsequent behavior better than attitudes formed via the peripheral route.

#### Attitude Persistence

Evidence for the greater temporal persistence of attitude change induced via the central route comes from studies in which sub-

jects' motivation to think about an issue was experimentally manipulated and a delayed measure of attitudes was taken. For example, in a carefully designed experiment, Watts (1967) had subjects either read a communication or actively generate a message on an assigned topic. The persuasive messages were developed in pretesting so that they would produce the same amount of initial attitude change as would the self-generation of arguments. The results of the study indicated that the pretesting was successful because subjects who passively read the communication showed an amount of initial attitude change equivalent to subjects who actively generated their own arguments. On a delayed measure of opinion taken six weeks later, however, subjects in the self-generated conditions showed total persistence of attitude change, but subjects in the passive reading conditions were no longer different from control subjects. The active generation subjects were required to think about issue-relevant arguments (in fact, they had to generate them), but the passive exposure group was not required to think (see review by Cook & Flay, 1978). Similar persistence effects have been observed when subjects were not required to think about issue-relevant arguments (as they are in role-playing research), but instead were motivated to do so spontaneously by experimental manipulations. For example, prior to exposing subjects to a persuasive communication, Chaiken (1980) led some subjects to believe that they would be interviewed about the topic of their message, whereas other subjects were led to believe that they would be interviewed about an irrelevant topic. Presumably, subjects would be more motivated to scrutinize the message carefully when the interview was relevant to their message topic. Although both groups of subjects showed the same amount of initial attitude change after being exposed to the message, and both groups showed some decay 10 days later, the group that was about to be interviewed on the message topic showed significantly less decay. Again, the more thoughtful the initial change, the longer it persisted.

These studies suggest that to the extent that attitude changes are accompanied by issue-related cognitive activity, the changes produced are more enduring than if such activity is absent (see also, Cialdini et al., 1976). When an attitude change is based on an extensive foundation of issue-relevant thoughts and beliefs, and these ideas are rehearsed, the attitude change is likely to persist because the issue-relevant beliefs are likely to remain salient (especially if they are self-generated; see Slamecka & Graf, 1978).

Furthermore, even if a few of the favorable thoughts elicited at the time of message exposure are forgotten, others are likely to remain. On the other hand, attitude changes that result from one prominent cue (e.g., an expert source), or one simple inference (e.g., if there are so many arguments it must be good), are much more vulnerable to forgetting (Gruder et al., 1978; Kelman & Hovland, 1953). These peripheral route changes are likely to endure only if the person has been exposed to the persuasive message many times which may render the cue or inference relatively permanent. Even then, however, we suspect that these attitude changes would be highly susceptible to counterpersuasion because the person would have so little on which to base a positive or negative opinion (i.e., the new attitude would be difficult to defend if severely challenged; McGuire, 1964). Thus, a client who adopts a therapist's recommendation simply because the therapist is a trusted expert, and not because the client has carefully thought about the recommendation may be easily sidetracked by opposing opinions presented by family or friends.

#### *Attitude-Behavior Link*

Recent research also suggests that the central route may produce a stronger attitude-behavior link than the peripheral route. For example, Sivacek and Crano (1982) explored the relationship between attitudes and behaviors for two groups of people. The attitudes of interest in their study concerned an impending Michigan state-wide referendum to raise the legal drinking age from 19 to 21. The two groups of people studied were those who would be personally affected by the proposal (i.e., they would not be 21 by the time the new law went into effect if passed), and those who would not be personally affected. Even though both groups expressed equally strong attitudes against the proposal to raise the drinking age, more people who would be personally affected by the proposal agreed to engage in behaviors consistent with their negative attitudes than people who would not be personally affected. If we can assume that the attitudes of people who would be personally affected were formed via the central route (i.e., extensive issue-relevant thought), whereas the attitudes of those who would not be affected were formed via the peripheral route (e.g., identifying with the opinions of their friends), then the results of this study are consistent with the view that the central route produces attitudes that are more predictive of behaviors than does the peripheral route.

In a recent study we attempted to directly manipulate whether subjects' attitudes were formed via the central or the peripheral route and then assess attitude-behavior correspondence. In this study (Petty, Cacioppo, & Schumann, 1983), subjects were exposed to one of four mock magazine advertisements for a bogus product. Some subjects were led to believe that they would soon have to make a decision about this product (high involvement group), whereas other subjects were led to believe that they would soon have to make a decision about an irrelevant product (low involvement group). Half of our ads featured two celebrity endorsers who were well liked by our subject population, and half featured average citizens. Of course, this was our manipulation of a peripheral cue. In addition, half of the ads featured very persuasive arguments in support of the product, and half featured weak arguments.

As expected, when subjects thought that they would soon have to make a decision about the product, attitudes toward the product were influenced by the quality of the product-relevant information provided, but not by the identity of the product endorsers (central route). On the other hand, when the product had little immediate relevance, attitudes were not affected by the product relevant arguments, but they were affected by the likability of the product endorsers (peripheral route). An additional feature of this study, however, was that subjects were asked whether or not they would purchase this product. Although the use of celebrity endorsers enhanced liking for the product compared to the average citizen endorsers for low involvement subjects, this manipulation failed to affect purchase intentions. On the other hand, for the high involvement subjects, the use of strong arguments enhanced liking for the product over the use of weak arguments, and also increased intentions to purchase the product. In addition, the correlational evidence indicated that attitudes were a better predictor of purchase intentions for subjects whose attitudes were changed via the central route (high involvement  $r = .59$ ) rather than the peripheral route (low involvement  $r = .36$ ). There are at least two reasons why attitudes formed via the central route would be more predictive of behavior than attitudes formed via the peripheral route. First, the former kind of attitude might be more salient in memory and thus people may be more able to act on their attitudes. Additionally, people may hold these attitudes with more confidence and thus they may be more willing to act on them (see Fazio & Zanna, 1981).

Although it would be possible to produce attitude changes via the peripheral route in therapy, it generally would not appear advantageous to do so. Because the central route has the two important advantages of temporal persistence and prediction of behavior, it will generally be the preferred persuasion strategy. Unfortunately, inducing attitude change via the central route is considerably more difficult than inducing change via the peripheral route. In the next section we focus on the central route to persuasion and outline the variables that are important in inducing thoughtful attitude change.

#### FOCUS ON THE CENTRAL ROUTE TO PERSUASION: MOTIVATION AND ABILITY TO THINK

Figure 1 outlines the steps involved in inducing a change via the central route. The Elaboration Likelihood Model depicted in the figure begins by posing the question of whether or not a person is motivated to think about the message to which he or she is exposed. It doesn't make sense for people to think about every communication that they encounter. To do so would "disengage the thought processes from the exigencies of daily life" (Miller et al., 1976, p. 623). Several variables have been shown to affect a person's motivation to think about a message. For example, we have already noted that people are motivated to engage in more careful scrutiny of messages that are personally relevant than messages with low personal implications (Petty & Cacioppo, 1979b). As an issue becomes more personally relevant, it becomes more important and adaptive to form a reasoned and veridical opinion. In addition, we have found that when the topic is involving, people are more motivated to think about messages or anticipated messages that take disagreeable rather than agreeable positions (Cacioppo & Petty, 1979a; 1979b). Counterattitudinal messages indicate that one's attitude may be incorrect, and therefore these messages may warrant more careful consideration than proattitudinal messages which do not challenge one's viewpoint. In most therapeutic situations, it is likely that the therapist's message will be both personally involving and counterattitudinal since the message will be aimed at changing one of the client's current maladaptive beliefs, attitudes, or behaviors. Thus, motivation to think about the therapist's message should be relatively high.

Just as some messages may typically evoke more thought than others (e.g., counterattitudinal, personally relevant), we have also found that some people are typically more motivated to think

about messages than are other people. In a series of studies on the "need for cognition," we have found that some people tend to find tasks requiring extensive cognitive activity to be fun, whereas others prefer to avoid them (see Cacioppo & Petty, 1982; and Chapter 7, this volume, for further discussion).

Of course there are many other persuasion variables that can affect a person's motivation to think about the information in a persuasive message and thereby affect attitudes. For example, the greater the number of people responsible for evaluating a message, the less motivated any individual person is to exert effort in order to evaluate the message (Petty, Cacioppo, & Harkins, 1983; Petty, Harkins, & Williams, 1980). Thus, the impact of some messages delivered to groups of people, such as in family therapy, may be diffused. One of the benchmarks of effective persuaders, of course, is that they are able to motivate thinking about their messages. One technique that we have found to be effective in doing this is shifting arguments from declarative statements ("All that arguing is bad for your marriage") to an interrogative form ("Isn't all that arguing bad for your marriage?"). In a recent study we were able to show that when a message was on a topic of low personal relevance (and thus ordinarily would have motivated little scrutiny of the message arguments), we were able to increase thinking by rephrasing six of the eight argument summary statements in the message as rhetorical questions. As a result of this, strong message arguments became even stronger, but weak message arguments became even weaker (Petty, Cacioppo, & Hucksacker, 1981; see Figure 4). Of course in an actual therapy session, the therapist can go further and actually engage the client in a dialogue in order to encourage thinking.

As Figure 1 indicates, however, having the motivation to think about a persuasive message is not sufficient to ensure that the central route will be followed. A person must also have the ability to think about the issue-relevant information presented. Some people will naturally have a greater ability to think about certain kinds of information because of their superior intelligence (Eagly & Warren, 1976) or because of their greater experience with, or knowledge about, an issue (Cacioppo & Petty, 1980b; Wood, 1982). In addition, however, a large number of situational variables have been shown to affect a person's ability to think about a message. For example, to the extent that a message is accompanied by distracting stimuli, the ability to think about a message is decreased, and as a result, people are less able to differentiate

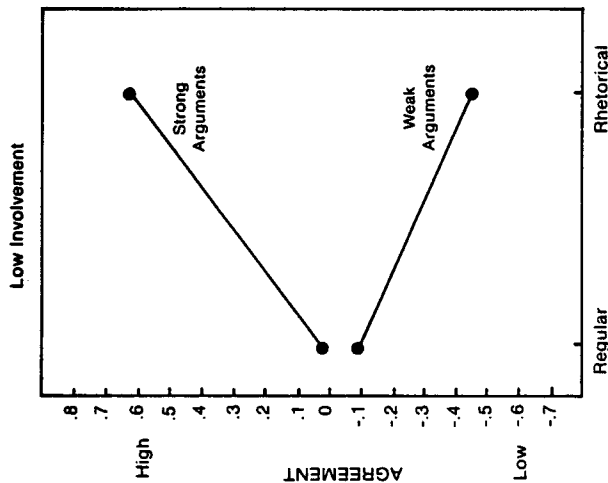


FIG. 4. Persuasion as a function of the interaction of message argument quality and the form of the message (statement or rhetorical) for a low involvement communication (data from Petty, Cacioppo, & Hirschaker, 1981)

strong from weak arguments (Petty, Wells, & Brock, 1976). On the other hand, as a message is repeated a moderate number of times, people have a greater opportunity to think about the arguments and show a greater differentiation of cogent from specious arguments (Cacioppo & Petty, 1979b; 1980a). The medium of message presentation may also affect a person's ability to engage in issue-relevant thought. When a person reads a message, as opposed to hearing it orally, it is possible to stop the message presentation to think about it. On the other hand, an oral message is under the control of the communicator and the arguments may be presented too quickly to permit careful scrutiny (Chaiken & Eagly, 1983). As a message becomes more complex and difficult to understand, the more advantageous it becomes in a therapy session to screen out

distractions, to repeat the message in different sessions, and perhaps to provide the client with a written summary of the major points made (cf. Chaiken & Eagly, 1976; Regan & Cheng, 1973).

When a person is both motivated and able to think about a persuasive communication, it becomes important to understand the nature of the thoughts elicited. Most research has focused on two kinds of cognitive processes: Favorable or positive thoughts (e.g., "He's right, I really should talk to my wife more") and unfavorable or negative thoughts (e.g., "He's nuts, I talk to my wife too much now") (see Cacioppo & Petty, 1981 for details on scoring cognitive response data). Knowing that a person has both the motivation and ability to think about a message does not allow a determination of what kinds of cognitive responses will be elicited. The variables that we have mentioned already, such as the personal relevance of the issue, or the amount of distraction present, tend to affect a person's motivation and/or ability to think in a fairly objective manner. In other words, they tend to affect whether or not a person fully appreciates the strengths of cogent arguments or the weakness of specious ones.

What happens if a person is both motivated and able to think about an issue, but no arguments are presented for the person's consideration? For example, some very non-directive forms of therapy require the client to generate arguments on his or her own. In this case, a person's thoughts cannot be guided by the quality of the arguments provided by the therapist. Instead, a person's thoughts are likely to be guided by an initial attitude on the topic. In an impressive program of research on the effects of "mere thought" (thinking about a stimulus or issue without external direction or new information), Tesser (1978) and his colleagues have demonstrated that, with increased thought, attitudes polarize in the direction of one's initial tendency. Thus, encouraging a client to think about an issue or problem, without providing a direction and arguments to guide that thinking, might lead to polarization in a maladaptive direction.

Thus, one form of bias in thinking occurs when a person's thoughts are guided by an initial attitude rather than by the merits of the arguments presented. Situational variables can also bias thinking, however. In one study, we specifically attempted to bias the kinds of thoughts that people would generate as they listened to an involving message (Wells & Petty, 1980). In this study, all subjects listened to a message through headphones, and the subjects were led to believe that the experimenters were engaging in a

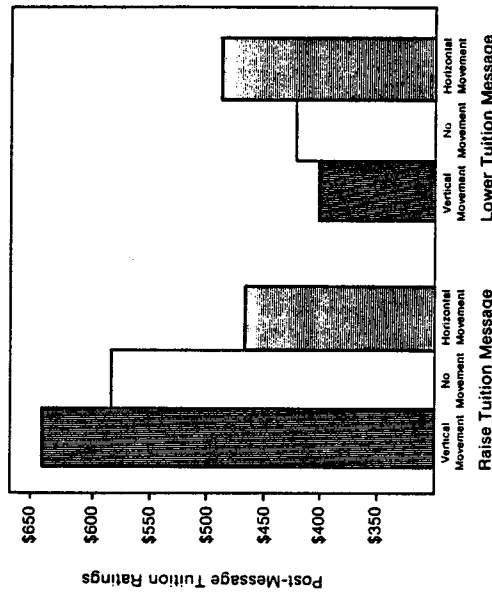


Fig. 5. Persuasion as a function of overt head movements and whether the message is pro or counterattitudinal (data from Wells & Petty, 1980).

consumer test of those headphones. Some subjects were told that in order to test the headphones under controlled conditions, they should move their heads in a horizontal manner, once per second. Others were told to move their heads in a vertical manner, once per second. Because vertical head movements have been associated with favorable reactions in the past and horizontal movements have been associated with unfavorable reactions (Eibl-Eibesfeldt, 1972), we expected that vertical movements would facilitate positive thoughts but would be incompatible with and thereby disrupt negative thoughts. The horizontal movements were expected to have the opposite effect. Figure 5 shows the results. For both the counterattitudinal message (advocating a reduction in tuition) and the proattitudinal message (advocating an increase in tuition), subjects who engaged in vertical head movements showed more agreement with the advocacy than subjects who engaged in horizontal head movements.

In our program of research on persuasion, we have also found a number of other variables that appear to bias people's thoughts as

they process a message. For example, a negative bias is typically introduced when people are *forewarned* that someone is going to try to persuade them. Forewarning threatens a person's freedom to hold a particular attitude. According to J. Brehm's (1966) theory of psychological reactance, more reactance (an unpleasant drive state) should be aroused when an involving rather than an uninvolved attitude is threatened, and this reactance should motivate people to reject the threatening communication. In a test of this hypothesis (Petty & Cacioppo, 1979a), we forewarned some subjects that a message they were about to hear "was designed specifically to try to persuade college students of the desirability of changing certain college regulations." A second group was told only that the message "was prepared as part of a journalism class project on radio recordings." In order to provide a strong test of the hypothesis that the forewarning would bias thinking, only strong arguments were used in the message (i.e., in the absence of the forewarning, the message produced primarily favorable thoughts). Involvement was manipulated by leading some of the subjects to believe that the proposed change in college rules would affect them personally, whereas other subjects were led to believe that the proposed change would not affect them. The forewarning of persuasive intent significantly enhanced the production of counterarguments and inhibited attitude change for the involved subjects even though all of the arguments were strong. If the forewarning of persuasive intent simply had enhanced thinking about the message in an objective manner, then forewarned subjects should have been *more* persuaded by the cogent arguments. There is widespread agreement that it is easier to change clients who want to change. People who don't want to change will likely experience reactance and attempt to counterargue what otherwise may have been very compelling advice (for further discussion of reactance in therapy, see S. Brehm, 1976).

Sometimes people's thoughts may be biased in a positive direction. For example, we have found that a salient self-schema may render people particularly susceptible to arguments that are relevant to their self-conception (Cacioppo, Petty, & Sidera, 1982). In a study on self-schemata and persuasion, we employed a procedure adapted from Markus (1977), and identified two groups of students who were attending a major Catholic university. Some of the students tended to think of their moral values as being primarily legalistic, whereas others tended to view their values as primarily religious. We presented the subjects with a proattitudi-

nal message that employed either a religious or a legalistic perspective on an issue (e.g., the abolition of capital punishment). In evaluating the arguments, the students rated arguments that were consistent with their self-conceptions as more persuasive than arguments that were inconsistent. This result was especially intriguing because all of the arguments employed in the messages were selected to be weak (i.e., they elicited primarily unfavorable thoughts from schematic subjects). Thus, when the weak arguments matched the subjects' self-schemata, rather than objectively recognizing the flaws in the arguments, they selectively elaborated on them in a favorable manner. To the extent that a therapist has discovered what the salient dimensions of a person's self-conception are (e.g., masculine/feminine), arguments can be fashioned that have a high likelihood of being perceived favorably.

As a final example of how a variable that affects a person's motivation or ability to think in either an objective or a biased manner can also affect attitudes, we address a variable that has long been associated with clinical and counseling psychology: the body posture of the client during therapy. Specifically, are there any benefits in persuasion from having the client recline on the therapist's couch during a session? As we noted already, if a variable affects thought processes, it can do so in one of two ways: (a) it can *bias* cognitive responses, or (b) it can enhance or disrupt thinking in a relatively *objective* manner. Although no previous work in social psychology had examined the effects of recipient posture on persuasion, previous literature did suggest two possible ways in which posture might affect thinking. First, people who are in a reclining position are viewed as less dominant or aggressive than people who are either standing or sitting (Schwartz, Tesser, & Powell, 1982). If people who are reclining also *feel* less aggressive, then they might be less prone to attack any persuasive communication that they receive. In other words, a reclining posture might make people more agreeable or influenceable by inhibiting the counterarguing that might normally take place. A second hypothesis is suggested by recent work on objective self-awareness. For example, Wegner and Giuliano (1980) reported that subjects who had been reclining were less self-conscious than subjects who had previously run in place or had been seated. Scheier, Carver, and Matthews (1983) have argued that the less attention allocated to the self, the better able people are to process external stimuli. If a reclining posture reduces self-consciousness, then people may be better able to carefully scruti-

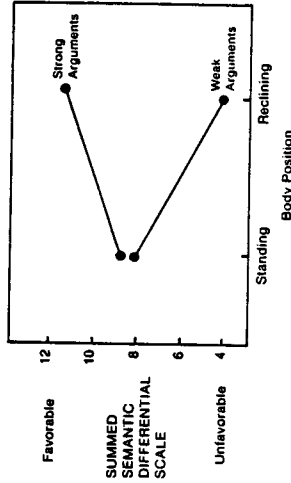


FIG. 6. Persuasion as a function of the interaction of message argument quality and the body posture of the message recipient (data from Petty, Wells, Hiesacker, Brock & Cacioppo, 1983).

nize a therapist's message and accept it if it is compelling, but reject it if it is weak. In order to compare these two hypotheses, we had undergraduates listen to an involving counterattitudinal message while they were either standing up or while they were reclining on a cot (Petty, Wells, Hiesacker, Brock, & Cacioppo, 1983). The arguments in the message that they heard were either cogent and compelling or weak and specious. Figure 6 presents the results. Subjects in the reclining posture significantly differentiated the strong from weak arguments, but standing subjects did not. Clearly, then, a reclining posture does not appear to render people more influenceable or susceptible to persuasion overall, but it makes it more likely that people will carefully consider the message that is presented to them. We suspect that many people who seek therapy will be quite self-conscious during the initial sessions with their therapist, and this could interfere with the therapist's power to persuade. The stereotypic couch in a dimly lit room may reduce self-consciousness and render the client better able to process the therapist's message.

#### Implications and Conclusions

We have presented the Elaboration Likelihood Model in some detail and would now like to more specifically address its potential utility for understanding the interpersonal influence process in psychotherapy. Since the level of therapist "expertise" is one of the most studied variables within the interpersonal influence literature, it may serve as a useful example. Earlier we noted that

although both social and counseling psychologists have conducted a considerable amount of research on the effects of source or counselor expertise on the power of the source or counselor to persuade, a variety of conflicting findings have been obtained. We also noted that a variety of theories have been employed to account for these findings. If the ELM is to prove useful, it should be able to account for these conflicting findings and provide a better explanation than previous theories.

Perhaps the dominant analysis of communicator expertise within the counseling literature stems from Strong's (1968) application of Festinger's (1957) theory of cognitive dissonance. Strong argues that when a counselor provides opinions that are discrepant from the client's, the client experiences dissonance. The client may reduce this dissonance by changing his or her opinion to conform with that of the counselor, or dissonance may be reduced by derogating and discrediting the counselor. When the counselor is perceived as an expert, this attenuates the tendency to derogate the therapist, and therefore enhances the likelihood of attitude change. This model can be evaluated by at least two criteria: (1) Does it predict the pattern of actual data obtained? (2) Does it correctly explain the underlying process whereby expertise affects attitude change? Although reviews of the literature on expertise and attitude change within both social (Sternthal et al., 1978) and counseling (Corrigan et al., 1980) psychology indicate that expertise generally increases persuasion, it does not do so universally. Sometimes expert and inexperienced sources are equally persuasive, and sometimes reverse effects are obtained. A second reason to question Strong's model comes from recent social psychological work on dissonance theory which indicates that mere exposure to a discrepant communication may not be sufficient to arouse dissonance. People may also have to feel personally responsible for bringing about some foreseeable negative consequence (see Cialdini et al., 1981; Cooper & Axson, 1982; Fazio & Cooper, 1983; Wicklund & Brehm, 1976 for reviews). Research has indicated that source expertise can affect attitudes in situations where the necessary preconditions for dissonance have not been satisfied.

What does the Elaboration Likelihood Model say about the effects of source expertise? According to the ELM, the effects of source expertise should depend on the elaboration likelihood of the persuasion situation. If a person's motivation and ability to think are very low, then increasing expertise should enhance

agreement by serving as a peripheral cue. If a person's motivation and ability to think are very high, however, then expertise should not affect attitudes since persuasion will be based primarily on a careful evaluation of the issue-relevant arguments presented. Earlier, we described a study in which we attempted to create a very high elaboration likelihood for some subjects, but a very low elaboration likelihood for others (Petty, Cacioppo, & Goldman, 1981). In this study, high elaboration likelihood subjects were told that the proposal they were to evaluate had important and relatively immediate consequences for them (i.e., if they didn't pass the comprehensive exam that was to be instituted the next year, they would be unable to graduate). On the other hand, low elaboration likelihood subjects were led to believe that the proposal would have absolutely no personal consequences for them. These manipulations were designed to induce relatively pure forms of the central and peripheral routes to persuasion. As you will recall (see Figure 2), under very high involvement conditions, attitudes were affected only by the issue-relevant information presented and not at all by source expertise and conversely, under low involvement, attitudes were affected only by source expertise, not at all by argument quality.

In most of the previous counseling analog research which manipulated communicator expertise, we suspect that the elaboration likelihood was neither as high nor as low as we deliberately created in our basic laboratory studies. Instead, the elaboration likelihood might best be described as moderately high. What is the effect of source expertise under these circumstances? We have proposed that when the elaboration likelihood is moderately high, increasing expertise will enhance a person's motivation to scrutinize the content of a persuasive message (Petty & Cacioppo, 1981). For example, when people have a moderately high degree of interest or knowledge about an issue, they would want to hold a correct opinion on it. Since an expert is more likely a source of veridical information than a non-expert, this information is more worthy of careful scrutiny since it has a higher probability of being correct and therefore useful. Thus, an expert source should increase issue-relevant thinking over an inexperienced source and lead to a greater realization of the strengths in cogent arguments and the flaws in specious ones. In short, the persuasive advantage of increasing expertise should be confined to messages containing compelling arguments. If the message contains specious arguments, the credibility effect should be attenuated or reversed. Two

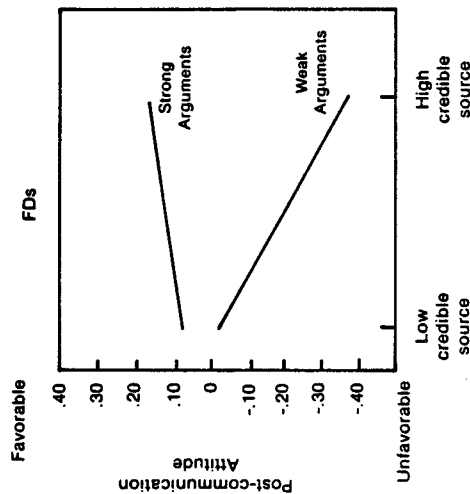


Fig. 7. Persuasion as a function of the interaction of message argument quality and source credibility for field-dependent subjects hearing a high involvement message (data from Heesacker, Petty, & Cacioppo, 1983).

recent experiments (Heesacker, Petty & Cacioppo, 1983; see Figure 7; and Stoltenberg, 1981) have provided support for this view.

We are proposing that in the typical counseling analog situation, because the elaboration likelihood is reasonably high, but not maximal, subjects may rely on the expertise of the source to decide if the message is worth thinking about. If the source is an expert, thinking will be enhanced, making persuasion via the central route more likely. Three implications of our proposal have received support in the interpersonal influence literature: in counseling. First, if people do more thinking about information from expert than inexperienced counselors, clients might be expected to recall more information from the therapy session when it is presented by an expert than a non-expert. Research by Gutman and Haase (1972) and by Merluzzi, Merluzzi, and Kaul (1977) has supported this view. Enhanced recall does not necessarily portend greater persuasion, of course, because persuasion depends on the person's idiosyncratic *evaluation* of the information presented. If the information presented is weak, greater scrutiny can lead to *reduced* agreement.

Secondly, according to the Elaboration Likelihood Model, if persuasion is increased as a result of scrutinizing the information presented by an expert source (central route), this persuasion should be relatively enduring. Heppner and Dixon (1978) supported this hypothesis by exposing subjects to an expert or an inexperienced counselor who attempted to change their opinions about their problem solving skills. The expert counselors produced more change than the nonexperts on an assessment taken immediately after counseling, and this difference was still significant one week later. In an intriguing delayed finding, Strong and Schmidt (1970) found that although expert and inexperienced counselors did not differ in the amount of attitude change they induced immediately after a very brief influence attempt, one week later the expert counselor had produced more change than the non-expert. This result suggests that clients may have been motivated to think about the information provided by the expert counselor after the therapy session, but the nonexpert therapist did not merit such further thought.

Finally, the Elaboration Likelihood Model suggests that if expert sources increase attitude change by increasing thinking, the attitude changes produced should relate to actual behavior. There is some support for this postulate as well. For example, in the Heppner and Dixon study, the expert counselor not only induced more attitude change than the inexperienced, but the expert was also more successful in getting subjects to ask the receptionist for a problem solving handout prior to leaving (a second, more difficult behavioral measure was not affected, however). In another study, Friedenberg and Gillis (1977) presented subjects with an 8 minute message designed to enhance self-esteem. The message was presented by a counselor who was either introduced as an expert or a nonexpert. One week later, the subjects were interviewed and their self-esteem behavior was monitored. Subjects who heard the message from the expert showed significantly more high self-esteem behavior (e.g., they made fewer negative remarks about themselves) than subjects who heard the same message from the inexperienced source.

In sum, we have outlined two different routes to attitude change. The *central route* to persuasion occurs when a person is both *motivated* and *able* to think about the merits of an advocacy. Some variables affect motivation and or ability to think about a message in a relatively *objective* manner, but other variables may introduce a consistent positive or negative bias to the thought content. Depending upon whether the advocacy elicits primarily

favorable or unfavorable thoughts, either persuasion, resistance, or even boomerang (change in a direction opposite to that advocated) may occur. If the person lacks the motivation and/or ability to think about a message, attitudes may be affected by positive and negative cues, or simple decision rules that permit an evaluation without extensive cognitive work (*peripheral route*). These cues or inferences may stem from characteristics of the source (e.g., expertise, attractiveness), the message (e.g., number of arguments, vocabulary of message), the recipient (e.g., one's own behavior), or the persuasion context (e.g., pleasant surroundings). Two important advantages of the central route are that these changes tend to persist longer and are more predictive of behavior than changes induced via the peripheral route. We believe that the Elaboration Likelihood Model provides a fairly general framework for thinking about persuasion, and that it may be of some utility in integrating apparently conflicting findings and generating new research.

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