

## Issue Involvement Can Increase or Decrease Persuasion by Enhancing Message-Relevant Cognitive Responses

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Two experiments were conducted to test the hypothesis that high issue involvement enhances thinking about the content of a persuasive communication. Experiment 1 varied involvement and the direction of a message (proattitudinal or counterattitudinal). Increasing involvement enhanced persuasion for the proattitudinal but reduced persuasion for the counterattitudinal advocacy. Experiment 2 again varied involvement, but both messages took a counterattitudinal position. One message employed compelling arguments and elicited primarily favorable thoughts, whereas the other employed weak arguments and elicited primarily counterarguments. Increasing involvement enhanced persuasion for the strong message but reduced persuasion for the weak one. Together the experiments provide support for the view that high involvement with an issue enhances message processing and therefore can result in either increased or decreased acceptance.

Persuasion researchers have recognized for some time that it is easier to demonstrate attitude change in the laboratory than in the field. One prominently mentioned explanation for this observation is that the advocacies employed in laboratory investigations are of considerably lower "involvement" than the advocacies encountered in the real world (Hovland, 1959). Greater involvement with an issue is presumably related to greater resistance to persuasion (cf. Triandis, 1971). The major goal of the present paper is to present and test a "cognitive response" (Greenwald, 1968; Petty, Ostrom, & Brock, in press) interpretation of involvement effects holding that increasing involvement with an issue increases one's motivation to process information relevant to the issue and can lead to either increased or decreased persuasion.

Before presenting the model in more detail, it is necessary to note that attitude researchers have distinguished between two different types of involvement that can affect susceptibility to influence. One kind of involvement concerns the extent to which the attitudinal *issue* under consideration is of personal importance, whereas a second concerns the extent to which the particular attitudinal *response* adopted is of personal importance to the individual. The first type of importance, which is the type under investigation here, has been called "issue involvement" (Kiesler, Collins, & Miller, 1969), "ego-involvement" (Rhine & Severance, 1970; Sherif, Sherif, & Nebergall, 1965), and "personal involvement" (Apsler & Sears, 1968; Sherif, Kelly, Rodgers, Sarup, & Tittler, 1973). Also, Halverson & Pallak (1978) and Madsen (1978) have argued that typical manipulations of "commitment" (cf. Kiesler, 1971) elevate involvement with an issue.

The second type of involvement is often referred to as "response involvement" (Zimbardo, 1960) or "task involvement" (Sherif & Hovland, 1961). In this second kind of involvement, the attitudinal issue is not particularly important to the person, but adopt-

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ing a position that will maximize the immediate situational rewards is. Thus in some cases response involvement will lead to increased influence (e.g., *Zimbardo, 1960*) and in some cases decreased influence (e.g., *Freedman, 1964*), depending upon which position the rewards favor.

The focus of this paper is on the mechanism mediating the effects of high issue involvement. High issue involvement occurs when an issue has "intrinsic importance" (*Sherif & Hovland, 1961, p. 197*), or "personal meaning" (*Sherif et al., 1973, p. 311*), when people expect the issue "to have significant consequences for their own lives" (*Apsler & Sears, 1968, p. 162*), and when concerns about immediate situational rewards are "dwarfed by outcomes connected with the topic itself" (*Cialdini, Levy, Herman, Kozlowski, & Petty, 1976, p. 664*). Most of the early research indicated that increased issue involvement was associated with increased resistance to persuasion (e.g., *Miller, 1965; Sherif & Hovland, 1961*). The most prominently mentioned explanation for this finding was derived from social judgment theory (*Sherif et al., 1965*). The notion was that on any given issue, highly involved persons should exhibit more negative evaluations of a communication because high involvement is associated with an extended "latitude of rejection" (the attitudinal positions that a person finds unacceptable). Thus, incoming messages on high involvement issues would have an enhanced probability of being rejected because they were more likely to fall within the unacceptable range of a person's implicit attitude continuum (cf. *Eagly & Manis, 1966*).

Contrary to social judgment theory, which seems always to predict greater resistance with increased issue involvement, some investigators have found increased involvement to be associated with greater influence. For example, *Eagly (1967)* presented subjects with information about either themselves (high involvement) or another person (low involvement) that was discrepant in either a favorable or an unfavorable direction from their initial attitudes. She found that although high involvement subjects changed less than low involvement subjects when unfavorable infor-

mation was provided, the former exhibited more change when favorable information was provided. Similarly, *Pallak, Mueller, Dollar, & Pallak (1972)* presented subjects who were either publicly committed (high involvement) or privately committed (low involvement) to their initial attitudes with information that either contradicted their opinions or was consistent but more extreme. They found that involvement increased resistance to the countercommunication but facilitated change toward the position advocated by the extreme consonant message. In order to account for these results, *Pallak et al. (1972)* suggested a modification of the original social judgment model. The new formulation was that high involvement (or commitment) increased the probability of rejecting or contrasting counterattitudinal information but increased the probability of accepting or assimilating proattitudinal information.

These same data may be explained by an alternative view holding that involvement increases the amount of thought in which subjects engage about the stimulus information. When the stimulus information is inconsistent with subjects' original attitudes, it is likely that subjects are motivated and able to generate counterarguments to the material presented. To the extent that increased involvement is associated with more thinking, increased counterargumentation and resistance to influence would be a likely result. On the other hand, when the stimulus information is consistent with subjects' original attitudes, it is likely that they are initially biased toward generating favorable cognitions. To the extent that increased involvement is associated with more thinking here, more favorable thoughts might be generated, and increased influence would result. There is already a large body of literature supporting the view that the idiosyncratic cognitive responses elicited by a communication are an important determinant of the direction and amount of attitude change produced (e.g., *Brock, 1967; Cacioppo & Petty, 1979; Cook, 1969; Insko, Turnbull, & Yandell, 1974; Petty, Wells, & Brock, 1976; Tesser, 1978; etc.*).

It is also important to note that there are already some suggestions in the literature that

increased involvement with a stimulus is associated with more extensive information processing. For example, Rogers, Kuiper, and Kirker (1977) had subjects rate personality adjectives in terms of their self-relevance (high involvement) or semantic, phonemic, and structural properties (low involvement). Adjectives processed under high involvement conditions were subsequently recalled best in an incidental recall test. According to Craik and Lockhart's (1972) "depth of processing" framework, enhanced recall is thought to reflect more extensive processing of the stimulus. More relevant to persuasion situations, Cialdini et al. (1976) found that subjects who expected to engage in a discussion with an opponent generated more supportive thoughts in anticipation of the discussion when the attitude issue was of high rather than low personal relevance. Finally Chaiken (Note 1) and Petty & Cacioppo (1979) have reported that subjects' message-relevant thoughts show higher correlations with message acceptance under high than under low issue involvement conditions.

Two experiments were conducted to test the cognitive response view of the effects of issue involvement. The primary goal of Experiment 1 was to replicate conceptually the Eagly (1967) and Pallak et al. (1972) attitudinal findings; measures of subject-generated cognitive responses were included also to assess the viability of the proposed reformulation of issue-involvement effects. The second experiment was designed to evaluate the two competing explanations of issue-involvement effects, namely, thought enhancement versus the revised social judgment theory formulation. Thus, an experiment was devised for which the two formulations made competing predictions.

### Experiment 1

Most of the early work on issue involvement was conducted by finding existing groups that differed in the extent to which an issue was important, and thus this work was correlational in nature (see Kiesler et al., 1969, for the interpretational problems with this approach). More recent investigators have

chosen to *manipulate* involvement by varying the issue between subjects (e.g., Dean, Austin, & Watts, 1971; Rhine & Severance, 1970). In other words, some subjects would receive a highly involving issue (e.g., increasing tuition), whereas others received an issue of low involvement (e.g., increasing park acreage in a distant city). A preferable procedure that keeps the communication constant across subjects was introduced by Apsler and Sears (1968) and is the method employed here. In this procedure, subjects in both high and low involvement groups receive the same communication, but high involvement subjects are led to believe that the advocated change will affect them, whereas low involvement subjects do not believe the change will have personally relevant effects. In the present study, this was accomplished by telling the college student subjects that a proposed change in university regulations regarding mixed-sex visitation hours was being made at either their university or a distant university. Pilot testing was conducted to develop proattitudinal and counterattitudinal communications. Not surprisingly, advocating more lenient regulations regarding visitation hours was found to be highly proattitudinal, and advocating stricter regulations was highly counterattitudinal. In addition, pilot testing revealed that subjects generated predominantly favorable thoughts to the proattitudinal communication and counterarguments to the counterattitudinal appeal. In Experiment 1 subjects received either a proattitudinal or a counterattitudinal advocacy under conditions of either high or low issue involvement. We predicted that increased involvement would enhance processing of the message contents. As a result of this, we expected both cognitive and affective responses to the two messages to be more extreme under high than under low involvement conditions. More specifically, increased involvement should decrease agreement with the counterattitudinal message but increase agreement with the proattitudinal communication.

### Method

#### Procedure

Twenty-four male undergraduates at the University of Notre Dame participated in order to earn

extra credit in an introductory psychology course. The design was a 2 (High or Low Issue Involvement)  $\times$  2 (Proattitudinal or Counterattitudinal Message Direction) factorial. Subjects were tested individually. Upon arrival, subjects were informed that students in a sound engineering course had prepared the communications that were to be employed in the investigation and that in return for the use of the tapes in other research, the investigators had agreed to provide evaluations of the sound quality of the tapes. The subjects were asked to aid in this endeavor.

Subjects were informed of the topic and position of the communication they were about to hear and 60 sec later were exposed to one of two professionally taped messages. Following exposure to a 2-minute message, subjects completed the dependent variable booklets and were debriefed, thanked, and dismissed.

### *Independent Variables*

*Message direction.* All subjects were exposed to a communication concerning coed visitation hours. The *proattitudinal* advocacy contended that colleges should be more lenient in allowing mixed-sex visitation. Elaborations of the following arguments were employed: (a) More lenient hours would not interfere with education, since the "Educational Examination Foundation" found no correlation between the length of visitation hours and graduate school entrance examination scores; (b) they also found no connection between visitation hours and grade point average; (c) enforcement of the morality inherent in visitation hours fails because morality is not tied to time of day; (d) since college is a period of responsible maturation, the imposition of visitation hours can be counterproductive; and (e) students are able to judge for themselves at what time a party should end. The *counterattitudinal* advocacy contended that colleges should be more strict in their visitation policies. Elaborations of the following arguments were employed: (a) Since the main purpose of going to college is to learn, university officials feel obligated to restrict weekday partying; (b) longer visitation hours have caused a trend away from Christian morals and ideals; (c) the "Educational Examination Foundation" found that the longer the visitation hours at a university, the lower the graduate school entrance examination scores obtained by its students; (d) they also found a negative correlation between visitation hours and grade point average; and (e) young students are not mature enough to handle the social pressures that accompany an increase in visitation hours.

*Issue involvement.* For subjects in the *high involvement* conditions, the speaker advocated that the change in visitation rules go into effect at their own university (Notre Dame). Thus all subjects would be affected personally by the proposal. In the *low involvement* conditions, the speaker advocated that the change in visitation rules go into effect at another university (Juanita Junior College). Thus, none of

the subjects would be affected personally by the proposal. The messages in both involvement conditions were identical except for the words *Notre Dame* and *Juanita Junior College*.

### *Dependent Variables*

*Attitude measures.* On the first page of the dependent variable booklet, subjects read: "Because your own opinion about the position advocated on the tape may influence the way you rate the quality of the tape, we would like to obtain a measure of how you feel about the views proposed by the speaker on each scale below." Two measures of opinion about visitation hours were included. First subjects rated the advocated position on four 9-point semantic differential scales (harmful-beneficial, wise-foolish, good-bad, favorable-unfavorable) that were summed to obtain a general measure of evaluation. Next, subjects responded to an 11-point Likert-type rating scale regarding their agreement with the speaker's position. On the scale, 1 indicated that the subject "did not agree at all," and 11 indicated "agree completely." The subjects' responses to the two attitude measures were converted to standard scores and were averaged for an index of communication acceptance.

*Cognitive response measures.* After completion of the attitude scales, subjects were given 2½ minutes to list the thoughts they had while listening to the tape (cf. Petty & Cacioppo, 1977). Twelve 8-inch (20.32 cm) horizontal lines each about 1 inch (2.54 cm) from the one above created the boxes in which subjects were to write their ideas, one per box. After recording their thoughts, subjects were instructed to rate their ideas as either + (in favor of the advocated position), - (opposed to the advocated position), or 0 (neutral or irrelevant). No independent judges were used to score subjects' thoughts, since previous research has indicated that subjects' and judges' ratings correlate highly (cf. Petty et al., 1976). After rating their thoughts, subjects completed a page of ancillary items regarding the quality of the taped communication and how involving they felt it was.

## *Results and Discussion*

### *Manipulation Checks*

Subjects rated the extent to which they found the communication "involving" on an 11-point scale where 11 indicated "extremely involving." Subjects in the high involvement conditions rated the message as significantly more involving ( $M = 6.67$ ) than subjects in the low involvement conditions ( $M = 4.75$ ),  $F(1, 20) = 5.09$ ,  $p < .03$ , providing support for the effectiveness of the involvement manipulation.

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Table 1  
*Attitudes and Cognitive Responses in Relation to Involvement and Type of Message (Pro or Counter)*

Item	Counterattitudinal message		Proattitudinal message	
	Involvement		Involvement	
	Low	High	Low	High
Attitude	-.39 <sub>a</sub>	-1.79 <sub>b</sub>	.62 <sub>c</sub>	1.57 <sub>d</sub>
Counterarguments	3.00 <sub>ac</sub>	4.00 <sub>a</sub>	2.00 <sub>bc</sub>	.67 <sub>b</sub>
Favorable thoughts	1.33 <sub>ab</sub>	.50 <sub>b</sub>	1.17 <sub>ab</sub>	3.17 <sub>a</sub>

*Note.* Means in any given row without a common subscript are significantly different at the .05 level by the Newman-Keuls procedure.

The mean score on the standardized attitude index for subjects hearing the counterattitudinal advocacy was  $-1.10$ , which differed significantly from the mean score of  $1.10$  for subjects hearing the proattitudinal message,  $F(1, 20) = 35.33$ ,  $p < .001$ . An average of 3.5 counterarguments was generated to the counterattitudinal message, whereas an average of only 1.3 counterarguments was generated to the proattitudinal message,  $F(1, 20) = 15.09$ ,  $p < .001$ . An average of 2.2 favorable thoughts was generated to the proattitudinal message, whereas only .9 favorable thoughts were generated to the counterattitudinal message,  $F(1, 20) = 3.5$ ,  $p < .07$ . The attitude and cognitive response data provide support for the notion that the two communications differed in the agreeableness of their positions.

#### *Tests of Hypotheses*

The attitude and cognitive response data are presented in Table 1. It was expected that involvement would decrease the effectiveness of the counterattitudinal message but increase the effectiveness of the proattitudinal message. A significant Involvement  $\times$  Message interaction on the attitude index provided support for this hypothesis,  $F(1, 20) = 10.14$ ,  $p < .005$ . A Newman-Keuls analysis revealed that increased issue involvement increased agreement with the proattitudinal message but decreased agreement with the counterattitudinal advocacy (see Table 1).

Similar Involvement  $\times$  Message interactions on the cognitive response measures pro-

vided support for the information-processing interpretation of involvement effects: counterarguments  $F(1, 20) = 4.36$ ,  $p < .05$ ; favorable thoughts  $F(1, 20) = 4.42$ ,  $p < .05$ . Newman-Keuls analyses of these interactions (Table 1) revealed that under high involvement subjects generated more favorable thoughts and fewer counterarguments to the proattitudinal advocacy than to the counterattitudinal one; under low involvement, however, neither the number of favorable thoughts nor the number of counterarguments was affected by message direction. Surprisingly, there was a tendency for subjects hearing the proattitudinal message under low involvement to generate more counterarguments than did subjects hearing the same message under high involvement. Postexperimental interviews with subjects suggested that this effect may have resulted from subjects' jealousy over having such a desirable effect (leniency in visitation hours) occur at an institution other than their own.

The analyses of the several ancillary measures on tape quality revealed one significant effect. Subjects rated the speaker's voice quality as higher in the high involvement conditions than in the low,  $F(1, 20) = 6.68$ ,  $p < .05$ . This effect was obtained regardless of whether the speaker advocated a proattitudinal or a counterattitudinal position and is puzzling, since both high and low involvement subjects heard identical tapes (except for the spliced insertion of the name of the appropriate university). A possible explanation for this finding may be that subjects wanted to

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give the tapes higher quality ratings when they were prepared by students at their own institution than when they were prepared at another school.

### Experiment 2

Although the cognitive response data from Experiment 1 provide support for the notion that increasing involvement increases the thinking that subjects engage in about an attitudinal issue, the attitude data could just as easily be explained by the revised social judgment formulation. Thus, subjects may have assimilated the proattitudinal information, producing acceptance, and contrasted the counterattitudinal information, producing resistance. According to the Pallak et al. (1972) formulation, the key determinant of whether involvement will facilitate or hinder persuasion is the extent to which the information provided appears to contradict the subject's initial position. When the information advocates a position opposite to that of the subject, involvement will decrease persuasion, but involvement "facilitates change toward a more extreme attitude in response to appeals which do not explicitly reject one's own position" (Pallak et al., 1972, p. 434).

According to the cognitive response view espoused here, the position advocated in the communication is not as important as the nature of the thoughts elicited by the message. Two counterattitudinal communications were constructed specifically for Experiment 2. Both messages argued that seniors be required to pass a comprehensive exam in their declared major before being granted a degree. Previous work has indicated that this position is strongly counterattitudinal for most college students (Petty & Cacioppo, 1977). The messages differed, however, in their presentation of eight key arguments. One message was designed to contain points that were logically sound, defensible, and compelling. The arguments in this message were selected from a pool that elicited predominantly favorable thoughts in a pretest. A second message was designed to be more open to refutation and skepticism. The arguments in this message were selected from a pool that elicited predominantly counterarguments in a pretest.

Given that the messages advocated an identical counterattitudinal position, but differed in the quality of the arguments used to support that position, it becomes possible to evaluate the two explanations of the effects of issue involvement. The modified social judgment formulation, as outlined by Pallak et al. (1972), predicts that increased issue involvement will produce decreased persuasion for both messages, since each message adopts an identical position in opposition to the subjects.<sup>1</sup>

The cognitive response hypothesis, on the other hand, predicts that increased issue involvement will be associated with decreased persuasion only for the message containing "counterarguable" arguments. For the message containing the compelling and difficult-to-counterargue arguments, increased involvement should be associated with increased persuasion. In other words, increased involvement motivates subjects to process the information contained in the communications more carefully. Thus, although high involvement may initially increase a subject's motivation to reject a counterattitudinal advocacy, subjects should ultimately better recognize the flaws in the weak communication and the virtues in the strong one.

In sum, the following predictions were made for Experiment 2. More counterarguments would be generated to the weak than to the strong communication, but more favorable thoughts would be generated to the strong message. There would be significant Arguments  $\times$  Involvement interactions on the attitude and cognitive response measures. As in Experiment 1, it was predicted that both cognitive and affective responses to the two messages would be more polarized under high than under low involvement conditions.

<sup>1</sup> Alternatively, it might be predicted that involvement would increase resistance more for the message containing the compelling rather than the weak arguments, since this message might be viewed as taking a stronger stand against one's own position (Klein-hesselink & Edwards, 1975). In any case, the modified social judgment formulation expects increased involvement to be associated with decreased persuasion for both messages.



### Method

#### Procedure

Seventy-two male and female undergraduates at the University of Missouri participated in order to earn extra credit in an introductory psychology course. The design was a 2 (High or Low Issue Involvement)  $\times$  2 (Strong or Weak Argument Quality) factorial. Subjects were run in groups of 4 to 12 in cubicles constructed so that no subject could have visual or verbal contact with any other subject. During any one session, all four experimental conditions were run. Upon arrival at the laboratory, subjects were told that each year the psychology department assists the school of journalism in evaluating radio editorials that are sent in by colleges and universities throughout the country; their task would be to provide ratings of the quality of the editorials. Following these instructions, subjects heard one of the taped communications over headphones. After listening to the appropriate 4-minute communication and completing the dependent variable booklets, subjects were debriefed, thanked, and dismissed.

#### Independent Variables

**Argument quality.** As noted previously, all subjects heard a communication advocating that seniors be required to pass a comprehensive exam in their declared major prior to graduation. In brief, the *strong version* of the message provided evidence (statistics, relevant studies, etc.) in support of the following arguments: (a) Prestigious universities have comprehensives to maintain academic excellence, (b) institution of the exams has led to a reversal in the declining scores on standardized achievement tests, (c) graduate and professional schools show a preference for undergraduates who have passed a comprehensive exam, (d) average starting salaries are higher for graduates of schools with the exams, (e) schools with the exams attract larger and more well-known corporations to recruit students for jobs, (f) the quality of undergraduate teaching has improved at schools with the exams, (g) state legislatures would increase financial support if exams were instituted, allowing a tuition increase to be avoided, and (h) the (fictitious) National Accrediting Board of Higher Education would give the university its highest rating if the exams were instituted.

The *weak version* of the message also contained 8 arguments but relied more on quotations and opinions than on statistics and data to support the following arguments: (a) Adopting the exams would allow the university to be at the forefront of a national trend, (b) graduate students have complained that since they have to take comprehensives, undergraduates should take them also, (c) by not administering the exams, a tradition dating back to the ancient Greeks was being violated, (d) parents had written to administrators in support of the plan, (e) the exams would increase student fear and anxiety

enough to promote more studying, (f) the exams would help to cut costs by eliminating the necessity for other tests that varied with instructor, (g) the exams would allow students to compare their performance with students at other schools, and (h) job prospects might be improved.

**Issue involvement.** Involvement was manipulated in a manner analogous to that employed in Experiment 1. For subjects in the *high involvement* conditions, the speaker advocated that the comprehensive exams be instituted at the University of Missouri (the subjects' institution), whereas for *low involvement* subjects, the speaker advocated that the exams be instituted at North Carolina State University.

#### Dependent Variables

The same measures were available as in Experiment 1. Subjects rated the concept "comprehensive exams" on four 9-point semantic differential scales and then responded to an 11-point Likert-type scale regarding their agreement with the speaker's position. As in Experiment 1, responses to the two attitude measures were converted to standard scores and were averaged to form the measure of communication acceptance.

Next, subjects were given 2½ minutes to list the thoughts they had while listening to the tape. Subjects also rated their thoughts with a +, -, or 0, as described for Experiment 1. In addition, some ancillary questions about the quality of the tape were completed, and subjects were asked to rate the amount of thought they engaged in about the issue. Finally, subjects were given 3 minutes to attempt to list as many message arguments as they could remember. Each booklet was rated by two judges ( $r = .88$ ) who were blind to the involvement manipulation. An argument had to correctly summarize one of the arguments that appeared in the appropriate message to be counted. Repetitions of the same argument were not counted. Disagreements between judges were resolved through discussion.

### Results

#### Manipulation Checks

In order to determine whether our manipulation of involvement affected the amount of message processing subjects engaged in, subjects were asked to rate on an 11-point scale (1 indicated *not very much* and 11 indicated *very much*) how much thought they put into evaluating what the speaker had to say. Subjects in the high involvement conditions reported doing more thinking about the messages ( $M = 8.6$ ) than subjects in the low involvement cells reported ( $M = 7.75$ ),  $F(1, 68) = 2.75$ ,  $p < .05$ , one-tailed. These data support the view that the involvement manip-

ulation affected the hypothesized mediating variable. In other words, increasing the personal relevance of an advocacy affected the perceived amount of thought subjects engaged in about that advocacy.

Analyses of the attitude and cognitive response measures indicated that the manipulation of message quality was also effective. The mean score on the standardized attitude index for subjects hearing the strong arguments was .45, which differed significantly from the mean score of  $-.45$  for subjects hearing the weak arguments,  $F(1, 68) = 21.65, p < .001$ . An average of 2.19 favorable thoughts was generated to the strong arguments, whereas only .99 were generated to the weak arguments,  $F(1, 68) = 15.19, p < .001$ . An average of 2.69 counterarguments was generated to the weak message, whereas 1.69 were generated to the strong message,  $F(1, 68) = 8.36, p < .005$ . The attitude and cognitive response data provide support for the notion that the two communications differed in the strength of their arguments.

#### Tests of Hypotheses

The attitude and cognitive response data are presented in Table 2. A significant Arguments  $\times$  Involvement interaction on the attitude index,  $F(1, 68) = 5.62, p < .02$ , and a Newman-Keuls analysis (Table 2) provided support for the hypothesis that involvement would increase the persuasiveness of the strong arguments but would decrease the persuasiveness of the weak arguments.

Involvement  $\times$  Arguments interactions on the cognitive response measures also provided

support for the information-processing interpretation of involvement effects: counterarguments  $F(1, 68) = 7.46, p < .008$ ; favorable thoughts  $F(1, 68) = 4.35, p < .04$ . A Newman-Keuls analysis on each of these measures (Table 2) revealed that under high involvement, subjects generated more favorable thoughts and fewer counterarguments to the strong than to the weak arguments; under low involvement, neither favorable thoughts nor counterarguments were affected by the argument quality manipulation. The Newman-Keuls analyses further demonstrated that higher involvement increased the production of counterarguments to the weak arguments and increased the production of favorable thoughts to the strong arguments.

Analyses of the ancillary measures of tape quality produced no significant differences. No significant effects were obtained on the number of arguments that subjects could recall either, although—consistent with the “depth of processing” notion—there was a slight tendency for high involvement subjects to recall more arguments ( $M = 3.75$ ) than did low involvement subjects ( $M = 3.2$ ),  $F(1, 68) = 2.07, p < .15$ . The interaction on this measure did not approach significance ( $p > .25$ ).

#### Correlational Analyses

Table 3 presents the correlations among the attitude and cognitive response measures separately for high and low involvement subjects. The pattern of correlations indicates that message-relevant cognitive responses are better predictors of attitude change under high than

Table 2  
*Attitudes and Cognitive Responses in Relation to Involvement and Quality of Message Arguments*

Item	Weak arguments		Strong arguments	
	Involvement		Involvement	
	Low	High	Low	High
Attitude	$-.24_a$	$-.67_b$	.20 <sub>c</sub>	.71 <sub>d</sub>
Counterarguments	2.11 <sub>a</sub>	3.28 <sub>b</sub>	2.05 <sub>a</sub>	1.33 <sub>a</sub>
Favorable thoughts	.88 <sub>a</sub>	1.11 <sub>a</sub>	1.44 <sub>a</sub>	2.94 <sub>b</sub>

Note. Means in any given row without a common subscript are significantly different at the .05 level by the Newman-Keuls procedure.

Table 3  
*Correlations Among Attitude and Cognitive Responses for High and Low Involvement Conditions*

Item	Low involvement			High involvement		
	Counter-arguments	Favorable thoughts	Recall	Counter-arguments	Favorable thoughts	Recall
Attitude	-.22	.35*	.01	-.73**	.64**	.19
Counterarguments	—	-.26	.09	—	-.51**	.02
Favorable thoughts	—	—	.06	—	—	.10

\*  $p < .05$ . \*\*  $p < .001$ .

under low involvement conditions. This replicates the findings of Chaiken (Note 1) and Petty & Cacioppo (1979) and is consistent with the view that high involvement increased the importance of message processing in producing persuasion. The ability to recall message arguments did not allow any reliable prediction.<sup>2</sup>

#### Discussion

The pattern of data in both experiments provides strong support for the cognitive response view of the effects of increased issue involvement on persuasion. The results of both experiments contradicted the original social judgment theory formulation (Sherif et al., 1965), which proposed that increased involvement would invariably reduce persuasion. In addition, the results of Experiment 2 extended the Pallak et al. (1972) formulation, which limited the persuasion-facilitating effects of increased issue involvement to extreme consonant messages. Experiment 2 demonstrated that increased involvement could lead to increased persuasion for a counterattitudinal advocacy if the arguments were sufficiently compelling. This suggests that it is not the direction of the advocacy (proattitudinal or counterattitudinal) that is important, but rather the nature of the cognitive responses elicited.

Of course it is likely that proattitudinal advocacies will generally elicit favorable thoughts, whereas counterattitudinal advocacies will elicit primarily counterarguments, but this will not always be the case. Recent research has demonstrated the feasibility of constructing communications that take pro-

attitudinal positions but employ arguments that elicit primarily counterarguments, and messages that take counterattitudinal positions but elicit primarily favorable thoughts (cf. Petty et al., 1976). The latter was also accomplished in the present investigation and allowed a strong empirical test of the hypothesis of interest.

It is also important to note that the attitudinal effects of issue involvement do not appear to be mediated by enhancing recall of the message arguments. Although high involvement did tend to increase argument recall for both the strong and weak messages in Experiment 2, high involvement increased persuasion for the strong message but decreased persuasion for the weak one. Also, consistent with previous research (e.g., Cacioppo & Petty, 1979; Insko, Lind, & LaTour, 1976; etc.), the within-cell correlations failed to substantiate a relationship between learning and persuasion.

The most compelling explanation for the present data appears to be that increased involvement enhances the importance of message content in producing persuasion. If the message content elicits primarily counterarguments, then increased involvement will tend to enhance the production of thoughts unfavorable to the advocacy and will result in decreased agreement; but if the message content elicits primarily favorable cognitions,

<sup>2</sup> Similar within-cell correlations among attitudes and cognitive responses were available for Experiment 1. The only significant correlation (based on an  $N$  of only 12) was between favorable thoughts and attitudes within the high involvement groups ( $r = .58, p < .05$ ). Message recall was not assessed in the first study.

then involvement will tend to enhance these positive thoughts and will result in increased agreement. The correlational data from Experiment 2 further corroborated the view that increased involvement enhances the importance of message-based cognitions in producing persuasion. The correlations between attitudes and cognitive responses were substantially greater under high than under low involvement conditions.

The finding that increased involvement enhances the importance of message factors in producing persuasion may explain the previously confusing finding that sources of high and low credibility produce differential persuasion under low but not under high involvement conditions (e.g., Johnson & Scileppi, 1969; Rhine & Severance, 1970). The present analysis suggests that nonmessage cues such as the expertise or attractiveness of a source should have maximal impact when persuasion is not tied to an extensive processing of the message content, as when a message is on a topic of low involvement. On the other hand, characteristics of the message content should have maximal impact under high involvement conditions. This analysis suggests that low involvement persuasion situations may be governed by what cognitive psychologists have called "automatic processing," whereas high involvement persuasion situations may be governed more by "controlled processing" (Atkinson & Shiffrin, 1968; LaBerge, 1975; Schneider & Shiffrin, 1977; Shiffrin & Schneider, 1977). Under the former situations, message acceptance would be determined more by a well-practiced script such as "Experts are to be believed" (cf. Abelson, 1976; Langer, 1978), whereas under the latter situations message acceptance would be determined more by a subject's attention to and processing of the message content. In support of this conjecture, Chaiken (Note 1) reported that subjects were more affected by the number of arguments employed in a message under high than under low involvement conditions but were more affected by source attractiveness under low than under high involvement conditions.

At least two important questions about involvement remain unaddressed by the present

research. One concerns *why* increased involvement should facilitate information processing. A possible explanation may reside in recent research indicating that information with self-relevance is processed more quickly than non-self-relevant information. For example, Markus (1977) argued that subjects have a more extensively developed "schema" or cognitive structure for self-relevant information and that this schema facilitates processing.

Another important question concerns the limitations on increased issue involvement facilitating processing. We suspect that there are circumstances where involvement may be so high, as when an issue is intimately associated with certain central values (cf. Ostrom & Brock, 1968), that processing will terminate in the interest of self-protection. This level of involvement was not reached in the present investigation, even though the message advocated a change in university policy that, if implemented, might have prevented many students from obtaining their degrees. Thus, within a normal range of involvement, increased issue importance appears to be associated with increased message processing. This enhanced processing will most likely lead to reduced persuasion when a message presents weak arguments (i.e., arguments that are open to refutation and counterargumentation), and to enhanced persuasion when a message presents particularly good arguments for which subjects have no readily available counterarguments (and thus favorable thoughts will predominate).

#### Reference Note

1. Chaiken, S. *Use of source and message cues in persuasion*. Paper presented at the meeting of the American Psychological Association, Toronto, Canada, August 1978.

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