

Cognitive Processing and the Functional Matching Effect in Persuasion: The Mediating Role of Subjective Perceptions of Message Quality

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In two experiments, we examined the hypothesis that subjective perceptions of message quality mediate the functional matching effect in persuasion. In Experiment 1, participants whose attitudes and behaviors serve primarily a value-expressive function (i.e., low self-monitors) or a social-adjustive function (i.e., high self-monitors) were exposed to persuasive messages that contained value-expressive, social-adjustive, or both types of arguments in favor of voting. Functionally-relevant messages (i.e., the social-adjustive message for high self-monitors and the value-expressive message for low self-monitors) produced enhanced perceptions of message quality and persuasiveness, more positive attitudes, and more message-related behavior than functionally nonrelevant messages. Functionally mixed messages were generally more effective than messages containing only functionally nonrelevant arguments, but less effective than messages containing only functionally relevant arguments. Path analyses indicated that the influence of functional relevance on attitudes and behavior was significantly mediated by subjective perceptions of the quality of the message. In Experiment 2, we exposed participants to a functionally relevant or nonrelevant voting appeal five days before a presidential election. Results

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replicated those of Experiment 1; functionally relevant messages produced more favorable attitudes, and this effect was mediated by enhanced perceptions of message quality. Finally, postmessage attitudes exerted a significant influence on whether participants voted in the election, and this effect was mediated by voting intentions. Discussion focuses on the subjective nature of message evaluation and on the cognitive processes underlying the functional matching effect in persuasion. © 1996 Academic Press, Inc.

Increasingly, attitude researchers have been devoting empirical attention to motivational factors underlying persuasion (DeBono, 1987; Haugtvedt & Petty, 1992; Mackie & Worth, 1989; Petty, Schumann, Richman, & Strathman, 1993). The most enduring of motivational issues concern the types of psychological benefit that people may derive from holding and expressing their attitudes. Classic functional theories (e.g., Katz, 1960; Smith, Bruner, & White, 1956) as well as more recent motivational taxonomies of social behavior (Chaiken, Liberman, & Eagly, 1989; Herek, 1986; Snyder, 1992; Thomsen, Borgida, & Lavine, 1995) suggest that attitudes may be instrumental in the attainment of a variety of psychological goals, such as defending the self from intrapsychic conflict, expressing important attributes of one's identity, obtaining social rewards and avoiding social sanctions, and gaining accurate knowledge about the social world. Within the attitude change context, a functional analysis proposes that persuasive communications should be successful to the extent that they directly address the psychological motivation(s) underlying the targeted attitude (*the functional matching effect*; DeBono, 1987; DeBono & Harnish, 1988; Herek, 1986; Katz, 1960; Prentice, 1987; Shavitt, 1989, 1990; Snyder & DeBono, 1985, 1989).

By delineating the conditions under which persuasive messages will induce attitude change (i.e., when the content of a message is addressed to the function that the attitude serves), the functional approach is primarily directed to the question of *when* persuasive messages will be effective. As well, the functional approach provides an explanation of the underlying motivational dynamics of *why* such changes occur (i.e., to obtain the desired psychological benefit conferred by holding and expressing the recommended attitude). Importantly, however, the logic of the functional approach's matching hypothesis does not fully address the question of *how* such motivational appeals influence attitudes and behavior; in fact, the cognitive processes that mediate the functional matching effect are not yet well-understood. A more complete understanding of the functional dynamics underlying persuasion would therefore benefit from an examination of such processes. It is to this mediational question of cognitive process that the present research seeks to provide an answer.

According to a functional analysis, attitudes are formed and maintained because of their influence in providing the person with various forms of desired instrumental and/or expressive psychological benefit (e.g., Herek, 1986; Prentice, 1987; Shavitt, 1990; Snyder & DeBono, 1989). For example, using an object-centered approach, Shavitt (1990) has shown that attitudes toward air conditioners and coffee serve a utilitarian function because they are "intrinsically associated with rewards and punishments" (p. 129), whereas attitudes toward objects

such as a wedding ring and the American flag primarily serve a social identity function because they are “commonly considered as symbols of identity and values, or . . . represent social classifications or reference groups” (p. 129).

Beyond their well-established motivational importance, however, attitude functions should also influence cognitive structure and process. For example, attention and thought should be directed toward function-relevant (as opposed to function-irrelevant) attributes of the attitude object. Thus, a person with a value-expressive attitude should be especially interested in attending to and thinking about the object’s value-related qualities, whereas a person with a social-adjustive attitude should be more interested in attending to and thinking about the object’s image-related or normative qualities (e.g., DeBono, 1987, Study 1; DeBono & Harnish, 1988; DeBono & Packer, 1991; McBride & Lavine, 1996). Similarly, attitude functions should influence the content of the supporting cognitive structures within which attitudes are embedded. For example, the cognitive structures associated with utilitarian attitudes should include information about the tangible costs and benefits of the attitude object; in contrast, the cognitive structures associated with value-expressive attitudes should contain information about the perceived influence of the attitude object for the attainment of cherished values (Eagly & Chaiken, 1993, p. 151; Pratkanis & Greenwald, 1989).

Recognizing the relevance of an attitude’s functional basis to the content of its supporting cognitive structure may provide an important clue to understanding the mediating cognitive processes through which functionally relevant persuasive messages influence attitudes and behavior. Specifically, research indicates that the content of cognitive structures can bias the evaluation of externally provided information in a structure-consistent manner (e.g., Cacioppo, Petty & Sidera, 1982; Pomerantz, Margolies, & Chaiken, 1993; Lord, Ross, & Lepper, 1979; Sherif & Hovland, 1961). For example, Pomerantz et al. (1993) found that attitudes associated with consistent underlying belief structures were particularly likely to influence the evaluation of information related to the issue in an attitude-consistent fashion (see also Houston & Fazio, 1989; Lord et al., 1979). Within the persuasion domain, Cacioppo et al. (1982) found that message recipients’ self-schemas biased their judgments of the persuasiveness of a message in a schema-consistent manner, such that recipients with a religious (legalistic) self-schema judged religious (legalistic) message arguments to be more persuasive than schema-irrelevant message arguments. Cacioppo et al. proposed that recipients’ self-schemas “. . . serve as a subjective theory that biases the assimilation of the message arguments; . . . that messages consistent with self-schemas . . . may guide a filling-in, or strengthening, of the arguments presented, therefore leading to the perception of the message being more persuasive; . . . and that recipients act *subjectively* rather than objectively rational when responding cognitively and evaluating a persuasive communication” (p. 328, italics original).

This research provides a theoretical vantage point from which to understand the cognitive processes mediating the functional matching effect in persuasion. Specifically, if the contents of the knowledge structures within which attitudes are

embedded systematically bias recipients' evaluations of the persuasiveness of the message arguments, those arguments that contain functionally relevant information—and therefore make direct contact with the contents of the attitude's supporting structure—should be perceived as more valid and more persuasive than messages that contain functionally-irrelevant information. That is, the functional matching effect in persuasion is likely to be mediated by recipients' subjective perceptions of the quality and persuasiveness of the message content. Thus, message recipients with value-expressive attitudes are principally concerned with an attitude's expressive benefit in facilitating value attainment; therefore, message arguments that directly link the recommended attitude to value attainment should be perceived as relatively more persuasive and valid than message arguments that link the recommended attitude to the mediation of one's social relationships. In contrast, message recipients with social-adjustive attitudes are principally concerned with how other people view the attitude object; therefore, message arguments that link the recommended attitude to the facilitation of one's social relationships should be perceived as relatively more persuasive and valid than message arguments that link the recommended attitude to the facilitation of value-related goals. In essence, then, we propose that the functional match of a persuasive message should directly influence the recipient's perceptions of message validity and persuasiveness, which in turn should influence postmessage attitudes and behavior.^{1,2}

However, there is little extant evidence that persuasive messages containing functionally relevant content enhance the perceived quality of the message arguments. In one indirectly relevant study, however, DeBono and Harnish (1988) found that recipients exhibited more favorable cognitive responses to a strongly argued message when it was communicated by a functionally relevant message source (i.e., an attractive source for high self-monitors; an expert source for low self-monitors) than when the identical message content was communicated by a

¹ Consistent with dual-process models of persuasion (e.g., Chaiken, Liberman, & Eagly, 1989; Petty & Cacioppo, 1986), this hypothesis depends on message recipients' ability and willingness to process the message arguments. In the present research, we employed a message topic of some relevance to participants (voting in local and national elections), and did not impede their processing ability in any manner (e.g., through distraction).

² In addition to biasing message recipients' perceptions of message quality, functionally relevant messages may also heighten processing motivation because they impinge more strongly on the recipient's relevant needs and goals than do functionally nonrelevant messages (DeBono, 1987; Study 1; DeBono & Harnish, 1988). For example, an attitude held because of its instrumentality in bringing about important values is likely to serve the value-expressive function as well as induce self-relevance based on the attitude's linkage to important values (Eagly & Chaiken, 1993; Thomsen et al., 1995). Similarly, an attitude held because of its utility in mediating an individual's social relationships is likely to serve the social-adjustive function as well as induce self-relevance based on the attitude's linkage to impression management goals. In the present research, we are particularly concerned with the *valence* of individuals' message-related evaluations and elaborations rather than their *amount*; therefore our research was specifically directed toward evaluating the bias hypothesis (for evidence that functionally relevant messages may heighten processing motivation, see DeBono, 1987; DeBono & Harnish, 1988; Petty & Wegener, 1996).

functionally irrelevant source (see also DeBono & Telesca, 1990). Providing somewhat more suggestive evidence, Snyder and DeBono (1985, Study 1) found that functionally relevant consumer advertisements (i.e., image-oriented ads for high self-monitors; product quality ads for low self-monitors) led to more favorable reactions to structured questions about the message (e.g., "Overall, which ad do you think is better?"). However, these studies did not evaluate the mediational role that such responses play in linking functionally relevant messages to postmessage attitudes and behavior.

Beyond the question of mediating process, we wished to explore an additional issue of both theoretical relevance and practical import concerning the effects of persuasive communications that simultaneously invoke multiple functions. For example, during the 1992 presidential election the Music Television Network (MTV) presented numerous public service announcements produced by the Rock the Vote organization emphasizing both social-adjustive and value-expressive considerations for voting. These messages stressed the importance of expressing one's devotion to living in a democracy (a value-expressive argument) while at the same time implying that voting was the popular thing to do (a social-adjustive argument). Little is known about the influence of functionally mixed messages on persuasion because previous researchers (e.g., DeBono, 1987; Prentice, 1987; Shavitt, 1990; Snyder & DeBono, 1985) have exposed recipients to functionally pure messages, that is, messages targeted to a single type of psychological benefit to be derived from adopting and expressing the recommended attitude. As a practical matter, functionally mixed messages may be particularly efficient for targeting diverse audiences whose attitudes serve different functions. Therefore, to assess the cognitive, attitudinal and behavioral responses produced by functionally mixed messages, we presented some participants with a message containing both value-expressive and social-adjustive arguments while other participants received functionally "pure" messages containing only value-expressive or social-adjustive arguments.

ASSESSING ATTITUDE FUNCTIONS: AN INVESTIGATIVE STRATEGY

In our research, we employed an investigative strategy for identifying attitude functions suggested by Snyder and Ickes (1985). From the standpoint of this strategy, psychological processes can be meaningfully understood by studying those individuals who characteristically exhibit those processes. Thus, to determine whether attitudes and behavior can function as an expression of personal values, this strategy advocates that we should identify and study those people who consistently seek to express their values. Similarly, if we wish to know whether attitudes and behavior can serve a social-adjustive function, we should identify and study those people who consistently attempt to monitor and regulate their behavior in order to fit in with their social environments.

Snyder and DeBono (1985, 1989; see also DeBono, 1987; DeBono & Harnish, 1988; DeBono & Telesca, 1990) have suggested that people who differ in their

self-monitoring propensities (Snyder, 1974, 1979, 1987) systematically differ in the functions that underlie their attitudes. Self-monitoring refers to the relative extent to which people actively monitor and regulate their interpersonal behavior on the basis of situational and dispositional sources of information. The interpersonal behavior of high self-monitors (those who score high on the Self-Monitoring Scale [Snyder, 1974]) is guided by the desire to fit into the various social situations of their lives; that is, the high self-monitor seeks to be the person called for by the situation. In contrast, the interpersonal behavior of low self-monitors (those who score low on the Self-Monitoring Scale) is not guided by the desire to fit into their social situations. Instead, the behavior of low self-monitors is principally guided by the desire to express their own inner dispositions, including their personal values, attitudes, and affective states. Low self-monitors seek to be “themselves” across diverse situations.

If the behavior of low self-monitors is characteristically motivated to express important identity attributes, the attitudes and behaviors of low self-monitors may be especially likely to serve the value-expressive function. In contrast, if the behavior of high self-monitors is regulated and monitored according to its social appropriateness, the attitudes and behaviors of high self-monitors are especially likely to serve the social-adjustive function.

OVERVIEW OF THE PRESENT RESEARCH

To evaluate the hypothesis that enhanced perceptions of message quality mediate the functional matching effect, we created persuasive messages emphasizing the value-expressive or social-adjustive psychological benefits that result from voting in local and presidential elections.³ The desire to express one’s core values and the desire to fit into one’s social circumstances are among the functions

³ The *value-expressive* message argued that voting provides a way for people to express their support for such values as freedom, liberty, and living in a democracy. This message also held that voting affords the opportunity to put into action one’s attitudes and beliefs about the issues and the candidates. In contrast, the *social-adjustive* message informed participants that a majority of their peers were planning to vote in an upcoming mayoral election, and that the act of voting enhances a person’s status, popularity, and attractiveness (complete transcriptions of the messages are available from the authors). To assess the construct validity of the messages, we presented either the value-expressive or the social-adjustive message (along with the Self-Monitoring Scale) to 28 undergraduate participants. Participants also completed four items assessing the extent to which the message emphasized value-expressive considerations (value-expressive items), and four items assessing the extent to which the message emphasized social-adjustive considerations (social-adjustive items). All eight items used 9-point scales, where higher numbers indicated greater perceived value-expressive or social-adjustive emphasis. Results of a 2 (Self-Monitoring) \times 2 (Message Type) \times 2 (Item Type: value-expressive items vs social adjustive items) mixed effects analysis of variance with repeated measures on the last factor revealed only the expected Message Type \times Item Type interaction, $F(1, 17) = 37.44, p < .001$. Contrasts revealed that participants exposed to the value-expressive message rated the message as containing more value-expressive ($M = 6.82$) than social-adjustive ($M = 4.73$) content, $t(10) = 4.75, p < .001$, and that participants exposed to the social-adjustive message rated the message as containing more social-adjustive ($M = 6.60$) than value-expressive ($M = 4.58$) content, $t(9) = 4.39, p < .001$.

that voting-related attitudes and behavior are likely to serve. Attitudes and behavior related to voting are well-positioned to serve the value-expressive function, since seeking out voting-related information and actually voting may provide an opportunity to express one's core values (e.g., voting may serve to symbolize one's devotion to the principle of living in a democracy). Attitudes and behavior serving the value-expressive function may also enable voters to express their attitudes toward the candidates and toward salient campaign issues. In contrast, attitudes serving a social-adjustive function fulfill a person's need to fit into and to reap rewards from one's social situations. Because voting is generally perceived to be highly desirable, such behavior should allow a person to manage his or her public image. Attitudes and behavior related to voting would thus serve a social-adjustive function if they were motivated by self-presentational goals.

If this reasoning holds, it should be possible to persuade high and low self-monitors to engage in voting-related behavior by using persuasive strategies that systematically appeal to each of these potential motivational bases for voting. Specifically, we examined whether low and high self-monitors would respond differentially to value-expressive and social-adjustive messages emphasizing the importance of voting. In Experiment 1, we also included a mixed message that contained message arguments of both types, and compared the influence of this message to that of functionally "pure" value-expressive and social-adjustive messages on cognitive responses and structured perceptions of message quality, attitudes toward voting, and voting-related behavior. To examine the mechanisms underlying the functional matching effect, we assessed the extent to which the favorability of recipients' thoughts in response to the message (cognitive responses and structured perceptions of message quality) mediated the influence of functional relevance on post-message attitudes and behavior. We predicted that functionally relevant messages would lead to more positive attitudes and more voting-related behavior than nonrelevant messages and that this effect would be mediated by recipients' perceptions of message quality.

To investigate the functional matching hypothesis and the cognitive mediation of the functional matching effect, we conducted two experiments; in each case, attitudes and behavior related to voting served as the message topic. In Experiment 1, we used as a behavioral measure participants' decisions of whether or not to complete a form to obtain a "voter information guide" in the mail. In Experiment 2, we replicated and extended Experiment 1 using a different and more consequential behavioral measure (participants' decisions of whether or not to vote in an actual presidential election) and increased the time interval between message exposure and behavior from 45 min to 5 days.

EXPERIMENT 1

To evaluate whether differences in perceived message quality mediate the functional matching effect, we employed two indicators of participants' evaluations of the quality of the message. First, we used a thought-listing procedure to elicit the favorability of participants' message- and topic-relevant responses (e.g.,

Brock, 1967; Greenwald, 1968; Mackie & Worth, 1989; Petty & Cacioppo, 1979). Second, we asked participants to directly rate the quality of the message (Cacioppo et al., 1982; Snyder & DeBono, 1985).

Hypotheses

Evaluations of Message Quality

We expected that functionally relevant messages (i.e., the value-expressive message for low self-monitors and the social-adjustive message for high self-monitors) would lead to more *favorable* message- and topic-related cognitive responses and more favorable perceptions of message quality than would functionally nonrelevant messages.

Attitudes

We also hypothesized that functionally relevant messages would produce more favorable voting-related attitudes than would functionally nonrelevant messages.

Behavior

In addition, we hypothesized that functionally relevant messages would be more likely than functionally nonrelevant messages to induce voting-related behavior. To make an informed voting decision, a potential voter must acquire relevant information about the candidates, such as their positions on important issues, party affiliations, previous relevant experience, accomplishments, and so on. If functionally relevant messages produce more positive perceptions of message quality, recipients should be more likely to engage in message-congruent behavior (requesting a “voter information guide”) when they are exposed to a functionally relevant than a functionally nonrelevant message.

Cognitive Mediation of the Functional Matching Effect

Our main prediction related to the cognitive mediation of the functional matching effect. Here, we predicted that recipients’ perceptions of message quality (as indexed by recipients’ message- and topic-related cognitive responses and structured perceptions of message quality) would mediate the influence of functionally-relevant messages on post-message attitudes and behavior.

Method

Participants

Two hundred fifty-four students ($n = 143$ women; $n = 111$ men) at the University of Minnesota participated in the study for extra credit in their introductory psychology course. Scores on the 25-item Self-Monitoring Scale (Snyder, 1974) permitted a classification of these students as high self-monitors (scores > 13 ; $n = 97$) and low self-monitors (scores < 11 ; $n = 85$).

Procedure

Students participated in groups, with each participant completing a booklet, working at his or her own pace. The booklet contained the message manipulation and relevant dependent measures. Each participant was randomly assigned to one of three different versions of the booklet that contained one

of the three message conditions (value-expressive, social-adjustive, or mixed). After completing the entire questionnaire, participants were invited to complete a form to receive by mail a voter's information guide providing information on upcoming elections in the Minneapolis and St. Paul areas.

Dependent Variables

Cognitive responses. Immediately following message exposure, participants' cognitive responses were assessed by means of a thought-listing procedure (e.g., Mackie & Worth, 1989; Petty & Cacioppo, 1979). The questionnaire provided 13 individually marked 1 × 5-in. boxes in which participants listed any "ideas, feelings, thoughts, or images that occurred to you as you were reading the preceding material, even if they had nothing to do with voting—even if you think they were totally irrelevant or silly." Participants listed each thought they had while reading the persuasive message, using one box per thought. Based on coding systems suggested and used by previous researchers (e.g., Cacioppo, Harkins & Petty, 1981; Greenwald, 1968; Mackie, 1987), participants' cognitive responses were coded by a judge unaware of participants' self-monitoring propensities into six categories: (1) *modified message-oriented thoughts* (elaborated positive, negative, or neutral reactions to some aspect of the message content [excluding direct statements referring to the quality of the message arguments; see category 3 below]); (2) *recipient-generated thoughts* (positive, negative, or neutral statements that were relevant to the message topic but did not make direct contact with any aspect of the message content); (3) statements bearing directly on the *quality of the message arguments*; (4) *direct restatements of the message content* (i.e., argument recall); (5) *unelaborated reactions* to the message (e.g., "I agree"); (6) responses that were *irrelevant* to both the message and to the topic of voting.

A second judge coded the cognitive responses of a randomly chosen 20% of the sample. Judges agreed on 85% of the coding categorizations. All disagreements were resolved by discussion. We computed a measure of the favorability of participants' elaborated message- and topic-relevant cognitive responses (i.e., from cognitive response categories 1–3 described above) by subtracting the sum of participants' negative modified message-oriented thoughts, recipient-generated thoughts, and statements of message quality from the sum of participants' positive modified message-oriented thoughts, recipient-generated thoughts, and statements of message quality. Thus, positive numbers indicated overall positive reactions to the message and negative numbers indicated overall negative reactions to the message.

Structured perceptions of message quality. To further assess perceptions of message quality, participants completed a scale composed of 12 7-point Likert-type items (where $-3 =$ *strongly disagree* and $+3 =$ *strongly agree*) such as "I found the material to be convincing" and "the material did not contain persuasive arguments." After items worded in the contrait (low quality) direction were recoded, these items formed an internally consistent set (Cronbach's $\alpha = .90$); thus, we summed them to create an aggregate index of perceptions of message quality. Scores on the composite index could thus range -36 to $+36$, with positive numbers indicating more positive perceptions of message quality.

Attitudes. To assess attitudes toward voting, we presented participants with 12 7-point Likert-type items (where $1 =$ *strongly disagree* and $7 =$ *strongly agree*). These items included "It would be a good thing if all American citizens over the age of 18 were to vote in elections" and "There is no use in voting since politicians just do what they want once elected." In addition, we used four 7-point bipolar scales (bad/good, harmful/beneficial, wise/foolish, positive/negative) taken from the evaluative dimension of the semantic differential (Osgood, Suci, & Tannenbaum, 1957). These 16 items were internally consistent ($\alpha = .76$), and were thus summed to create an index of attitudes toward voting. Scores on the composite index could range from 16 to 112 with higher numbers indicating more positive attitudes toward voting.

Behavior. Finally, participants were informed that they could complete an address card if they wished to receive a voter information guide in the mail pertaining to local elections in the Minneapolis/St. Paul areas.

TABLE 1

EFFECTS OF MESSAGE TYPE AND SELF-MONITORING ON COGNITIVE RESPONSES AND STRUCTURED PERCEPTIONS OF MESSAGE QUALITY, ATTITUDES TOWARD VOTING, AND VOTING-RELATED BEHAVIOR

Dependent variable	Low self-monitoring			High self-monitoring		
	VE	SA	Mixed	VE	SA	Mixed
Valenced index of cognitive responses	1.32 ^a	-0.48 ^b	1.00 ^a	-0.32 ^x	1.00 ^y	0.38 ^{x,y}
Perceptions of message quality	13.48 ^a	1.73 ^b	10.36 ^a	7.93 ^x	13.77 ^y	8.38 ^{x,y}
Attitudes toward voting	89.07 ^a	89.41 ^a	91.25 ^a	88.55 ^x	94.48 ^y	85.72 ^x
Voting behavior	0.68 ^a	0.35 ^b	0.52 ^{a,b}	0.26 ^x	0.50 ^y	0.54 ^y

Note. VE, value-expressive message; SA, social-adjustive message. Voting behavior entries represent the proportion of participants requesting the voter's guide within each condition. Entries with different superscripts in each row within each self-monitoring condition are significantly different at $p < .05$ according to Duncan's multiple range test (for comparisons involving the mixed message) or planned contrasts (for comparisons not involving the mixed message).

Results

Perceptions of Message Quality

Cognitive responses. To assess whether functionally relevant messages produced more favorable cognitive responses than functionally nonrelevant messages and to explore the favorability of recipients' thoughts to mixed messages, we subjected participants' cognitive response index to a 2 (Self-Monitoring) \times 3 (Message Type) analysis of variance. This analysis produced only the expected interaction, $F(2, 176) = 7.86, p = .001$. Following a significant simple effects analysis for low self-monitors $F(2, 82) = 6.29, p < .01$, post hoc comparisons using Duncan's multiple range test revealed that low self-monitors perceived both the functionally relevant value-expressive message and the mixed message more favorably than the social-adjustive message (see row 1 of Table 1 for means).⁴ Following a marginally significant simple effects analysis among high self-monitors, $F(2, 94) = 2.69, p = .073$, post hoc comparisons revealed that high self-monitors perceived the functionally relevant social-adjustive message more favorably than the functionally nonrelevant value-expressive message; the mean cognitive response score within the mixed message condition fell between the functionally relevant and nonrelevant means and was not significantly different from either (see row 1 of Table 1 for means). Finally, low self-monitors perceived the value-expressive message more favorably than did high self-monitors, $t(57) = 2.98, p < .01$, and high self-monitors perceived the social-adjustive message more favorably than did low self-monitors, $t(53) = 2.57, p < .01$.

⁴ Because we did not advance strong a priori predictions for the mixed message condition for either high or low self-monitors, we used simple effects and post-hoc analyses to interpret significant omnibus interactions. However, we supplement these analyses with 1-tailed planned contrasts when comparing across the value-expressive and social-adjustive message conditions (within levels of self-monitoring) and within the value-expressive and social-adjustive message conditions (across levels of self-monitoring) where a priori hypotheses are advanced.

Structured perceptions of message quality. To further assess whether functionally relevant messages were perceived as higher in quality than functionally nonrelevant messages, we performed a 2 (Self-Monitoring) \times 3 (Message Type) ANOVA on participants' structured perceptions of message quality. This analysis produced only the expected interaction, $F(2, 174) = 7.22, p = .001$. Following a significant simple effects analysis for low self-monitors $F(2, 80) = 6.30, p < .01$, post hoc comparisons yielded results consistent with the cognitive response analysis: low self-monitors perceived the functionally nonrelevant social-adjustive message as lower in quality than either the functionally relevant value-expressive or the mixed message (see row 2 of Table 1 for means). Although a comparable simple effects analysis for high self-monitors did not reach significance, $F(2, 94) = 1.72, ns$, a planned contrast indicated that high self-monitors perceived the functionally relevant social-adjustive message as higher in quality than the functionally nonrelevant value-expressive message, $t(56) = 1.71, p < .05$ (see row 2 of Table 1 for means). Finally, low self-monitors perceived the value-expressive message as being more persuasive than did high self-monitors, $t(57) = 1.64, p < .06$, and high self-monitors perceived the social-adjustive message as being more persuasive than did low self-monitors, $t(53) = 3.42, p < .01$.

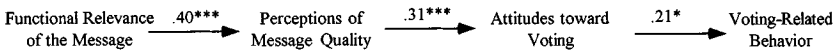
Attitudes toward Voting

To determine whether functional relevance influenced postmessage attitudes, we performed a 2 (Self-Monitoring) \times 3 (Message Type) ANOVA on participants' composite attitude scores. This analysis yielded a marginally significant interaction, $F(2, 176) = 2.59, p < .08$. A follow-up simple effects analysis for low self-monitors did not approach significance, $F(2, 82) = .24, ns$ (see row 3 of Table 1 for means). However, a comparable analysis on the attitudes of high self-monitors was significant, $F(2, 94) = 3.53, p < .05$. A planned comparison indicated that high self-monitors' attitudes were more positive following exposure to the social-adjustive message than following exposure to the value-expressive message, $t(56) = 1.75, p < .05$; moreover, a post hoc comparison indicated that high self-monitors' attitudes were more positive within the social-adjustive condition than within the mixed message condition (see row 3 of Table 1 for means).

Voting-Related Behavior

Next, we determined whether functionally relevant persuasive messages yielded higher levels of message-congruent behavior than functionally nonrelevant messages and explored the effectiveness of mixed messages in producing such behavior. A 2 (Self-Monitoring) \times 3 (Message Type) analysis of variance performed on participants' voting-related behavior (request of the voter information guide) revealed only the expected interaction, $F(2, 176) = 5.18, p < .01$.⁵

⁵ Hsu and Feldt (1969) have shown that the analysis of variance on dichotomous dependent variables provides a good control of the Type I error rate, and therefore suggest that ANOVA is robust to such violations of normality.



Note: * $p < .05$; ** $p < .01$; *** $p < .001$.

FIG. 1. Path model of the role of perceptions of message quality in mediating the influence of the functional relevance of the message on postmessage attitudes and behavior (Experiment 1).

Following a significant simple effects analysis for low self-monitors, $F(2, 82) = 3.21$, $p < .05$, post hoc comparisons indicated that low self-monitors were more likely to request the voter's guide within the functionally relevant value-expressive condition than within the functionally nonrelevant social-adjustive condition (see row 4 of Table 1 for means); the mean within the mixed message condition fell in between the value-expressive and social-adjustive conditions and was not significantly different from the means of these functionally pure message conditions.

A simple effects analysis revealed that the influence of Message Type on voting-related behavior was also significant for high self-monitors, $F(2, 94) = 3.26$, $p < .05$. A planned contrast indicated that voting-related behavior was more prevalent within the functionally relevant social-adjustive condition than within the nonrelevant value-expressive condition, $t(56) = 1.85$, $p < .05$; moreover, a post hoc comparison indicated that voting-related behavior was more prevalent within the mixed message condition than within the value-expressive condition ($p < .05$; see row 4 of Table 1 for means).

Path Analyses Assessing the Mediation of the Functional Matching Effect

The primary question of the present research is whether the influence of functional relevance on postmessage attitudes and behavior is mediated by functional relevance-based differences in recipients' perceptions of message quality. To test this mediational hypothesis, we estimated the model depicted in Fig. 1.^{6,7} This model evaluated whether the functional relevance of the message indirectly influenced postmessage attitudes and behavior through its direct influence on perceived message quality. As Fig. 1 indicates, all of the paths in the model are significant; the functional relevance of the message exerted a significant influence on perceptions of message quality, which in turn significantly influenced postmessage attitudes toward voting. Finally, recipients' postmessage attitudes exerted a direct effect on their behavioral decisions of whether to request the voter information guide. More importantly, the indirect paths from functional relevance through perceptions of message quality to attitudes ($\beta = .12$ [standard error = .044], $p < .01$) and to behavior ($\beta = .03$ [standard error = .017], $p < .05$)

⁶ Participants in the mixed message condition were excluded from this analysis.

⁷ The perceptions of message quality mediational variable is the sum of the standardized cognitive response and structured perceptions variables ($r[113] = .38$, $p < .001$). Path coefficients were virtually identical when the mediational variable consisted only of the structured measure of perceived message quality.

are significant, indicating that recipients' perceptions of message quality significantly mediated the influence of functional relevance on postmessage attitudes and behavior.

We also tested an alternative model of the relations among functional relevance, perceptions of message quality, attitudes, and behavior. Specifically, to evaluate whether recipients' postmessage attitudes biased their perceptions of message quality (as implied by DeBono, 1987; see also Eagly & Chaiken, 1993), we determined whether attitudes mediated the influence of functional relevance on perceptions of message quality and behavior. This model did not produce a direct effect of functional relevance on attitudes, $\beta = .11$, $t = 1.17$, *ns*. Importantly, the indirect paths of functional relevance on perceptions of message quality and behavior (the dependent variables in this model) through postmessage attitudes (the mediating variable in this model) also failed to reach significance (β s = .03 and .02, *ns*). In light of these results, it is unlikely that attitudes and perceptions of message quality are merely alternate measures of the same construct (i.e., attitudes toward voting). Finally, these results suggest that recipients' perceptions of message quality (including their cognitive responses) are not merely justifications for their already-formed attitudes toward the message topic.

Discussion

The purpose of Experiment 1 was to inquire into the psychological processes that functionally relevant messages invoke that in turn influence attitudes and behavior. Based in part on previous social-cognitive research in the attitude domain (e.g., Cacioppo et al., 1982), we hypothesized that persuasive messages that directly addressed the functional basis of message recipients' supporting knowledge structures would be perceived as higher in quality and more persuasive and in turn would lead to more attitude and behavior change. Our results support this mediational hypothesis. First, results of the cognitive response and perceived message quality analyses indicated that functionally relevant messages produced more favorable thoughts than did functionally nonrelevant messages and were viewed as more convincing, more effective in motivating people to vote, more persuasive, and more thought-provoking. More important, however, is our finding that recipients' perceptions of message quality significantly mediated the functional matching effect on postmessage attitudes and behavior. Although previous studies (DeBono & Harnish, 1988) have shown that identically well-argued messages produced more favorable attitudes when they were communicated by functionally relevant *sources*, the present study is the first to demonstrate that differences in the functional relevance of the message *content* influence attitudes and behavior through influencing recipients' perceptions of the quality of the message arguments.

Beyond explicating the cognitive mediation of the functional matching effect, we explored the persuasive influence of functionally mixed messages, that is, messages containing both value-expressive and social-adjustive arguments. Although our results varied somewhat depending upon the dependent variable being

examined (e.g., perceived message quality, attitudes, behavior), mixed messages appear not to be quite as effective in producing persuasion as messages containing only functionally relevant arguments. To compare the overall effectiveness of matched, mismatched, and mixed messages more formally, we performed a 3 (Message Match: Matched, Mismatched, or Mixed) \times 2 (Self-Monitoring) between-groups multivariate analysis of variance on the four variables shown in Table 1. This analysis yielded only a main effect for Message Match, Wilk's $\lambda = .864$, $p = .001$, multivariate $F(8, 342) = 3.24$, $p = .001$. Follow-up post hoc analyses using Duncan's test revealed that the mixed message was less effective overall than the matched message but more effective overall than the mismatched message ($ps < .05$).

There are, however, important aspects of our formulation (and of the functional approach more generally) that have yet to be investigated. Among the questions to be addressed are: (1) Can functionally relevant persuasive messages conveyed in the lab influence socially significant behavior in the field; that is, can our laboratory approach be extended to increase socially desirable behavior within an applied setting? (2) Is our mediational framework involving differential perceptions of message quality generalizable to a setting in which the intervening time period between message exposure and message-relevant behavior is more substantial (e.g., several days instead of 45 min.)?

According to information-processing theories of attitude change proposed by Hovland and by McGuire (e.g., Hovland, Janis, & Kelley, 1953; McGuire, 1968, 1972), attitude and behavior changes depend upon the message recipient's retention of the message arguments (for a review, see Eagly & Chaiken, 1993). When the time period intervening between message exposure and behavior is increased from 45 min to several days, it may be that the influence of functional relevance on behavior increasingly depends upon recipients' retention of the message arguments.

However, there are at least two theoretical considerations that argue against this alternative memory-as-mediator hypothesis. Specifically, attitude-based social cognition research suggests that the relation between memory and judgements (e.g., attitudes, behavior) is likely to be low to the extent that people are capable of making *on-line* judgments about the message topic and to the extent that message recipients are motivated to express an attitude on the message topic (see Chaiken & Stangor, 1987; Mackie & Asuncion, 1990). Therefore, so long as message recipients are sufficiently able and motivated to process the message content, the influence of functional relevance on behavior should be mediated through an on-line process (e.g., evaluation of the quality of the message arguments) rather than a memory-based process.

To directly evaluate the generalizability of our mediational model, we conducted a second study. In this study, the message-relevant behavior occurred in the field rather than in the lab, and the temporal delay between exposure to a persuasive message and the opportunity to perform behaviors relevant to the message was lengthened from 45 min to 5 days.

EXPERIMENT 2

In Experiment 2, we evaluated the generalizability of our mediational model within a highly naturalistic context—the 1992 U.S. presidential election. Specifically, we evaluated whether, as in Experiment 1, functionally relevant voting-related persuasive messages would enhance recipients' perceptions of message quality (relative to functionally nonrelevant messages), and in turn, whether such perceptions would enhance postmessage attitudes toward voting. As in Experiment 1, we hypothesized that perceptions of message quality would mediate the influence of functionally relevant messages on postmessage attitudes toward voting in the election. However, because in Experiment 2 exposure to the message occurred 5 days before the election, the concept of behavioral intention is also an important consideration.

Therefore, in considering the psychological processes through which attitudes toward voting in the election may influence actual voting behavior, we employed an aspect of Fishbein and Ajzen's (1975) theory of reasoned action. The theory of reasoned action specifies that volitional social behaviors are proximally mediated by people's *intentions* to act in a particular manner. Within the theory of reasoned action framework, behavioral intentions represent people's conscious and deliberate plans for engaging in volitional behavior, and that *attitudes toward behaviors* exert their influence on behavior through influencing the construction of such behavioral intentions or plans.⁸ The theory of reasoned action is especially applicable in the present context because voting is a well-specified, volitional behavior that is enacted through a deliberate process (see Fishbein & Ajzen, 1981).

In summary, we hypothesized that functionally relevant voting appeals would lead to enhanced perceptions of message quality, which in turn would produce more favorable attitudes toward voting in the 1992 presidential election than functionally nonrelevant voting appeals. In addition, we hypothesized that postmessage attitudes toward voting in the election would directly influence message recipients' behavioral intentions to vote, which in turn would exert a direct influence on their actual decisions of whether to vote in the election. Thus, we hypothesized that functional relevance would influence attitudes indirectly through its influence on perceived message quality and that postmessage attitudes would in turn exert an indirect influence on behavior through directly affecting recipients' behavioral intentions. To evaluate this chain of reasoning, we estimated the following path model: Functional Match/Mismatch → Perceptions of Message

⁸ The theory of reasoned action also specifies that subjective norms (i.e., people's beliefs about how salient others expect them to act) influence behavioral intentions. However, because we were concerned only with the attitudinal component of behavioral intention, we did not measure participants' normative beliefs. Moreover, because our purpose was not to test a completely specified reasoned action model toward voting (see Fishbein & Ajzen, 1981), but instead to incorporate the concept of behavioral intention within a functional framework, we did not measure the hypothesized antecedents of attitudes toward behavior (i.e., behavioral beliefs).

Quality → Attitudes toward Voting in 1992 Election → Voting Intentions → Voting.

Method

Participants

Ninety seven voting-eligible (i.e., >17 years old and American citizens) students ($n = 38$ men; $n = 59$ women) at the University of Minnesota participated in the study for extra credit in their introductory psychology course. Scores on the 25-item Self-Monitoring Scale (Snyder, 1974) permitted a classification of these students as high self-monitors (scores > 13; $n = 35$) and low self-monitors (scores < 11; $n = 31$).

Procedure

Participants each completed a booklet individually, working at their own pace, in group sessions. The booklet contained the message manipulation and relevant dependent measures. To determine whether participants actually had voted in the 1992 presidential election, we contacted each one by telephone approximately 3 weeks after the election. To increase our confidence in the veracity of their voting self-reports, we asked them, in addition to whether they had voted, *where* they had voted; all but one participant who reported voting were able to recall where they voted. To corroborate the self-report behavioral data, we obtained voting information on a subsample ($n = 70$) of participants from the Hennepin County Board of Elections.⁹ In each case, the self-report matched the county's record, bolstering our confidence in the accuracy of the self-reports.

Questionnaire

The questionnaire assessed the same constructs as in Experiment 1, with the following exceptions: (1) perceived message quality was assessed solely with the 12-item structured measure used in Experiment 1 (i.e., participants' cognitive responses were not assessed); (2) attitudes toward voting in the upcoming election (rather than general attitudes toward voting) were solicited; (3) participants indicated their intention to vote in the 1992 presidential election by estimating the probability (expressed as a percentage) that they would vote.

Results

Perceptions of Message Quality

As in Experiment 1, we expected that functionally relevant messages would produce more favorable perceptions of message quality than messages that appealed to a nonrelevant function. A 2 (Self-Monitoring) \times 2 (Message Type) analysis of variance performed on participants' perceptions of message quality produced only the expected interaction, $F(1, 62) = 9.85, p < .01$. Planned contrasts confirmed that high self-monitors perceived the social-adjustive message as more persuasive than the value-expressive message, $t(33) = 2.45, p < .05$; in contrast, low self-monitors perceived the value-expressive message as more persuasive than the social-adjustive message, $t(29) = 2.02, p < .05$ (see row 1 of Table 2 for means).

⁹ We attempted to corroborate the voting behavior of all participants. However, 27 of our participants were not preregistered at the address provided in the questionnaire, preventing the county elections board from determining whether they had voted.

TABLE 2
EFFECTS OF MESSAGE TYPE AND SELF-MONITORING ON PERCEPTIONS OF MESSAGE QUALITY
AND ATTITUDES TOWARD VOTING IN THE 1992 PRESIDENTIAL ELECTION

Dependent variable	Low self-monitoring		High self-monitoring	
	VE	SA	VE	SA
Perceptions of message quality	8.47 ^a	1.94 ^b	11.57 ^x	3.95 ^y
Attitudes toward voting in the election	96.32 ^a	91.36 ^b	89.92 ^x	96.16 ^y

Note. VE, value-expressive message; SA, social-adjuctive message. Entries with different subscripts within in each row within each self-monitoring condition are significantly different at $p < .05$, except the comparison among low self-monitors for attitudes, in which $p < .10$.

Attitudes toward Voting in the 1992 Presidential Election

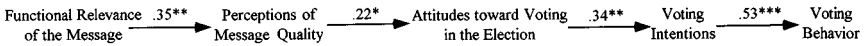
The expected interaction between Self-Monitoring and Message Type on recipients' attitudes toward voting in the 1992 presidential election was significant, $F(1, 62) = 4.40, p < .05$. The postmessage attitudes of high self-monitors were more favorable following exposure to the functionally relevant social-adjuctive message than following exposure to the functionally nonrelevant value-expressive message, $t(33) = 1.70, p < .05$. In contrast, low self-monitors tended to hold more favorable attitudes toward voting in the election following exposure to the functionally relevant value-expressive message than following exposure to the nonrelevant social-adjuctive message, $t(29) = 1.30, p = .10$ (see row 2 of Table 1 for means).

Voting Intentions and Voting Behavior

Because voting behavior was predicted to be directly regulated by voting intention, we did not expect the functional relevance of the message to exert a *direct* influence on whether or not participants subsequently voted in the election. Similarly, because we expected postmessage attitudes to directly regulate voting intentions, we did not expect functional relevance to exert a direct effect on voting intentions. In accord with this reasoning, Message Type \times Self-Monitoring analyses of variance revealed that functional relevance did not exert a direct influence on either of these variables (for voting intentions, interaction $F[1, 62] = .98, ns$; for voting behavior, interaction $F[1, 62] = .57, ns$).

Path Analyses Assessing the Mediation of the Functional Matching Effect

To evaluate whether perceived message quality mediated the influence of functional relevance on postmessage attitudes toward voting in the election and whether voting intentions mediated the influence of postmessage attitudes on voting in the 1992 presidential election, we estimated the path model shown in Fig. 2. As can be seen in the figure, all of the paths in the model are significant, and the model accounted for 28% of the variance in voting behavior. The



Note: * $p < .05$; ** $p < .01$; *** $p < .001$.

FIG. 2. Path model of the role of perceptions of message quality in mediating the influence of the functional relevance of the message on postmessage attitudes toward voting in the 1992 election and the role of voting intention in mediating the influence of postmessage attitudes on subsequent voting behavior in the 1992 presidential election (Experiment 2).

functional relevance of the message (high vs. low) influenced recipients' perceptions of message quality, which in turn exerted a significant effect on postmessage attitudes toward voting in the election. Moreover, the indirect path from functional relevance through perceptions of message quality to postmessage attitudes toward voting in the election was significant ($\beta = .08$ [standard error = .05], $p < .06$). These paths suggest that recipients' perceptions of the quality of the message mediated the influence of the functional relevance of the message on postmessage attitudes toward voting in the election. Thus, this part of the model provides a conceptual replication of the path model estimated in Experiment 1. Finally, recipients' postmessage attitudes toward voting in the election significantly shaped their intentions to vote in the election, which in turn exerted a strong influence on their actual voting behavior 5 days later. Moreover, the indirect path from postmessage attitudes through voting intentions to voting behavior was significant ($\beta = .18$ [standard error = .07], $p < .05$). This part of the model therefore indicates, in line with the theory of reasoned action, that recipients' behavioral intentions mediated the influence of postmessage attitudes on subsequently enacted voting behavior.

Memory-as-mediator model. Although the model shown in Fig. 1 is well grounded in psychological theory and research and replicates the results of Experiment 1, we tested a theoretically plausible alternative model of the processes mediating the influence of the functional relevance of the message on subsequent voting behavior. Specifically, we examined Hovland's (Hovland et al., 1953) and McGuire's (1968, 1972; see also Mackie & Asuncion, 1990) hypothesis that memory for the message arguments mediates the influence of persuasive messages on attitude change.¹⁰

A path model indicated that functionally relevant messages did not influence postmessage attitudes and behavior in the election through its mediating impact on recipients' retention of the message arguments. Results of this model indicated that, although the functional relevance of the message did exert a significant

¹⁰ To assess memory for the message arguments, participants completed a surprise recall task at the end of the questionnaire, in which they listed as many of the message arguments as they were able to remember. Two blind coders counted each of the message arguments recalled and agreed on 97% of recipients' responses. Discrepancies were resolved by discussion. An index of recall was created by dividing the number of message ideas recalled by the total number of message ideas contained within the persuasive message to which participants were exposed.

influence on memory ($\beta = .36, p < .01$), memory did not significantly influence either attitudes or behavior (β s $< .01, ns$).

Discussion

The results of Experiment 2 replicated and extended those of Experiment 1. Functionally relevant messages were perceived as higher in quality (e.g., more convincing, more persuasive, more likely to motivate people to vote, and more thought-provoking) than functionally nonrelevant messages; as well, functionally relevant messages produced more positive postmessage attitudes toward voting in the election. More important, however, were the results of the path analyses: As in Experiment 1, the impact of functional relevance on postmessage attitudes was significantly mediated by participants' subjective perceptions of the quality of the message.

In addition to replicating the results of Experiment 1, we also extended our analysis of the functional matching effect in two important ways: First, we examined whether the functional approach (including our hypotheses about mediating process) would be relevant within an applied, fully naturalistic, and socially consequential context—voting in a presidential election. Second, we examined the robustness of the model to a substantial increase in the delay between message exposure and behavior. Our mediational framework was highly robust to these nontrivial alterations in social context. Functionally relevant persuasive messages brought about initial (i.e., *attitude*) change by influencing recipients' perceptions of message quality. To understand the processes connecting postmessage attitudes to subsequently enacted voting behavior, we utilized Fishbein and Ajzen's (1975) intervening concept of behavioral intention. According to their theory of reasoned action, attitudes toward behaviors influence subsequent behavior indirectly by influencing the formation of people's behavioral intentions or plans to engage in a specific behavior. Our results indicated that message recipients' voting intentions were significantly linked to their postmessage attitudes and that the attitude-voting relationship was mediated by recipients' voting intentions.

GENERAL DISCUSSION

Functional theories of attitudes (e.g., Katz, 1960; Smith et al., 1956) propose that people are motivated to form their opinions because they derive some kind of psychological benefit from holding and expressing them. The theoretical implications of a functional analysis of attitudes have been examined most frequently within the persuasion context. Contemporary research has consistently shown that persuasive messages produce more recommended attitude change when they directly address the functional content underlying the attitude than when they are addressed to an irrelevant or less relevant function, (e.g., DeBono, 1987; DeBono & Harnish, 1988; Prentice, 1987; Shavitt, 1989, 1990; Snyder & DeBono, 1985).

However, to date, little research has directly examined the cognitive processes

through which functionally relevant messages produce persuasion. In our studies, we hypothesized that the functional matching effect is at least partly mediated by differences in message recipients' perceptions of the quality of the message. Specifically, we argued that functionally relevant messages would enhance the perceived quality and persuasiveness of the message arguments, and that these subjective perceptions would in turn exert a direct influence on persuasion. Because the attitudes of low self-monitors are likely to serve their chronic value-expressive motivations, they should be more likely to judge message arguments as valid and persuasive when they directly address value-based considerations than when they highlight the social advantages of adopting the recommended position. Just the opposite should be the case for high self-monitors. Because the attitudes of high self-monitors are likely to reflect their chronic social-adjustive concerns, high self-monitors should be more likely to judge message arguments as valid and persuasive when they directly address how adopting the recommended position may bring about social rewards than when they highlight the value-expressive advantages of adopting the recommended position.

The results of both of our experiments were highly supportive of this mediational framework involving functional relevance-based perceptions of message quality. Low self-monitors consistently found the contents of value-expressive messages to be more persuasive than the contents of social-adjustive messages. In contrast, high self-monitors consistently found the contents of social-adjustive messages to be more persuasive than the contents of value-expressive messages. Moreover, our path-analytic results provided support for the role that perceptions of message quality play in mediating the influence of the functional relevance of the message on persuasion.

That the functional underpinnings of people's attitudes should bias their perceptions of message cogency is conceptually consistent with two related types of "biased assimilation" effects in the attitudes literature. First, research conducted by Lord et al. (1979; see also Houston & Fazio, 1989; Pomerantz et al., 1993) has shown that the evaluation of evidence related to the efficacy and validity of a particular issue position (e.g., pro capital punishment) is systematically biased by the congruence of the person's relevant attitude. Second, Cacioppo et al. (1982) have demonstrated that message arguments are perceived as more persuasive when they match than when they mismatch the content of recipients' self-schemas. Importantly, this study provided evidence that message evaluations are influenced by whether the arguments addressed a relevant disposition of the recipient. Thus, just as both attitudes per se and self-schemas may serve as prior theories or frames of reference for subjectively judging and evaluating attitude-relevant information, so too may the functional basis of a person's attitude influence his or her perceptions of the quality and persuasiveness of the message content.

The present research also relates to recent attempts to understand the processing factors underlying the functional matching effect. DeBono has shown

that messages containing functionally relevant introductions (DeBono, 1987) or sources (DeBono & Harnish, 1988) increase message recipients' motivation to process the message. Petty and Wegener (1996) found similar effects using (as in the present study) actual *arguments* that differed in functional relevance. In line with the elaboration likelihood model of persuasion (Petty & Cacioppo, 1986), Petty and Wegener (1996) also found that the typical functional matching effect found with strong arguments could be reversed (i.e., mismatched messages producing more persuasion) when message arguments were weak. Because our message arguments were generally rated as being strong (although ratings of strength depended on functional match), the motivation-to-process explanation suggests that our functional relevance-based effects on cognitive responses and perceived message quality may have been driven (at least in part) by differences in processing motivation. That is, perhaps functionally relevant messages produced enhanced perceptions of message quality because recipients' processed the (strong) message arguments more thoroughly than did recipients who received functionally-nonrelevant messages. To evaluate whether our functional matching effects on these message evaluation variables were dependent on differences in message *scrutiny* across levels of functional relevance, we recomputed the 2 (Self-Monitoring) \times 3 (Message Type) analyses of variance on participants' Experiment 1 cognitive responses and perceptions of message quality, holding constant the *sum* of their cognitive responses (i.e., categories 1–3; see Experiment 1 Method section). Results indicated that greater levels of overall cognitive responding (indicating degree of processing motivation) were reliably associated with the favorability of recipients' cognitive responses (covariate $F[1, 173] = 7.42, p < .01$); however, the expected pattern of the Self-Monitoring \times Message Type interaction remained significant for both message evaluation variables (for cognitive response favorability, $F[2, 173] = 7.17, p = .001$; for perceived message quality, $F[2, 173] = 6.92, p = .001$). Therefore, functionally relevant messages did not enhance evaluation of the message content simply as a result of enhanced motivation to process the message arguments.

Because our message topic (voting) was probably a more relevant one for most respondents than the consumer product topics used in most functional matching studies (e.g., shampoo, whisky; see Petty & Wegener, 1996; Snyder & DeBono, 1985), it is likely that, in the present research, processing motivation was relatively high to begin with, thus providing less opportunity for message relevance to heighten motivation. This would seem especially true in Experiment 2 in which the presidential election was at hand. Participants in our studies who received functionally *nonrelevant* messages should thus have been more likely to attend to the message arguments, but to have evaluated them less favorably, than to have simply not processed them at all. Our mediational framework for understanding the functional matching effect may thus be most likely to hold true in relatively high motivation settings in which at least some processing of the message arguments occurs.

Finally, our framework highlights the theoretical importance of a neglected

variable in persuasion research: subjective perceptions of the quality of the message arguments. Consistent with Cacioppo et al.'s (1982) claim, we found strong evidence that "recipients act *subjectively* rather than objectively rational" when evaluating the quality and cogency of a persuasive message. In most contemporary persuasion research, however, argument quality is manipulated, and strong and weak arguments are treated as a constant across message recipients rather than as varying according to dispositional and situational factors (e.g., Petty & Cacioppo, 1986). However, earlier persuasion research conducted within the context of social judgment theory accorded an important theoretical role to the subjective nature of message evaluation in mediating persuasion. Specifically, social judgment theorists (e.g., M. Sherif & Hovland, 1961; M. Sherif & C. W. Sherif, 1967) argued that perceptual distortions (assimilation and contrast) of the position advocated in the message determined recipients' evaluative responses to the message, which in turn proximally determined attitude change. To the extent that perceived message quality varies according to such factors as the message's functional match, the relevance of the message to a salient self-schema, the pro or counterattitudinal nature of the message, the level of ego involvement of the message recipient, and so on, persuasion researchers should directly measure such subjective perceptions of argument quality and examine their status as proximal mediators of persuasion.

Persuasion researchers have recently rekindled an interest in functional theories of attitudes (Abelson & Prentice, 1989; DeBono, 1987; Herek, 1986; Maio & Olson, 1995; Prentice, 1987; Shavitt, 1989, 1990; Snyder & DeBono, 1985, 1989). Functional approaches have been shown to be useful in delineating the conditions under which attitude change occurs as well as in explaining the motivational dynamics underlying such change. However, little previous research has directly explored the cognitive processes through which the functional relevance of a persuasive message exerts its attitudinal and behavioral effects. The results of our studies consistently suggest that persuasive messages that provide functionally relevant information are perceived as higher in quality and perceived to contain better arguments than messages that contain functionally nonrelevant information. In turn, recipients' perceptions of message quality play an important mediational role in linking the functional relevance of the message to persuasion.

At a more general level, the present research contributes to a burgeoning literature examining the cognitive mechanisms underlying the influence on persuasion of other motivational variables such as positive mood (Mackie & Worth, 1989; Petty et al., 1993), involvement (Howard-Pitney, Borgida, & Omoto, 1986; Petty & Cacioppo, 1984), anxiety (DeBono & McDermott, 1994), and need for cognition (e.g., Cacioppo, Petty & Morris, 1983; Haugtvedt & Petty, 1992). Taken together, these findings have begun to illuminate the synergistic relations among motivational and cognitive processes in producing changes in attitudes and behavior.

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