Matching Versus Mismatching Attitude Functions: Implications for Scrutiny of Persuasive Messages

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Abstract:

Two studies were conducted to examine the hypothesis that matching the content of a persuasive message to the functional basis of people's attitudes enhances message scrutiny. In Study 1, high and low self-monitors were exposed to a message that matched or mismatched the functional basis of their attitudes (i.e., image appeal for high self-monitors and quality appeal for low self-monitors) and that contained either strong or weak arguments. Attitudes were more strongly affected by message strength when the message arguments matched rather than mismatched the functional basis of the attitude. In Study 2, this outcome was especially characteristic of individuals who typically do not enjoy thinking (those low in need for cognition). These studies show that matching arguments to the functional basis of an attitude is not invariably beneficial for persuasion but can enhance or reduce attitude change (compared to mismatched arguments) depending on the cogency of the matched information.

Full Text:

Consider attitudes about a political candidate. There are many qualifies of the candidate that might be relevant to citizens' views of the candidate such as his or her stand on domestic issues, a projected image of decisiveness and leadership, past congressional experience, and so forth. Which qualities should the candidate promote most? One answer to this question receiving renewed attention in recent years suggests that an effective procedure would be to provide people with information that matches the functional basis of their attitudes. Recent research on this functional approach has supported earlier notions (e.g., Smith, Bruner, & White, 1956) that attitudes toward objects, issues, or people can serve different functions for different individuals and that attempts to influence these attitudes are most effective when the content of the message matches the functional basis of the attitude (e.g., Clary, Snyder, Ridge, Miene, & Haugen, 1994).

A number of possible functions for attitudes have been proposed. For example, attitudes might serve an ego-defensive function whereby a person is protected from accepting undesirable or threatening truths about him or herself. Attitudes might also serve a utilitarian function whereby an attitude reflects rewards and punishments that the attitude object supplies to the holder of the attitude. People could also hold value-expressive attitudes that allow them to act in accordance with their underlying values or social-adjustive attitudes that allow them to identify with (or distance themselves from) particular social groups (e.g., Katz, 1960; Shavitt, 1990; Smith et al., 1956; see Kiesler, Collins, & Miller, 1969; Snyder & DeBono, 1989, for reviews).

A variety of methods for identifying which function an attitude serves have been developed. One method relies on individual differences and suggests that most attitudes serve different functions for different people. That is, for some people, most attitudes might serve a value-expressive function, but for others, most attitudes might serve a social-adjustive or ego-defensive function

(see Clary et al., 1994, for direct self-report measures of functions, and Snyder & DeBono, 1985, 1989, for identification of functions through more global personality measures). An alternative to the individual difference approach suggests that attitudes toward particular issues or objects might serve a common function for most people. For example, attitudes toward air-conditioners might be based on utilitarian concerns for most people (e.g., Abelson & Prentice, 1989; Prentice, 1987; Shavitt, 1990). Finally, it is possible that in some cases there is little consistency across attitude objects or people, and thus one must assess functions separately for each attitude object for each person (see Herek, 1987).

A key notion of the functional approach is that it is important to understand the functional basis of peoples' attitudes in order to understand how to change those attitudes. For example, one person might like a political candidate because the candidate's position regarding preservation of national parks allows the person to express an important value of caring for the environment (i.e., the value-expressive function). Another might like the same candidate because this person identifies with the well-known people supporting the candidate (i.e., the social-adjustive function). Functional theory offers the general proposition that persuasive appeals whose content addresses the function served by an attitude will be more persuasive than appeals that are irrelevant to the function served by that attitude. That is, one should offer value-relevant arguments to the person whose attitude serves a value-expressive function, but one should offer social-adjustment arguments to the person whose attitude serves a social-adjustment function (e.g., Clary et al., 1994; DeBono & Packer, 1991; DeBono & Rubin, 1995; Katz, 1960; Kiesler et al., 1969; Lavine & Snyder, 1996; Shavitt, 1990; Snyder & DeBono, 1989).

Various studies have provided support for the functional hypothesis that persuasive appeals are more effective when they present information addressing the function underlying an attitude. For example, Snyder and DeBono (1985) used the individual difference method of identifying people for whom attitudes likely served different functions. Specifically, because high self-monitors (Snyder, 1974) tailor their behavior to fit the socially appropriate considerations of different situations (i.e., they change their behavior in order to present themselves to others in a positive manner, Snyder (1979) Snyder and DeBono (1985) reasoned that their attitudes might typically serve the social-adjustive function. In contrast, because low self-monitors are guided by internal sources such as values and feelings, Snyder and DeBono (1985) reasoned that their attitudes would more likely serve the value-expressive function.

To test the idea that attitudes served these different functions for high versus low self-monitors and, thus, that attitudes could be changed more easily by presenting message arguments that matched these different functions, Snyder and DeBono presented research participants with advertisements for a variety of products. These advertisements either contained content that appealed to the social images that consumers could gain from use of the product (which should serve primarily a social-adjustive function) or presented content regarding the intrinsic quality or merit of the product (which should serve the value-expressive function to the extent that qualities of the product readily can be interpreted in terms of underlying values and other internal evaluations of the product; see Snyder & DeBono, 1989). For example, an ad for Canadian Club Whiskey containing image content showed a bottle of the whiskey resting on a set of blueprints for a house and stated, "You're not just moving in, you're moving up." The quality ad for the

whiskey had the same picture, but used the statement, "When it comes to taste, everyone draws the same conclusion."

Across a number of studies, Snyder and DeBono (1985) found that high self-monitors rated ads with image content as better (more effective) than ads with quality content, were willing to pay more for products advertised with image rather than quality, and were more willing to use products advertised with image than with quality. In contrast, low self-monitors rated quality ads as better (more effective) than image ads, were willing to pay more for products advertised with quality rather than image, and were more willing to use products advertised with quality than with image. Individuals high versus low in self-monitoring have also been shown to rate product quality as better when the product has been advertised in a manner consistent with the functional base assumed to underlie the attitude (DeBono & Packer, 1991; see Clary et al., 1994, and Lavine & Snyder, 1996, for additional evidence consistent with matching functional message content to individuals' bases of attitudes being more persuasive than mismatching content).

Using an object-oriented approach to classifying functions, Shavitt (1990) also found support for advertisements containing function-relevant arguments being more persuasive than function-irrelevant ads. That is, people preferred advertisements when the ad content matched the function served by the product, held more favorable attitudes toward brands advertised with the matching strategy, and preferred purchasing brands advertised with an ad when the content matched rather than mismatched the function of the object. Thus, the existing literature is consistent with the functional hypothesis that, all else being equal, messages containing arguments that match functional bases are more persuasive than messages containing contents that mismatch functional bases (see Shavitt, 1989; Snyder & DeBono, 1989, for reviews).

WHY DOES MATCHING PRODUCE MORE PERSUASION?

Although the effect of matching message content to the functional basis of a person's attitude has been clear and consistent in past research, the reason why such functional matching effects have been obtained has been less clear. As Lavine and Snyder (1996) noted recently, "the logic of the functional approach's matching hypothesis does not fully address the question of how such motivational appeals influence attitudes ... in fact, the cognitive processes that mediate the functional matching effect are not yet well understood" (p. 581). Based on past work demonstrating that existing cognitive structures can bias the evaluation of message arguments (e.g., Cacioppo, Petty, & Sidera, 1982), Lavine and Snyder (1996) hypothesized that "functional match of a persuasive message should directly influence the recipient's perception of message validity ... which in turn should influence postmessage attitudes" (p. 583). That is, functional matching of arguments should "bias recipients' evaluations of the persuasiveness of the arguments" and result in the message being "perceived as more persuasive than messages that contain functionally-irrelevant information" (p. 583). In two studies in which high and low self-monitors were presented with messages that either matched or mismatched the presumed functional basis of the attitude, matched messages elicited more favorable thoughts and were rated as more persuasive. That is, low self-monitors seemed motivated to generate favorable thoughts to a message that made an appeal to values, whereas high self-monitors seemed motivated to generate favorable thoughts to a message that made an appeal to image. Of greater interest, valenced thoughts and perceptions of message quality mediated the impact of functional

argument matching on postmessage attitudes. Thus, this study provided the first mediational evidence consistent with the view that arguments that match the functional basis of one's attitude produce greater attitude change because of biased processing of those arguments.

According to the Elaboration Likelihood Model of persuasion (ELM; Petty & Cacioppo, 1981, 1986), however, this biased processing effect should be most evident when the overall likelihood of message elaboration is high, such as when distractions are low (Petty, Wells, & Brock, 1976), and the message is high in personal relevance (Petty & Cacioppo, 1979; see also Chaiken & Maheswaran, 1994; Petty, Schumann, Richman, & Strathman, 1993). In fact, Levine and Snyder (1996) noted that in their research, it was likely that "processing motivation was relatively high" (p. 600). On the other hand, according to the ELM, if the overall likelihood of thinking is quite low, functional matching might produce attitude change by a low-effort "peripheral route" even if there is little processing of the substantive merits of the information provided. For example, if the arguments simply seemed to suggest that values were relevant to the advocacy, a low self-monitor might be more inclined to agree than a high self-monitor by reasoning, "if it speaks to my values, it must be good." An analogous heuristic might be used by a high self-monitor to accept a message with arguments using image because the person might reason that "if the product is image related, I should buy it" (cf. Chaiken, 1987). These simple inferences could lead to message acceptance in the absence of thinking about the actual justifications for the value or image assertions contained in the message.

Both the "cue" and "biased processing" explanations for functional matching effects would predict main effects of functional matching. In fact, this is the only effect of functional argument matching that has been observed in the literature. The mechanisms behind the cue and biased processing explanations are different, of course, but the attitudinal outcome is similar. That is, messages that match the underlying basis of the attitude should be more effective than messages that mismatch--either because matching serves as a peripheral cue or because people engage in biased evaluation of functionally matched arguments. It is also possible, however, that past main effects of functional matching could be accounted for by differential processing of matched versus mismatched messages. According to the ELM, if people are unsure how much to process information and the background elaboration likelihood is not constrained to be either very high or low, a persuasion variable such as functional argument match might prompt people to effortfully scrutinize the message. In particular, people might give more careful thought to a message when the content of that message matches the functional basis of their attitudes than when the content mismatches. If past messages in the literature used relatively cogent information to support the attitude object, and content matching enhanced message processing, then people for whom the message matched the functional basis would be more persuaded than people for whom the message mismatched, because they would better recognize the cogency of the arguments presented. According to this analysis, however, if the supporting evidence was specious, then matching would be less effective than mismatching because people for whom the message matched would better recognize the weakness of the arguments. Thus, the enhanced scrutiny hypothesis suggests that functional matches of arguments could either be superior to or inferior to mismatches in producing persuasion, depending on the quality of the information presented in support of the advocated position.

To date, the possibility that functional matching of arguments enhances message scrutiny has not been tested. Nevertheless, some preliminary evidence consistent with this hypothesis has been found. In one study, DeBono and Packer (1991) found that people rated matching messages as more self-relevant than mismatching messages. Considerable prior research suggests that any feature of a message that invokes self-relevance increases information processing activity whether the self-relevance is based on linkage to one's possessions, social groups, or values (see Petty, Cacioppo, & Haugtvedt, 1992; Thomsen, Borgida, & Lavine, 1995, for reviews). In addition, DeBono and Packer (1991) found that low self-monitors made more memory errors regarding image ads (i.e., mismatching ads) than did high self-monitors (matching ads), although no difference was found for quality ads. Observed differences in memory are also consistent with the view that matched messages received greater elaboration than mismatched messages (Craik & Lockhart, 1972, p. 239).

Some indirect evidence for the possibility that arguments that match the function served by one's attitude can elicit greater scrutiny than arguments that mismatch comes from studies that examine functional matching without varying the actual content of the arguments that comprise the message. Although most studies addressing functional theory have varied the functional match of the arguments that comprise the message, some researchers have attempted to vary functional relevance by manipulating nonargument features of the communication such as whether the source of the message is one that appeals to individuals whose attitudes serve different functional bases. In fact, DeBono and colleagues (DeBono & Harnish, 1988; DeBono & Telesca, 1990) have provided strong support for the notion that functionally relevant sources can increase message scrutiny over functionally irrelevant sources even though the messages are not varied to differ in the actual functions they address. The notion is that expert sources provide a better functional match for individuals whose attitudes are based on values and the central merits of things (i.e., low self-monitors) but that socially attractive sources provide a better functional match for individuals whose attitudes are based on social adjustment concerns (i.e., high self-monitors). This may be because of differential identification with these sources or because these sources might be expected to present different kinds of information (i.e., an expert might be more likely to present value-relevant arguments than an attractive source and an attractive source might be more likely to present image arguments than an expert source). Consistent with the notion that functional source matching increases message scrutiny, DeBono and Harnish (1988) found that attitudes were more dependent on argument quality and that issue-relevant thoughts were more predictive of attitudes when the source matched the presumed functional basis of the attitude than when it mismatched. The enhanced impact of argument quality on attitudes and the higher thought-attitude correlations are indicative of enhanced information processing activity (Petty & Cacioppo, 1986; Wegener, Downing, Krosnick, & Petty, 1995).

In another study varying noncontent features of the messages, DeBono (1987) presented recipients with a message containing both sides of an issue, but told recipients in advance that one position (i.e., the mentally ill should be institutionalized) was consistent with the functional basis of their attitudes. Following exposure to the message, people expressed more agreement with the side that was said to be a functional match. Because this study found that message-relevant thoughts were equally predictive of attitudes regardless of functional match, and these attitude results were replicated in a second study even when no messages were presented to process (i.e., recipients were simply told which side was associated with their function), DeBono

concluded that "the pattern of results argues strongly for the notion that attitude change via a functional appeal may best be considered a peripheral process" (p. 284). We concur that this is probably the best interpretation of this research, and thus this research suggests that nonargument functional matching can serve as a peripheral cue when the elaboration likelihood is low either because no arguments are presented (DeBono, 1987, Study 2) or the message topic is a low relevance and/or low knowledge one that is unlikely to elicit much elaboration (e.g., "institutionalization of the mentally ill," DeBono, 1987, Study 1).

Of course, in the studies varying some feature of the communication other than the message arguments, the messages never directly matched or mismatched the functional bases of peoples' attitudes. Because of this, these studies provide no information as to whether message content that matches functional bases (which is the focus of most of the work on functional matches) receives greater thought or not. In addition, the research on source matching, which provides the best evidence for the notion that functional matching can increase information processing, might be subject to an alternative explanation. That is, if people form stronger expectations about what a message will say when the message is presented by someone matching the functional basis of the attitude than a mismatched source, they would be more surprised when the message violates these expectancies (i.e., because the messages at best provide a mix of functionally relevant and irrelevant arguments). Thus, surprise rather than functional matching per se might account for the enhanced information processing activity to functionally matched sources (e.g., Baker & Petty, 1994; Hastie, 1984; Maheswaren & Chaiken, 1991). This speculation should be tested in future research.

THE CURRENT STUDIES

In sum, the previous literature on functional argument matching indicates that matched arguments are more persuasive than nonmatched arguments, and the one mediational study suggests that the mechanism behind this matching effect is biased information processing (Lavine & Snyder, 1996). However, the ELM suggests that functional argument matching effects could result from other mechanisms such as the operation of peripheral cues or enhanced scrutiny of matched messages (Petty & Wegener, 1998).(1) In fact, studies that have examined functional relevance in ways that did not involve manipulating the functional match of the message arguments themselves have provided support for both the cue (DeBono, 1987) and enhanced scrutiny hypotheses (DeBono & Harnish, 1988; DeBono & Telesca, 1990). Nevertheless, these studies do not address the possibility that matching the actual arguments in the message to the underlying function of one's attitude need not enhance persuasion as hypothesized and found by previous researchers. In particular, if the functionally matched arguments are weak, and receive greater scrutiny, less persuasion should result from functionally matched arguments. This effect has not been reported in the literature previously and, if obtained, would provide a strong counterpoint to the traditional view that functional matching of arguments invariably enhances persuasion.

Thus, in two experiments, we attempted to test the hypothesis that message arguments matching the functional basis of an attitude receive greater scrutiny than message arguments that mismatch the functional basis. We did this by manipulating the strength of the matching versus mismatching information in brief messages about new consumer products. If information that

matches functional bases receives greater scrutiny than information that mismatches functional bases, then participants should form more favorable opinions of the products when the products are supported by strong, cogent information rather than weak, specious information to a greater extent when the information matches rather than mismatches functions. If either the cue or biased processing alternatives are operating in this context, however, one would find a main effect of functional match (with matching information leading to more favorable opinions than mismatching information) and no interaction between argument strength and functional match.

In sum, rather than suggesting that arguments that match the function served by one's attitude invariably will be more persuasive than arguments that mismatch, the processing view suggests that, under some circumstances at least, matching arguments are scrutinized more carefully. If information in matched messages is processed more thoroughly than information in mismatched messages, then matches should be more persuasive than mismatches if strong arguments are used (and baseline opinions are not already so favorable that little room is left for enhancement of opinions), but matches should also be less persuasive than mismatches if weak arguments are used.(2)

ARGUMENT PRETESTING: METHOD

To create messages that systematically differed in argument strength and functional match for high versus low self-monitors, we pretested arguments adapted in part from prior functional studies (e.g., Snyder and DeBono, 1985) as well as some new ones.

Argument strength. Strength was assessed using a procedure similar to that described by Petty and Cacioppo (1986). That is, we presented one group of 11 participants with four messages designed to represent each cell of a 2 (argument strength: strong, weak) x 2 (type of appeal: image, quality) within-participants design. Each of 11 participants received a strong-image, strong-quality, weak-image, and weak-quality message relevant to each of four categories of consumer products. Prior to receipt of the messages, participants were instructed to think carefully about the information about each product and to write down any thoughts that crossed their minds about whether the arguments stated in the messages constituted good reasons to buy and use the product and about whether the product possessed qualities that people wanted from that type of product. This instructed thought induction is used to examine differences in argument strength when task demands require effortful information processing. Thus, this induction should attenuate any natural tendencies for participants to process one type of claim more than others because all participants are instructed to process at a high level.

The different messages on each product shared the same introduction and conclusion, but the middle part of each message varied in the type and strength of the appeal. For example, the four messages for one of the products, shampoo, all began by stating that the shampoo would be available in a wide variety of sizes and concluded by stating that the price of the shampoo was competitive with other brands in that the shampoo sold for almost one-half cent less per ounce than other brands. The four variations of type and strength of appeal for the shampoo ads were as follows:

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Strong Image. A brand new shampoo is being introduced whose primary
qualities are related to how good it makes your hair look. That is, of
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    people who have used the shampoo in tests of the product, over half of
them
    thought the shampoo made their hair look better than the shampoo they used
    at home. Also, the shampoo seemed able to make people's hair manageable
and
    attractive for a longer period of time than other shampoos.

    Weak Image: A brand new shampoo is being introduced whose primary
qualities
    are related to how good it makes your hair look. That is, of people who
    have used the shampoo in tests of the product, almost half of them thought
    the shampoo made their hair look better than the shampoo they used at
home.
    Also, the shampoo seemed able to make people's hair manageable and
    attractive for some time as long as people did not go outdoors or
otherwise
    mess up their hair following initial styling.

    Strong Quality: A brand new shampoo is being introduced whose primary
    qualities are related to how well it cleans your hair. That is, of people
    who have used the shampoo in tests of the product, over half of them
    thought the shampoo cleaned their hair better than the shampoo they used
at
    home. Also, the shampoo seemed able to keep hair clean for a longer period
    of time than other shampoos.

    Weak Quality: A brand new shampoo is being introduced whose primary
    qualities are related to how well it cleans your hair. That is, of people
    who have used the shampoo in tests of the product, almost half of them
    thought the shampoo cleaned their hair better than the shampoo they used
at
    home. Also, the shampoo seemed able to keep hair clean for some time as
    long as people did not go outdoors or otherwise soil their hair.
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On the bottom of each page that contained the short message pertaining to one of the products, 10 double-spaced blank lines were provided on which participants were to record their thoughts. Following the blank lines, participants were asked to report what they thought about the product on three attitude scales anchored at 1 = bad, negative, and harmful, and 9 = good, positive, and beneficial, respectively. Messages for the products were presented in one of four orders, with the products always in the same order for each of the four blocks of messages (i.e., four blocks of messages were presented, each with one shampoo message, one coat message, one shoe message, and one toothpaste message) but varying the order of the four strength-by-appeal type combinations. Thus, for one set of participants, the strong image message was first in the first block, second in the second block, third in the third block, and fourth in the fourth block. For another set of participants, the strong image message was fourth in the first block, third in the second block, second in the third block, and first in the fourth block, and so on. The four orders represented a revised Latin square design.

Thoughts were categorized as favorable, unfavorable, or neutral toward the product by two judges unaware of the pretest hypotheses. Judges agreed on 84% of the thoughts listed. Disagreements were resolved by discussion. Finally, participants completed the 25-item self-

monitoring scale (Snyder, 1974) and were identified as high or low on that measure by a median split (Median = 48.5).

Type of argument. In a second pretesting study using the messages just described, 24 people participated in a 2 (argument quality) x 2 (type of appeal) x 4 (product) design with the first two factors constituting between-participants variables and the last factor being a within-participants variable. In this study, all participants were asked to rate messages for each of the four consumer products on a scale designed to assess the functional basis of the message presented. Specifically, participants were asked to "ignore your personal opinion about the merits of the message (i.e., how convincing or unconvincing it is) and indicate the extent to which you think the message appeals to people concerned about the overall quality of the product (1) or the overall image of those who use the product (7)." The messages were presented in a different random order for each participant. Because product category had no impact in a preliminary analysis, ratings were averaged across the four products.

ARGUMENT PRETESTING: RESULTS

Argument strength. An index of thought favorability was created for each message encountered by each pretest participant by subtracting the number of unfavorable thoughts from the number of favorable thoughts and dividing by the number of total thoughts reported. An attitude index was created by averaging the responses to the three attitude scales for each product and by averaging these responses across the four messages of the same type and strength (Cronbach alphas within combinations of type and strength were between .74 and .86). These indices were each submitted to a 2 (argument strength: strong, weak) x 2 (type of appeal: image, quality) x 2 (self-monitoring: low, high) mixed design analysis of variance (ANOVA). Because order of presentation did not influence the results reported, order was dropped from the analyses.

Results showed that our manipulation of argument strength was effective. That is, strong arguments led to mostly favorable thoughts (M = .50) and weak arguments led to mostly unfavorable thoughts (M = -.33), and these means were different from each other, $F(1, 9)$ = 105.3, p [is less than] .0001. In addition, strong arguments led to more favorable attitudes toward the products (M = 6.64) than weak arguments (M= 4.43), $F(1, 9)$ = 86.4, p [is less than] .0001. Argument strength x Type of appeal interactions on the attitude, $F(1, 9)$ = 19.12, p [is less than] .002, and thought $F(1, 9)$ = 4.59, p [is less than] .06, measures indicated that our manipulation of argument strength tended to be stronger for quality than for image ads. That is, although strong arguments led to more favorable thoughts (M = .46) and to more favorable attitudes (M = 6.36) than did weak arguments (M = -.24 for thoughts and 4.82 for attitudes) for image appeals, the effect was stronger for quality appeals (Ms =.54 versus -.42 for thoughts, and 6.93 versus 4.04 for attitudes).(3)

Thus, although our manipulation of argument strength was successful for both image and quality messages, our manipulation of argument strength was somewhat stronger for quality than for image appeals. Because our primary hypothesis regards the extent to which a given message is differentially processed when that message matches versus mismatches the attitude function, it was not crucial that the argument quality manipulation be equated across type of appeal. In order to put the two manipulations on a common scale for presentation and analyses in the experiments

to follow, however, we standardized attitude responses within type of appeal (across self-monitoring and argument strength). Using raw rather than standardized scores does not substantively change the results or conclusions.

Type of message. Ratings of functional basis were submitted to a 2 (argument strength: strong, weak) x 2 (type of appeal: image, quality) ANOVA. As expected, the only significant result was a main effect for Type of appeal, $F(1, 20) = 38.8$, p [is less than] .001. Messages that were designed to represent quality were seen as making a quality appeal (M = 3.4), whereas messages that were designed to represent image were seen as making an image appeal (M = 5.6).

EXPERIMENT 1

In our initial experiment, we attempted to test the hypothesis that the quality of the information in a persuasive message would have greater impact if the information content matched, rather than mismatched, the functional base underlying attitudes toward the object. As with much past research (e.g., Snyder & DeBono, 1985), we used a measure of self-monitoring as our method for a priori identification of the likely functions of attitudes. That is, during a prescreening session, we administered the 25-item self-monitoring measure (Snyder, 1974) using a 5-point response scale anchored at 0 = not at all characteristic of me and 4 = extremely characteristic of me. Items were scored such that high values corresponded to high levels of self-monitoring. Participants were recruited who had scored either high (score [is greater than] 56) or low (score [is less than] 37) on the resultant measure (roughly from the top and bottom fourths of the distribution of scores in the prescreening session). This should increase the likelihood of obtaining categorization into the proper self-monitoring classification for this categorical individual difference (Gangestad & Snyder, 1985, 1991) and thus increase the likelihood of obtaining effects if they are present.

The basic procedure was as follows. Participants received descriptions of four products (i.e., a shampoo, a shoe, a coat, and a toothpaste). Each product was introduced and described with either strong or weak claims about product quality, or with strong or weak appeals to the image associated with use of the product. On the same page as the information about each product, participants provided their opinions of the product. Messages that matched the hypothesized functional bases of attitudes (i.e., image arguments to high self-monitors and quality arguments to low self-monitors) were classified as matches, and messages that mismatched the hypothesized functional bases of attitudes (i.e., quality arguments to high self-monitors and image arguments to low self-monitors) were classified as mismatches. This allowed us to represent tests of our hypothesis as the two-way interaction between argument strength and functional match.

METHOD

Participants

Thirty introductory psychology students were recruited to participate in the experiment in partial fulfillment of a class requirement. Participants were identified as either high (n=16) or low

(n=14) in self- monitoring based on pretest responses to the version of the 25-item self-monitoring scale (Snyder, 1974) described previously.

Procedure

Participants received written instructions that the experiment concerned situations in which people form opinions based on limited sets of information. Participants were told that they would be given pieces of information about a number of products and that they would be asked to form overall opinions of the products based on the information they would receive. In addition, they were told to assume that characteristics of the products other than those noted in the passages were roughly equal to characteristics of similar items. Participants were given the example that if they were told only that a new car gets outstanding gas mileage, they should assume that other characteristics of the car (such as price and reliability) were basically the same for this car as for other cars in its class.

Next, participants received one message on each of the four products in the study (i.e., the shampoo, coat, shoe, and toothpaste) and reported their attitude toward each product on three scales at the bottom of the page below each message. Attitude reports were given on three 9-point scales anchored at 1 = bad, useless, and harmful, and 9 = good, useful, and beneficial, respectively. Products were always presented in the same order (i.e., the shampoo, coat, shoe, and toothpaste), and all four combinations of argument strength and type of appeal were represented across the four products. Participants received one of four orders of the message conditions that corresponded to a revised Latin square for the four combinations of argument strength and type of appeal. Because order of messages did not influence the pattern of results obtained, this factor was dropped from the following analyses.

RESULTS AND DISCUSSION

A composite measure of attitude was constructed by summing responses to the three attitude scales and standardizing this composite within the type of appeal (image or quality) as noted previously (Cronbach alphas varied between .90 and .97). Corresponding to the experimental design described previously, the attitude measure was submitted to a 2 x 2 x 2 mixed-design ANOVA. We expected an interaction between functional match and argument strength, with matching information receiving greater scrutiny than mismatching information. The Match x Argument quality interaction was expected to hold equally for high and low self-monitors resulting in no three-way interaction.

Results showed that our manipulation of argument strength was effective. That is, as in the pretest, strong arguments led to more favorable opinions toward the products (M=.59) than weak arguments (M=-.59), $F(1, 28) = 63.87$, p [is less than] .0001. Consistent with the hypothesis that information matching the functional base of an attitude is naturally considered more extensively than information mismatching the functional base, the argument strength main effect was qualified by the two-way interaction between argument strength and functional match, $F(1, 28) = 4.77$, p [is less than] .037 (see Figure 1). That is, the effect of argument strength was greater when the message content matched the functional base of product attitudes (i.e., when image messages were presented to high self-monitors or quality messages were presented to low self-

monitors) than when the message content mismatched the functional base of product attitudes (i.e., when quality messages were presented to high self-monitors or image messages were presented to low self-monitors). The Functional match x Argument strength interaction did not differ across levels of self-monitoring (p [is greater than]. 19, for the three-way interaction).(4) Because the weak arguments were especially ineffective in persuading people when the message matched the function underlying the attitude, there was also a main effect of functional match such that matches (M =-.19) were less effective than mismatches (M=.19), F(1, 28) = 7.93, p [is less than] .01.

[ILLUSTRATION OMITTED]

The results of Experiment 1 are consistent with the proposition that information matching the functional base underlying an attitude receives greater consideration than information mismatching the functional base. There was no support for the proposition that functional matches are simply more persuasive than functional mismatches regardless of the cogency of the supporting information presented. In fact, when the evidence is weak, content that matched the functional basis of attitudes was less persuasive than content that mismatched the functional basis. Thus, based on our first experiment, we can tentatively conclude that, all else being equal, matches per se are not necessarily more persuasive than mismatches.

If differential effectiveness of matching versus mismatching information is dependent upon the amount of processing given to matches versus mismatches (e.g., rather than differential weighting of information that was processed to the same extent), then this suggests some natural limiting conditions to this effect. For instance, if information matching the functional base of the attitude brings about greater processing than information mismatching the functional base (perhaps because it is viewed as more important or self-relevant as found by DeBono & Packer, 1991), then one should be especially likely to find differences in the impact of argument strength when the background likelihood of effortful scrutiny of information is moderate rather than very high or low. That is, matching should enhance information processing mostly when people are not already so highly motivated to engage in extensive scrutiny of the information that thinking cannot be enhanced further, nor so constrained from processing or so disinterested in the topic that motivation from functional matching alone is insufficient to enhance processing. For example, in our argument pretesting, all participants were motivated to think by the task instructions and thus function matching would not be expected to (and did not) enhance information processing further. However, other factors that enhance the likelihood of thinking should also reduce the impact of functional matches on information processing. For example, if people are highly likely to scrutinize incoming information because of its high personal relevance (Petty & Cacioppo, 1979) or because they are high in their "need for cognition" (Cacioppo & Petty, 1982), then the functional match of the information would be less likely to enhance processing over a functional mismatch.

Therefore, to provide a replication of the results of our first experiment and to extend these findings by demonstrating one of the limiting conditions suggested by the hypothesized differences-in-processing view, we conducted a study in which functional matches and mismatches that varied in argument strength were presented to people who differed in both their self-monitoring and need for cognition tendencies.

EXPERIMENT 2

As noted above, if functional argument matches bring about greater processing of the arguments than functional mismatches, this should occur most strongly when some enhancement of processing is possible and least strongly when the likelihood of scrutiny is already high due to other factors. As just noted, one way of controlling the baseline level of processing is through classification of individuals as high versus low in need for cognition. The need for cognition scale provides an individual difference measure of the motivation to think about incoming information (Cacioppo & Petty, 1982), and the available research indicates that it provides a useful indicator of cognitive motivation in a wide variety of situations (see Cacioppo, Petty, Feinstein, & Jarvis, 1996, for a comprehensive review). Thus, according to the hypotheses noted above, functional matching of information should be least likely to enhance message processing for people who are high in their need for cognition because these individuals are already likely to be operating with a baseline level of message scrutiny that is quite high. In contrast, people low in need for cognition who are equally able to process messages as those high in need for cognition tend to avoid effortful processing of information and have been found to scrutinize the merits of persuasive appeals primarily when there is some special incentive to do so. For example, in one study (Priester & Petty, 1995), individuals low in need for cognition considered the merits of the arguments in a persuasive message when the source was described as untrustworthy, but not when the source was trustworthy. Individuals high in need for cognition processed the message extensively regardless of source trustworthiness. In another study (Smith & Petty, 1996), low need for cognition individuals processed the message arguments when the message was framed in a manner that was unexpected, but did not engage in careful scrutiny when the message framing was not surprising. High need for cognition individuals thought about the arguments to the game extent regardless of expectancies. In short, people high in need for cognition have tended to process message information regardless of the situational incentives to do so, whereas people low in need for cognition have required some special motivational incentive to undertake the cognitive work necessary to carefully evaluate the message arguments.(5)

If matching arguments to the basis of one's attitudes provides a motivational incentive to process, then low need for cognition individuals should be especially likely to scrutinize the message when the information matches the basis of their attitudes. High need for cognition individuals are expected to process the message regardless of its functional match. Therefore, functional match or mismatch of information should make less difference in information processing for individuals high in need for cognition.

To examine this implication of our enhanced processing account of functional matches, our second study followed the same design as Experiment 1 but added a need for cognition factor. Accordingly, we recruited people to participate in the study that fell into one of the four cells created by combining high versus low levels of need for cognition and high versus low levels of self-monitoring. We expected that the results of Experiment 1 would be replicated for people low in need for cognition (i.e., a Functional match x Argument quality interaction would be obtained), but we expected only a main effect of argument strength for people high in need for cognition. The attenuation of the matching effect for high need for cognition individuals should produce a three-way interaction overall (i.e., Need for cognition x Functional match x Argument

quality). That is, functional matching should enhance consideration of argument quality for low but not high for need for cognition individuals.

METHOD

Participants

Sixty-two undergraduate students were recruited to participate in the experiment for extra class credit. Participants were identified as either high (score [is greater than] 45) or low (score [is less than] 42) in self-monitoring based on responses to the 13-item Lennox-Wolfe self-monitoring scale (Lennox & Wolfe, 1984), and as either high (score [is greater than] 69) or low (score [is less than] 60) in need for cognition based on responses to the short (18-item) need for cognition scale (Cacioppo, Petty, & Kao, 1984). Both of these measures were available from a prescreening session.(6) Cell sizes for each of the combinations of self-monitoring and need for cognition were all between 12 and 18.

Procedure

The procedure and materials for the experiment were identical to those used in Experiment 1, with one exception. The materials for this experiment were embedded in a larger study that included an attitude survey on a variety of topics unrelated to the subject matter of the current experiment (e.g., participants provided their opinions on such issues as building nuclear power plants or changing lighting over to halogen bulbs).

RESULTS AND DISCUSSION

As in Experiment 1, the attitude scales were summed to create a composite measure, and that measure was standardized within type of appeal (Cronbach alphas varied between .88 and .94). The resultant attitude measure was submitted to a 2 (functional match: match, mismatch) x 2 (argument strength: strong, weak) x 2 (self-monitoring: low, high) x 2 (need for cognition: low, high) mixed-design ANOVA with need for cognition and self-monitoring as between-participants factors and functional match and argument strength as within-participants factors.

Results showed that our manipulation of argument strength was again effective. Strong arguments led to more favorable opinions toward the products (M =.59) than weak arguments (M =-.59), $F(1, 58) = 62.29$, p [is less than] .0001. Of greater importance, this main effect of argument strength was qualified by the predicted three-way interaction between need for cognition, functional match, and argument strength, $F(1, 58) = 3.95$, p [is less than] .05. For participants low in need for cognition, the predicted interaction between functional match and argument quality was obtained, $F(1, 28) = 4.01$, p [is less than] .05 (see Figure 2). That is, consistent with the hypothesis that information matching the functional base of an attitude is processed more extensively than information mismatching the functional base (at least when the baseline level of processing is not constrained to be low by inability to process or high because of other individual or situational factors), the effect of argument strength was greater when the message matched the functional base of product attitudes than when the message mismatched the functional base. The Functional match x Argument strength interaction did not differ across

levels of self-monitoring (p [is greater than] .29 for the three-way interaction) for people low in need for cognition.

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In contrast, the only significant effect for individuals high in need for cognition was the main effect of argument strength, $F(1, 30) = 25.13$, p [is less than] .0001, such that strong arguments (M =.31) led to more favorable opinions of the products than weak arguments (M =-.39). There was no Match x Argument strength interaction, p [is greater than] .3, for high need for cognition individuals.(7)

Thus, the results of Experiment 2 replicate the Functional match x Argument strength interaction found in Experiment 1 under conditions where ability to process was high but the baseline level of motivation to process was low enough to be enhanced by the functional match of the information. As predicted by the differential processing view, this enhancement of the argument strength effect did not occur when the baseline level of processing was already high. These results are consistent with the proposition that some past results favoring matching over mismatching of message content to attitude functions could have been obtained because strong arguments were used in the communications and the matching of message arguments to attitude functions led to enhanced message scrutiny over mismatching. It is important to note that when weak arguments were used, matching message content to the function served by the attitude is actually less effective than mismatching. Thus, Experiment 2 provides additional evidence that matching message arguments to attitude functions per se is not necessarily more effective than mismatching arguments, and our research provides some insight into one mechanism by which this occurs. That is, people scrutinize more carefully information in a message that matches the functional basis of their attitudes than informational content that does not match.

GENERAL DISCUSSION

Whereas past studies have investigated whether the functional match of introductions to messages (e.g., DeBono, 1987) or sources that present messages (e.g., DeBono & Harnish, 1988; DeBono & Telesca, 1990) influence the processing of information in the messages, previous work has not examined whether matches of the substantive message content to the functional basis of one's attitude influences the extent of information processing (see Footnote 1). In fact, most functional theorists have assumed either explicitly or implicitly that matching of functional content to attitudinal basis should induce greater persuasion (e.g., see Clary et al., 1994; Snyder & DeBono, 1989; Shavitt, 1990) and that this effect is due to biased processing of the functionally matched message arguments (Lavine & Snyder, 1996). The current studies suggest that this is not invariably the case and, in fact, mismatching content to functional bases can be a superior strategy if the only available arguments are relatively weak and easy to counterargue. The current research also indicated why these matching versus mismatching effects might occur. Namely, these results are due to the fact that recipients can sometimes engage in greater scrutiny of content that matches the functional basis of their attitudes than content that does not match.

The view that matching persuasive messages to the functional bases of attitudes can increase the scrutiny the information receives might not only be useful for organizing past work on functional

attitude change, but might also be used to organize work on changing attitudes with bases other than functional needs. For instance, research on the cognitive versus affective bases of attitudes has generally addressed the question of whether a message that is matched or mismatched to the base of the attitude is a more effective method of changing the attitude (e.g., Edwards, 1990; Millar & Millar, 1990). However, in contrast to the consistent prior findings that functional content matches produce greater persuasion than mismatches (e.g., Shavitt, 1990; Snyder & DeBono, 1985), the work on affective versus cognitive bases of attitudes has not been so consistent. For example, Edwards (1990) found matching arguments to attitude bases was better than mismatching (e.g., an affective persuasion appeal was better than a cognitive persuasion appeal when the attitude under attack had an affective basis), but Millar and Millar (1990) found mismatches to be more effective. Although these researchers have arrived at seemingly opposite conclusions, their results can be made coherent by applying the framework from the current studies. In order to do so, one need only consider the implications of the differential processing perspective for the persuasiveness of the arguments used by Edwards (1990) and Millar and Millar (1990).

Edwards (1990) used attitude objects that were previously unfamiliar to research participants and arguments that appear difficult to counterargue (i.e., relatively strong information such as an aversive smell associated with a new beverage). In contrast, Millar and Millar (1990) used attitude objects familiar to participants and arguments that were relatively easy to counterargue (i.e., relatively weak information such as telling participants that a majority of other people liked a beverage that they disliked because the beverage made those people feel refreshed). Millar and Millar (1990) found that their counterattitudinal arguments were extensively counterargued, especially when the arguments attacked the basis of the attitude. Thus, if one assumes that the arguments in the Edwards (1990) studies were stronger than those in the Millar and Millar (1990) studies, then increased scrutiny of information that matched the attitudinal base could lead precisely to the results obtained by those researchers.

In general, our perspective suggests that a message that matches the basis of an attitude will receive greater scrutiny than one that mismatches (assuming that the elaboration likelihood is not constrained to be very high or very low; Petty, Gleicher & Baker, 1991; Petty & Wegener, 1998). Thus, the quality or cogency of the matched information--whether matched to a functional basis or an affective/cognitive basis--becomes critical in determining whether it would be more effective to match or mismatch the basis of the attitude. That is, if the matched arguments are strong and compelling, matching is more effective than mismatching because the strengths of the arguments will be especially appreciated. However, if the matched arguments are weak, mismatching is likely to be more effective than matching because the weaknesses of the matched arguments will be especially apparent. Future work should examine the limits of this effect by explicitly varying the overall elaboration likelihood to be very high or very low. Thus, although we observed the enhanced processing effects expected when the elaboration likelihood was not constrained to be very high or low, we did not observe any evidence for biased processing of functionally matched messages for high need for cognition individuals. Thus, it is unclear if our levels of processing were insufficiently high compared to the Lavine and Snyder (1996) research to observe biased processing (e.g., due to the reduced importance of our attitude issue--mundane consumer products--compared to theirs--an impending national election), whether our messages were not sufficiently ambiguous to observe biased processing (Chaiken & Maheswaran, 1994),

or whether the Lavine and Snyder (1996) finding that matching was more effective than mismatching can be attributed to the fact that they only presented strong arguments and matching enhanced the extent of processing of these arguments (rather than biasing processing). Future work will have to determine the extent to which the functional matching of arguments works in only one way or in multiple ways under different elaboration likelihood conditions. Based on the current studies, at least, it is clear that functional matching of arguments can influence attitudes by influencing the extent of scrutiny given to the message and that, contrary to prior assumptions, functional matching of arguments need not increase persuasion.

Future work should also investigate the similarities between properties found for hypothesized functional bases of attitudes and other potential bases of attitudes (e.g., affective versus cognitive). To the extent that commonalities can be found, one might discover that phenomena related to attitudinal bases are more general than have been acknowledged in past work. That is, forming an attitude based on information that matches one's functional predispositions may imbue the attitude with properties very similar to those for attitudes based primarily on some other type of information (e.g., feelings associated with the object). If this is the case, then manipulations found to influence the properties of affective versus cognitive attitudes (e.g., focus manipulations meant to make one category of information more salient than the other and thus influence prediction of behavior by the attitude, see Millar & Tesser, 1986, Wilson, Dunn, Kraft, & Lisle, 1989) might also be found to influence attitudes based on specific attitude functions. For instance, one might find that focusing a respondent on a function other than that on which the attitude is based might undermine the prediction of later behavior from the reported attitude.

Alternatively, one might conceptualize bases of attitudes in terms of a hierarchy, with some categories of bases subdividing other superordinate categories. For instance, all of the arguments used in the current research might be considered cognitive. Thus, although past researchers have found differences in the effectiveness of persuasive information that matches versus mismatches the general category of affect or cognition (e.g., Edwards, 1990; Millar & Millar, 1990), we have also found differences in the scrutiny of (and thus effectiveness of) information that matched versus mismatched the functional basis of the attitude, even though all of the information provided fits the cognitive category. Future work will be needed in order to delineate which categories create meaningful differences in information processing and persuasion under which conditions. For instance, one might imagine that attitudes toward some classes of objects or for some people might naturally be organized along the affective/cognitive dimension, whereas other classes of objects or people might lead to attitudes organized along the functional dimensions.

Much work is left to be done regarding the role of functional bases of attitudes in the attitude change process. Thanks to recent advances in methods for a priori identification of attitudinal bases (Herek, 1987; Shavitt, 1990; Snyder & DeBono, 1985, 1989), the tools needed to make additional progress in this research domain are available. We believe that manipulations of the argument strength of matched versus mismatched persuasive information along with manipulations of baseline levels of elaboration likelihood could provide critical information regarding the processes underlying functional effects on attitude change processes.

NOTES

(1.) Lavine and Snyder (1996) examined the possibility that their functional matching result was produced because matching enhanced message scrutiny rather than biasing scrutiny, but concluded that it did not. This conclusion was based on the finding that functional matching of arguments enhanced persuasion even when the mere number of issue-relevant thoughts people generated was controlled. That is, when presumably controlling for the extent of processing of functionally matched messages, matching still led to greater persuasion. Their analysis assumes, of course, that the number of thoughts listed is a good indicator of the extent of processing. Petty and Cacioppo (1986), however, have noted that a number of studies suggest that extent of processing can be varied in the absence of any difference in the mere number of thoughts listed. In brief, this is because a nonthoughffful person might report six thoughts that reflect his or her a priori assessment of the issue (e.g., three negative thoughts and three favorable thoughts that reflect little message elaboration), whereas a thoughtful person would be more likely to report thoughts that reflect the quality of the arguments presented in the message (e.g., a strong message might elicit four favorable and two unfavorable thoughts, whereas a weak message might elicit four unfavorable and two favorable thoughts). Thus, the profile rather than the number of thoughts listed could reflect the extent of message scrutiny. If so, then the analysis by Lavine and Snyder does not rule out the possibility that they obtained greater persuasion for functionally matched messages because the matching elicited greater scrutiny of the strong arguments they presented.

(2.) As noted already, the ELM suggests that each of the explanations (i.e., cue effect, biased elaboration, enhanced elaboration) could account for functional matching effects under different baseline levels of thinking (see Petty & Cacioppo, 1986). We focus here on the enhanced elaboration hypothesis in that it is the one that can accommodate the heretofore unobtained result that matching arguments to functions can actually reduce persuasion. In addition, because prior work on functional matching of arguments has never manipulated the elaboration likelihood to render it especially high or low, the elaboration conditions characterizing most past research might best be described as moderate. In any case, the current research examines the impact of functional matches when the elaboration likelihood is not constrained to be very high or low.

(3.) There was also an unexpected Self-monitoring x Argument strength interaction on both thoughts, $F(1, 9) = 5.79$, p [is less than] .04, and attitudes, $F(1, 9) = 4.85$, p [is less than] .06, such that low self-monitors were more affected by the argument quality difference than high self-monitors (although both groups were significantly affected by the argument quality manipulation). This effect does not occur in either of the reported studies, however, each of which is based on larger samples.

(4.) The Functional match x Argument strength interaction in our analysis is identical to a three-way interaction of type of appeal (quality/ image), self-monitoring (low/high), and argument strength (weak/strong), $F(1, 28) = 4.77$, p [is less than] .037. That is, within each type of appeal, the self-monitoring group for which the message matched the function scrutinized that information more (was more persuaded by strong than weak arguments) than the group for which the information mismatched the function.

(5.) Our assumption is that the low need for cognition participants in our sample constitute a relatively moderate elaboration likelihood group. This is because elaboration likelihood depends

on both motivational and ability factors and the ability of our low need for cognition participants to engage in message scrutiny in this setting is high (i.e., very simple message, no distractions, etc.). In any case, the low need for cognition students in this study were not constrained to remain low in thought (i.e., increases in motivation to scrutinize information could lead to increases in thought).

(6.) Because the prescreening battery included a large number of inventories (and was designed to accommodate the needs of various researchers), the 13.item Lennox and Wolfe (1984) version of the self-monitoring scale was selected instead of the 25-item Snyder (1974) scale (largely because it contained fewer items). Like the Snyder (1974) scale, however, respondents scoring high are expected to change their behaviors in order to present themselves in a positive manner to others, whereas respondents who score low are expected to act more in accordance with internal cues. Because researchers using this scale have found that high scorers attend more to situational cues, whereas low scorers attend more to internal cues to guide their behavior (e.g., Anderson & Tolson, 1989), high versus low self-monitors on this measure should roughly approximate the social-adjustive versus value-expressive functions that have been hypothesized for high and low scorers on the Snyder (1974) scale. In addition, in samples of respondents from the same participant pool as those in this experiment, scores on the Lennox-Wolfe (1984) and Snyder (1974) scales have been significantly correlated over a 5- to 7-week delay between administration of the scales ($r = .5$; p [is less than] .0001).

(7.) As in Experiment 1, classifying functional matches versus mismatches makes the test statistic for the three-way interaction presented identical to that of a four-way Need for cognition (low/high) x Type of appeal (image/quality) x Self-monitoring (low/high) x Argument strength (weak/strong) interaction, $F(1, 58) = 3.95$, p [is less than] .05. That is, within each type of appeal, the interaction from Experiment 1 was replicated for people low in need for cognition, but only a main effect of argument strength was found for people high in need for cognition such that strong arguments produced more favorable attitudes than weak ones.

REFERENCES

Abelson, R. P., & Prentice, D. A. (1989). Beliefs as possessions: A functional perspective. In A. R. Pratkanis, S.J. Breckler, & A. G. Greenwald (Eds.), Attitude structure and function (pp. 361-381). Hillsdale, NJ: Lawrence Erlbaum.

Anderson, L., & Tolson, J. (1989). Group members' self-monitoring as a possible neutralizer of leadership. Small Group Behavior, 20, 24-36.

Baker, S. M, & Petty, R. E. (1994). Majority and minority influence: Source-position imbalance as a determinant of message scrutiny. Journal of Personality and Social Psychology, 67. 5-19.

Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. Journal of Personality and Social Psychology, 42, 116-131.

Cacioppo, J. T., Petty, R. E., Feinstein, J., & Jarvis, W.B.G. (1996). Dispositional differences in cognitive motivation: The life and times of individuals varying in need for cognition. Psychological Bulletin, 119, 197-253.

Cacioppo, J. T., Petty, R. E., & Kao, C. (1984). The efficient assessment of need for cognition. Journal of Personality Assessment, 48, 306-307.

Cacioppo, J. T., Petty, R. E., & Sidera, J. (1982). The effects of salient self-schema on the evaluation of proattitudinal editorials: Top-down versus bottom-up message processing. Journal of Experimental Social Psychology, 18, 324-338.

Chaiken, S. (1987). The heuristic model of persuasion. In M. P. Zanna, J. M. Olson, & C. P. Herman (Ed.), Social influence: The Ontario symposium (Vol. 5, pp. 3-39). Hillsdale, NJ: Lawrence Erlbaum.

Chaiken, S., & Maheswaran, D. (1994). Heuristic processing can bias systematic processing: Effects of source credibility, argument ambiguity, and task importance on attitude judgment. Journal of Personality and Social Psychology, 66, 460-473.

Clary, E. G., Snyder, M., Ridge, R., Miene, P. K., & Haugen, J. A. (1994). Matching messages to motives in persuasion: A functional approach to promoting volunteerism. Journal of Applied Social Psychology, 24, 1129-1149.

Craik, F.I.M., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. Journal of Verbal Learning and Verbal Behavior, 11, 671-684.

DeBono, K. G. (1987). Investigating the social-adjustive and value-expressive functions of attitudes: Implications for persuasion processes. Journal of Personality and Social Psychology, 52, 279-287.

DeBono, K. G., & Harnish, R.J. (1988). Source expertise, source attractiveness, and the processing of persuasive information: A functional approach. Journal of Personality and Social Psychology, 55, 541-546.

DeBono, K. G., & Packer, M. (1991). The effects of advertising appeal on perceptions of product quality. Personality and Social Psychology Bulletin, 17, 194-200.

DeBono, K. G., & Rubin, K. (1995). Country of origin and perceptions of product quality: An individual difference perspective. Basic and Applied Social Psychology, 17, 239-247.

DeBono, K. G., & Telesca, C. (1990). The influence of source physical attractiveness on advertising effectiveness: A functional perspective. Journal of Applied Social Psychology, 20, 1383-1395.

Edwards, K. (1990). The interplay of affect and cognition in attitude formation and change. Journal of Personality and Social Psychology, 59, 202-216.

Gangestad, S. W., & Snyder, M. (1985). To carve nature at its joints: On the existence of discrete classes in personality. Psychological Review, 92, 317-349.

Gangestad, S. W., & Snyder, M. (1991). Taxonomic analysis redux: Some statistical considerations for testing a latent class model. Journal of Personality and Social Psychology, 61, 141-146.

Hastie, R. (1984). Causes and effects of causal attribution. Journal of Personality and Social Psychology, 46, 44-56.

Herek, G. M. (1987). Can functions be measured? A new perspective on the functional approach to attitudes. Social Psychology Quarterly, 50, 285-303.

Katz, D. (1960). The functional approach to the study of attitudes. Public Opinion Quarterly, 24, 163-204.

Katz, D., McClintock, C., & Sarnoff, D. (1957). The measurement of ego defense as related to attitude change. Journal of Personality, 25, 465-474.

Kiesler, C. A., Collins, B. E., & Miller, N. (1969). Attitude change: A critical analysis of theoretical applications. New York: John Wiley.

Lavine, H., & Snyder, M. (1996). Cognitive processing and the functional matching effect in persuasion: The mediating role of subjective perceptions of message quality. Journal of Experimental Social Psychology, 32, 580-604.

Lennox, R. D., & Wolfe, R. N. (1984). Revision of the self-monitoring scale. Journal of Personality and Social Psychology, 46, 1349-1364.

Maheswaren, D., & Chaiken, S. (1991). Promoting systematic processing in low-motivation settings: Effect of incongruent information on processing and judgment. Journal of Personality and Social Psychology, 61, 13-33.

Millar, M. G., & Millar, K. U. (1990). Attitude change as a function of attitude type and argument type. Journal of Personality and Social Psychology, 59, 217-228.

Millar, M. G., & Tesser, A. (1986). Effects of affective and cognitive focus on the attitude-behavior relation. Journal of Personality and Social Psychology, 51, 270-276.

Petty, R. E., & Cacioppo, J. T. (1979). Issue-involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. Journal of Personality and Social Psychology, 37, 1915-1926.

Petty, R. E., & Cacioppo, J. T. (1981). Attitudes and persuasion: Classic and contemporary approaches. Dubuque, IA: Wm. C. Brown.

Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology (Vol. 19, pp. 124-205). New York: Academic Press.

Petty, R. E., Cacioppo, J. T., & Haugtvedt, C. (1992). Involvement and persuasion: An appreciative look at the Sherifs' contribution to the study of self-relevance and attitude change. In D. Granberg & G. Sarup (Eds.), Social judgment and intergroup relations: Essays in honor of Muzafer Sherif (pp. 147-174). New York: Springer/Verlag.

Petty, R. E., Gleicher, E, & Baker, S. (1991). Multiple roles for affect in persuasion. In J. Forgas (Ed.), Emotion and social judgments (pp. 181-200). Oxford: Pergamon.

Petty, R. E., Schumann, D. W., Richman, S. A., & Strathman, A. J. (1995). Positive mood and persuasion: Different roles for affect under high and low elaboration conditions. Journal of Personality and Social Psychology, 64, 5-20.

Petty, R. E., & Wegener, D. T. (1998). Attitude change. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), Handbook of social psychology (4th ed., Vol. 1, pp. 323-390). New York: McGraw Hill.

Petty, R. E., Wells, G. L., & Brock, T. C. (1976). Distraction can enhance or reduce yielding to propaganda: Thought disruption versus effort justification. Journal of Personality and Social Psychology, 34, 874-884.

Prentice, D. A. (1987). Psychological correspondence of possessions, attitudes, and values. Journal of Personality and Social Psychology, 53, 993-1003.

Priester, J. M., & Petty, IL E. (1995). Source attributions and persuasion: Perceived honesty as a determinant of message scrutiny. Personality and Social Psychology Bulletin, 21, 637-654.

Shavitt, S. (1989). Operationalizing functional theories of attitude. In A. R. Pratkanis, S.J. Breckler, & A. G. Greenwald (Eds.), Attitude. structure and function (pp. 311-338). Hillsdale, NJ: Lawrence Erlbaum.

Shavitt, S. (1990). The role of attitude objects in attitude functions. Journal of Experimental Social Psychology, 26, 124-148.

Smith, M. B., Bruner, J. S., & White, IL W. (1956). Opinions and personality. New York: John Wiley.

Smith, S. M., & Petty, IL E. (1996). Message framing and persuasion: A message processing analysis. Personality and Social Psychology Bulletin, 22, 257-268.

Snyder, M. (1974). The self-monitoring of expressive behavior. Journal of Personality and Social Psychology, 30, 526-537.

Snyder, M., & DeBono, K. G. (1985). Appeals to image and claims about quality: Understanding the psychology of advertising. Journal of Personality and Social Psychology, 49, 586-597.

Snyder, M., & DeBono, ICG. (1989). Understanding the functions of attitudes: Lessons from personality and social behavior. In A. R. Pratkanis, S.J. Breckler, & A. G. Greenwald (Eds.), Attitude structure and function (pp. 361-381). Hillsdale, NJ: Lawrence Erlbaum.

Thomsen, C.J., Borgida, E., & Lavine, H. (1995). The causes and consequences of personal involvement. In R. E. Petty & J. A. Krosnick (Eds.), Attitude. strength: Antecedents and consequences (pp. 191-214). Mahwah, NJ: Lawrence Erlbaum.

Wegener, D. T., Downing, J., Krosnick, J. A., & Petty, R. E. (1995). Strength-related properties of attitudes: Measures, manipulations, and future directions. In IL E. Petty & J. A. Krosnick (Eds.), Attitude strength: Antecedents and consequences (pp. 455-487). Mahwah, NJ: Lawrence Erlbaum.

Wilson, T. D., Dunn, D. S., Kraft, D., & Lisle, D.J. (1989). Introspection, attitude change, and attitude-behavior consistency: The disruptive effects of explaining why we feel the way we do. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 22, pp. 287-343). San Diego, CA: Academic Press.

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