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# Source Expertise and Persuasion: The Effects of Perceived Opposition or Support on Message Scrutiny

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## Abstract

Compared to nonexperts, expert sources have been considered to elicit more processing of persuasive messages because of expectations that the information is likely to be valid or accurate. However, depending on the position of an advocacy, source expertise could activate other motives that may produce a very different relation from that found in past research. When messages are counterattitudinal (disagreeable), experts should motivate greater processing than nonexpert sources because of expectations that they will likely provide robust opposition to one's existing views. In contrast, when advocacies are proattitudinal (agreeable), nonexpert rather than expert sources should elicit more scrutiny because of perceptions that they will likely provide inadequate support to recipients' current views. Two studies offer evidence consistent with these predictions. Manipulations of source expertise created different expectations regarding the strength of opposition or support, and these perceptions accounted for effects of source expertise on the amount of message scrutiny.

## Keywords

message discrepancy, message position, persuasion, processing, source expertise

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The extent to which a communicator has expertise is one of the most widely studied factors in persuasion. Compared to nonexpert sources, experts should be perceived as more likely to present information that is valid, compelling, or otherwise “correct.” Although these beliefs may be partly responsible for many effects of expertise, considerable research has shown that persuasion can occur via a number of distinct mechanisms that depend on motivation and ability to think carefully about a persuasive message. Consistent with the tenets of dual- (e.g., the heuristic-systematic model; Chaiken, 1987) and multiprocess persuasion theories (e.g., the elaboration likelihood model; Petty & Cacioppo, 1986), source expertise has been shown to serve as a peripheral cue or heuristic to persuasion when motivation and ability to process is low (e.g., Petty, Cacioppo, & Goldman, 1981). At higher levels of processing, perceptions of expertise have been shown to bias message-related thoughts in some situations (Chaiken & Maheswaran, 1994) and influence the extent to which people have confidence in their thoughts in other circumstances (e.g., Tormala, Briñol, & Petty, 2006).

Under conditions of moderate motivation and ability, source expertise has been shown to influence persuasion in yet a different way—by determining the extent to which message recipients carefully scrutinize persuasive appeals

(e.g., Debono & Harnish, 1988; Heesacker, Petty, & Cacioppo, 1983; Tobin & Raymundo, 2009). Early theorists proposed that a position advocated by an expert should be viewed as having greater incentives (i.e., more likely to be valid or “correct”) than one promoted by a source that lacks expertise. Thus, message recipients should be more motivated to carefully attend to, and ultimately be more persuaded by, an expert rather than a nonexpert communicator (Hovland, Janis, & Kelley, 1953; Hovland & Weiss, 1951; Kelman & Hovland, 1953).

Some research findings are consistent with expertise serving as a determinant of attention (Debono & Harnish, 1988; Heesacker et al., 1983; Moore, Hausknecht, & Thamodaran, 1986; Tobin & Raymundo, 2009). For instance, individuals low in self-monitoring (Snyder, 1974) have been found to think more deeply about a message when it is presented by an expert rather than an attractive source (Debono & Harnish, 1988).

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Also, research has found that field-dependent message recipients (those that are typically passive learners; see Goodenough, 1976) engaged in greater processing of a message when the source possessed rather than lacked expertise on a topic (Heesacker et al., 1983). More recent research has found further evidence that is independent of these individual differences. In one study, Tobin and Raymundo (2009, Experiment 1) manipulated a source's level of causal expertise (i.e., knowledge regarding causal factors) and then provided college participants with either strong or weak arguments arguing against extending the length of spring break. Greater scrutiny of the appeal was found when the causal expertise of the source was high rather than low. In particular, strong (compelling) arguments were found to be more persuasive than weak (specious) arguments when the source was described as "very good at pinpointing the underlying causes" (high causal expertise). However, when the source was depicted as "not being very good at pinpointing underlying causes," the quality of the arguments had no effect on postmessage attitudes about the issue.

Across these investigations, the findings can be interpreted as consistent with early conceptualizations of how expertise should influence persuasion (e.g., Hovland et al., 1953). However, a growing body of research on effects of message discrepancy (i.e., message position) highlights the possibility that expertise could trigger other motives that in turn could produce very different effects in some situations. When a person encounters a persuasive appeal, often one of the most salient initial perceptions is the extent to which the position of the message is viewed as consistent with (proattitudinal) or discrepant from (counterattitudinal) one's currently held attitude toward an issue. Past research has found that processing associated with several attitudinal (accessibility, Clark, Wegener, & Fabrigar, 2008a; ambivalence, Clark et al., 2008b), contextual (mood, Wegener, Petty, & Smith, 1995), and source (majority or minority status, Baker & Petty, 1994; group entitativity, Clark & Wegener, 2009) factors depends on the pro- versus counterattitudinal nature of an appeal.

In these situations, variables may interact with the position of a message to influence perceptions of threat (or concern) that may determine the scrutiny recipients dedicate to an advocacy. For instance, Clark et al. (2008a) reasoned that having a highly accessible attitude (i.e., one that is easily retrieved from memory; see Fazio, 1995) toward a topic could increase the perceived threat of a counterattitudinal message but also make a proattitudinal message seem redundant with existing beliefs (or not at all threatening). Consistent with greater perceived threat motivating processing (and redundancy decreasing processing), higher levels of attitude accessibility were associated with increased processing of counterattitudinal messages but decreased processing of proattitudinal appeals.

In other work, Clark and Wegener (2009) found that characteristics of group message sources can activate similar

processing motives. When a group source was described as highly entitative (e.g., cohesive, organized, members shared common goals), participants engaged in greater processing of a counterattitudinal message compared to when the group was depicted as lacking entitativity (e.g., noncohesive, disorganized, members held disparate goals). However, an opposite relation was found when a message was proattitudinal—the nonentitative group elicited greater scrutiny of the message compared to the highly entitative group. Additional data suggested that these differences in processing were driven by perceptions associated with the potential effectiveness of the group. When the message was negative or counterattitudinal, participants expressed greater concern that the source would be successful with their proposal when the group was high rather than low in entitativity. However, when the message was proattitudinal, participants reported greater concern that the nonentitative group would be *less* successful bringing about the proposed changes. Furthermore, these heightened levels of concern were shown to account for processing effects of group entitativity for both counter- and proattitudinal messages.

### *Source Expertise, Perceptions of Strength, and Message Discrepancy*

Our current analysis of source expertise builds from past research on threat or perceptions of opposition—support strength serving to motivate processing (e.g., Cacioppo & Petty, 1979; Clark et al., 2008a; Clark & Wegener, 2009). As previously noted, learning that a source possesses a given level of expertise should trigger expectations associated with the accuracy or validity of a forthcoming message (e.g., Hovland et al., 1953). However, knowledge of the position of a message may also trigger expectations associated with threat, concern, or how strongly the source will support or oppose a message recipient's current attitude on an issue. When appeals are counterattitudinal, message-relevant outcomes such as proposed changes or policies are undesirable to message recipients. In these situations, an expert source should lead participants to believe that he or she will offer strong opposition, will likely have success with the advocacy, and thus, proposed negative outcomes might be viewed as likely to come to fruition. Therefore, message recipients should be motivated to carefully scrutinize the tenets of the expert communicator's arguments.

On the other hand, a counterattitudinal message presented by a low-expertise source should not be expected to serve as strong opposition. Thus, perceptions of threat (or the likelihood of negative outcomes occurring) should seem low relative to an expert advocate. Hence, compared to a message from an expert source, recipients should be less motivated to carefully attend to a negative message given by a source that lacks expertise. Interestingly, this reasoning is consistent with many of the aforementioned findings on source expertise and message scrutiny. In these past studies,

researchers reported that the stimulus messages used were indeed counterattitudinal (see Debono & Harnish, 1988; Heesacker et al., 1983; Tobin & Raymundo, 2009).

If our conceptualization is correct, perceptions of source expertise may elicit a very different pattern of results when a communication supports, rather than opposes, the views of message recipients. Specifically, we propose that greater perceived source expertise should be associated with decreases in scrutiny of a proattitudinal message. Rather than eliciting threat or concern, an expert advocating a favorable idea may be comforting or bolstering—because this source should be expected to provide accurate, compelling support to a recipient's opinion on an issue. Message recipients may perceive little need and, thus, have little motivation to actively scrutinize the merits of the expert's communication. In stark contrast, however, encountering this same positive message from a source that lacks expertise may be disconcerting rather than comforting. Though the message recipient should want the advocacy to be successful, he or she may be afraid that the source will fail. The recipient may be concerned that support for his or her preferred outcomes only comes from a communicator that lacks the ability to present effective arguments. This expected absence of strong support could motivate processing in an attempt to find that the tenets of the message are sensible and make preferred outcomes likely. In other words, the message recipient may seek to be reassured that the merits of the appeal might carry the day in spite of the low expertise source.

Taken together, these predictions suggest that the relation between source expertise and message processing may be more complex than previously understood. If source expertise increases scrutiny only because of validity or accuracy expectations about a forthcoming message (e.g., Hovland & Weiss, 1951), processing effects should be similar across proattitudinal and counterattitudinal messages. However, if perceptions of expertise and message discrepancy operate in concert to influence motives to process, effects of source expertise may be different across proattitudinal and counterattitudinal appeals. Experts should be most likely to enhance attention and scrutiny when messages counter the premessage attitudes of message recipients. However, sources that lack—rather than possess—expertise may elicit more processing when messages are favorable toward (support) existing attitudes.

Two studies tested these hypotheses. In each investigation, the valence of participants' premessage attitudes was measured. Then, after receiving expertise information about a source, participants were supplied with either strong or weak arguments that clearly advocated a particular position on the issue (in favor of taxes placed on junk food [Study 1] or in favor of building more nuclear power plants [Study 2]). In Study 2, participants also reported expectations regarding how strongly the source would oppose or support their position on the issue. For each study, message scrutiny was indexed by examining the extent to which the quality of the

arguments influenced participants' postmessage attitudes and thoughts about the issue (see Petty & Cacioppo, 1986, for discussion of this method).

## Study 1

### Method

**Participants and design.** Two hundred and forty undergraduates at a large Midwestern university participated in exchange for partial course credit in their introductory psychology classes. The valence of premessage attitudes was measured and the expertise of a message source (low vs. high) and quality of message arguments (weak vs. strong) were manipulated.

**Procedure.** As a cover story, participants were led to believe that the researchers were investigating the validity of "readability indices." Participants were told they would receive a written communication and then assess factors related to the readability of the information. Following this script, the favorability of participants' attitudes toward the potential taxation of junk food and a number of filler issues were measured. After this survey, participants received information that manipulated the expertise of the source (low vs. high) of the forthcoming message. Participants were then given a set of specious (weak) or compelling (strong) arguments advocating the taxing of junk food. After reading the message, participants reported their attitudes on scaled measures, completed a thought-listing task, rated the valence of their listed thoughts, and responded to a manipulation check. Following these measures, participants were thanked and debriefed.

### Independent Variables

**Message discrepancy (premessage attitude).** After the cover story, participants completed a 19-item attitude survey in which the second question corresponded to junk food taxation and the remaining items served as filler. Attitudes toward potential taxes placed on junk food were measured on a 9-point semantic differential (1 = *definitely opposed* to 9 = *definitely in favor*). Responses on this measure ( $M = 4.93$ ) indexed the extent to which the position of the persuasive message was discrepant from premessage attitudes (i.e., relatively high discrepancy [counterattitudinal] or low discrepancy [proattitudinal]).

**Source expertise.** Before receiving the persuasive message, participants received one of two source descriptions designed to manipulate the expertise of the message source. In the high-expertise conditions, participants were told that the source (i.e., "Paul Chambers") was "a leading scholar in the field of health and food sciences." In contrast, the low-expertise description stated that the source was "a high school junior." This manipulation of source expertise is conceptually similar to those used in past research (e.g., Petty et al., 1981).

**Argument quality.** Participants received a message titled “In Favor of Junk Food Taxation” and it contained either strong or weak arguments that were supposedly written by the aforementioned source (approximately 470 words; developed by Clark et al., 2008b). For example, in the strong version of the message, one argument focused on how a small tax on junk food would provide \$70 million for initiatives to promote healthy lifestyles. The weak version of the appeal also supported the tax, but with information that had been pretested to be less compelling. For example, in the weak version, information in the message conveyed that the tax would create only a small amount of money to support healthy lifestyle initiatives.

### Dependent Measures

**Postmessage attitudes.** After reading the message, participants reported their attitudes toward junk food taxation on five 9-point scales (“Junk food taxation would be:” 1 = *bad, negative, harmful, foolish, undesirable*, to 9 = *good, positive, beneficial, wise, and desirable*). Responses to these items were reliable ( $\alpha = .92$ ) and were averaged to form a postmessage attitude index.

**Thought listing.** Following the attitude measures, participants completed a thought-listing task in which they listed a maximum of eight thoughts (on separate computer screens) that came to mind while reading the message (see Wegener, Downing, Krosnick, & Petty, 1995, for specific thought-listing instructions). Upon listing eight thoughts or after 3 min elapsed, participants were prompted to rate each of their thoughts. Each listed thought was presented sequentially by the computer and was coupled with the following choices: *positive, negative, neutral, or unrelated* to the taxation of junk food. The overall favorability of each participant’s self-rated thoughts was indexed by subtracting the number of negative thoughts from the number of positive thoughts and dividing this number by the total number of topic-related thoughts listed.

**Source expertise check.** After rating their thoughts, participants were asked to report the extent to which they perceived the message source to be an expert. This item read as follows: “To what extent do you believe that Paul Chambers is an expert on the topic of junk food taxation?” (1 = *not at all* to 9 = *very much*).

### Results

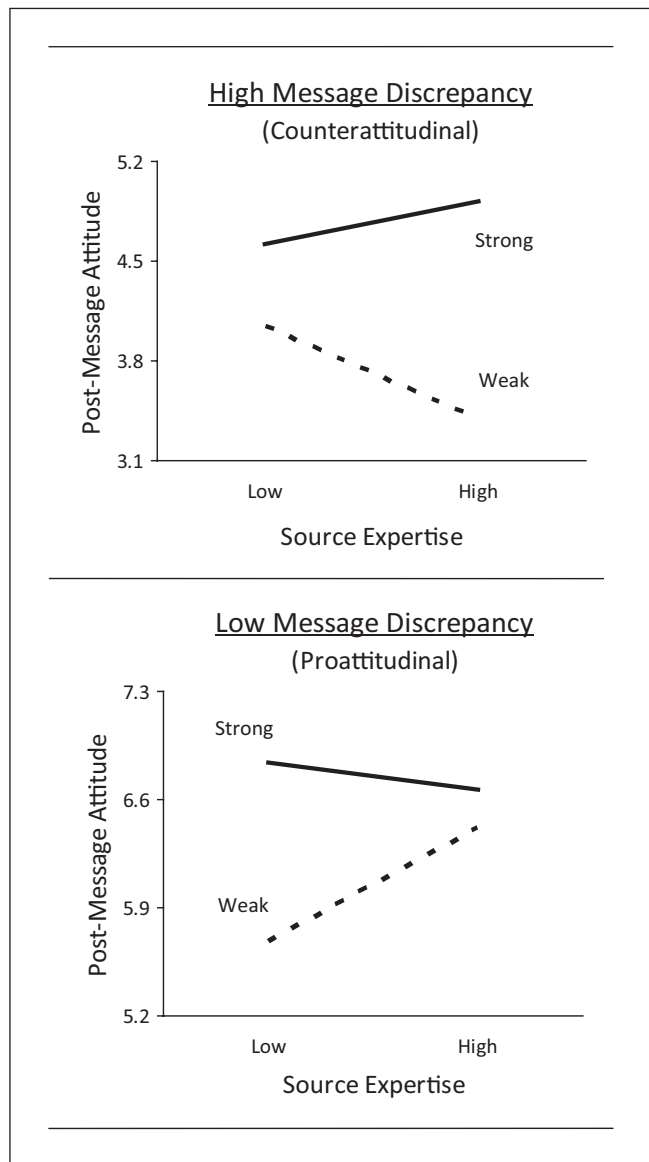
**Source expertise check.** Centered regression analyses were performed on each dependent measure (see Aiken & West, 1991). In each analysis, centered predictors included the measure of premessage attitude (to index the extent of message discrepancy), the manipulation of source expertise, the manipulation of argument quality, and all interaction terms. When the expertise check was regressed on these predictors, a robust main effect of the source expertise manipulation

was found. As anticipated, the source was viewed as more of an expert on the topic when expertise was manipulated to be high rather than low,  $b = 1.06$ ,  $t(232) = 4.10$ ,  $p < .001$ ,  $r = .26$ . In addition, a smaller main effect of message discrepancy also emerged such that higher expertise was perceived when the message was relatively proattitudinal compared to counterattitudinal,  $b = .11$ ,  $t(232) = 1.99$ ,  $p = .048$ ,  $r = .13$ . No additional effects approached significance ( $ps > .32$ ).

**Postmessage attitudes.** A centered regression analysis revealed the predicted Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality interaction,  $b = -.38$ ,  $t(232) = -2.12$ ,  $p = .035$ ,  $r = .14$  (see Figure 1). When message discrepancy was relatively high (i.e., counterattitudinal, 1 *SD* below the mean on the premessage attitude measure), argument quality had a significant influence on postmessage attitudes when source expertise was high ( $\hat{Y}_{\text{strong}} = 4.92$  vs.  $\hat{Y}_{\text{weak}} = 3.39$ ),  $b = 1.52$ ,  $t(232) = 3.37$ ,  $p = .001$ ,  $r = .22$ , but not when expertise was low ( $\hat{Y}_{\text{strong}} = 4.62$  vs.  $\hat{Y}_{\text{weak}} = 4.04$ ),  $b = .58$ ,  $t(232) = 1.34$ ,  $p = .182$ . In contrast, when message discrepancy was relatively low (i.e., proattitudinal, 1 *SD* above the mean on the premessage attitude measure), the quality of the arguments affected attitudes when the source was low in expertise ( $\hat{Y}_{\text{strong}} = 6.84$  vs.  $\hat{Y}_{\text{weak}} = 5.68$ ),  $b = 1.16$ ,  $t(232) = 2.56$ ,  $p = .011$ ,  $r = .17$ , but not when the source was high in expertise ( $\hat{Y}_{\text{strong}} = 6.66$  vs.  $\hat{Y}_{\text{weak}} = 6.42$ ),  $b = .23$ ,  $t < 1$ . Main effects of message discrepancy and argument quality were also found. Postmessage attitudes were more favorable when message discrepancy was low rather than high,  $b = .44$ ,  $t(232) = 9.81$ ,  $p < .001$ ,  $r = .45$ , and when strong versus weak arguments were received,  $b = .87$ ,  $t(232) = 3.98$ ,  $p < .001$ ,  $r = .25$ . No additional effects approached significance ( $ps > .30$ ).

**Thought favorability.** A regression performed on thought favorability revealed a three-way interaction pattern similar to that found on postmessage attitudes,  $b = -.13$ ,  $t(232) = -2.01$ ,  $p = .045$ ,  $r = .13$ . At relatively high message discrepancy (counterattitudinal), the quality of arguments influenced thought favorability when source expertise was manipulated to be high ( $\hat{Y}_{\text{strong}} = -.05$  vs.  $\hat{Y}_{\text{weak}} = -.49$ ),  $b = .44$ ,  $t(232) = 2.66$ ,  $p = .008$ ,  $r = .17$ , but not when it was low ( $\hat{Y}_{\text{strong}} = -.04$  vs.  $\hat{Y}_{\text{weak}} = -.16$ ),  $b = .12$ ,  $t < 1$ . However, when message discrepancy was relatively low (proattitudinal), favorability of thoughts was significantly affected by argument quality when source expertise was low ( $\hat{Y}_{\text{strong}} = .42$  vs.  $\hat{Y}_{\text{weak}} = .05$ ),  $b = .37$ ,  $t(232) = 2.21$ ,  $p = .028$ ,  $r = .14$ , but not when it was high ( $\hat{Y}_{\text{strong}} = .36$  vs.  $\hat{Y}_{\text{weak}} = .33$ ),  $b = .03$ ,  $t < 1$ . Also, robust main effects of message discrepancy,  $b = .10$ ,  $t(232) = 5.87$ ,  $p < .001$ ,  $r = .36$ , and argument quality,  $b = .24$ ,  $t(232) = 2.99$ ,  $p = .003$ ,  $r = .19$ , emerged.

**Mediation of argument quality effects on postmessage attitudes by thoughts.** Significant influences of argument quality on persuasion indicate that recipients carefully scrutinized an advocacy, whereas a lack of such effects is consistent with low levels of message-related thinking. These differential effects of argument quality are often evident on measures



**Figure 1.** Top panel: Predicted values for postmessage attitudes as a function of source expertise and argument quality when message discrepancy was high (counterattitudinal;  $-1$  SD on premessage attitude measure) in Study 1. Bottom panel: Predicted values for postmessage attitudes as a function of source expertise and argument quality when message discrepancy was low (proattitudinal;  $+1$  SD on premessage attitude measure) in Study 1

of thought favorability (as reported earlier), and these thoughts in response to the message can be responsible for the differential effects of argument quality on attitudes (e.g., Clark & Wegener, 2009). To test this notion, we conducted mediated-moderation regression analyses (see Muller, Judd, & Yzerbyt, 2005; Wegener & Fabrigar, 2000). Parallel Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality (independent variable) effects on both thought favorability (mediator) and postmessage attitudes (dependent measure) are consistent with the proposed mediational pattern. However,

the key analysis consisted of regressing postmessage attitudes on the previously constructed terms for message discrepancy, source expertise, and argument quality, while simultaneously including thought favorability as a predictor. Results of this analysis showed a robust main effect of thought favorability on attitudes,  $b = 1.53$ ,  $t(231) = 10.21$ ,  $p < .001$ ,  $r = .56$ . In contrast, the distal Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality interaction on postmessage attitudes decreased, from the original value of  $b = -.38$ ,  $t(232) = -2.12$ ,  $p = .035$ , and fell to nonsignificance,  $b = -.18$ ,  $t(231) = -1.19$ ,  $p = .235$ .

The statistical significance of this mediational pattern was examined using bootstrapping procedures outlined by Shrout and Bolger (2002; see also Preacher & Hayes 2004, 2008). The bootstrap analyses treated the obtained data as the population and randomly drew 5,000 samples of equal size to the study, with replacement. Estimates of the indirect effect on postmessage attitudes were calculated for each bootstrapped sample and were used to generate a bias corrected (BC) 95% confidence interval for the mediational (indirect) effect. This analysis showed that thought favorability significantly mediated the influence of the Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality interaction on postmessage attitudes, estimated mean indirect effect = .20, BC 95% CI [.0031, .4459]. Hence, these results suggest that differences in the favorability of participants' thoughts accounted for the differences in argument quality effects on postmessage attitudes (based on the hypothesized combinations of message discrepancy and source expertise).

## Discussion

The findings of Study 1 provide initial evidence that the relation between source expertise and message scrutiny is markedly different depending on whether the position of an advocacy is discrepant from or consistent with existing attitudes. When message discrepancy was relatively high (counterattitudinal), argument quality influenced persuasion when the source was high but not low in expertise. In contrast, when discrepancy was low (proattitudinal message), the quality of the message arguments affected persuasion when expertise was manipulated to be low but had no impact when it was high. Furthermore, these opposing patterns support the conceptualization that source expertise triggers motives related to perceptions of threat or strength of opposition or support. For counterattitudinal messages, message recipients may perceive an expert as more likely to provide strong opposition to one's views compared to a source that lacks expertise. When messages are proattitudinal, a nonexpert (rather than an expert) advocate may be viewed as unlikely to effectively support message recipients' preferred position. In these situations, expectations of inadequate support (proattitudinal) or robust opposition (counterattitudinal) may motivate message recipients' to carefully scrutinize the tenets of a communicated message.

The aim of Study 2 was to examine whether these expectations account for the observed processing effects. In this investigation, the procedures were largely similar to those employed in Study 1. However, participants' expectations concerning the strength of potential opposition or support were measured immediately after learning the expertise of the source. If expecting strong opposition from an expert (counterattitudinal) and anticipating weak support from a nonexpert (proattitudinal) motivates message scrutiny, these perceptions should mediate the interactive effects of source expertise on processing.

## Study 2

### Method

**Participants and design.** One-hundred ninety-three undergraduates at a large Southern university participated and received partial course credit. Premessage attitudes toward nuclear power plants were measured, and source expertise (low vs. high) and the quality of message arguments (weak vs. strong) were manipulated.

**Procedure.** The procedure was nearly identical to Study 1 with the following exceptions. The expertise of the message source was varied using a different manipulation and the message topic now concerned the development of nuclear power plants. After the manipulation of expertise, but *before* receipt of the message, participants also answered questions that assessed beliefs concerning how strongly the source would oppose or support the participant's position on an issue.

### Independent Variables

**Message discrepancy (premessage attitude).** As part of the initial survey, attitudes toward nuclear power were measured on a 9-point scale (1 = *definitely opposed* to 9 = *definitely in favor*). The extent to which the position of the persuasive appeal was discrepant from premessage attitudes was based on responses to this measure ( $M = 4.95$ ).

**Source expertise.** In contrast to Study 1, participants were simply told that the source ("Paul Chambers") possessed either "a very high level of expertise" or had "absolutely no expertise whatsoever" on the issue. In the expertise manipulation, participants received no indication of the topic or position of the forthcoming message.

**Argument quality.** The message was titled "In Favor of Developing New Nuclear Power Plants in the U.S." and it consisted of either four weak or four strong arguments (approximately 300 words; adapted from Clark et al., 2008b). For example, one weak argument stated that nuclear power plants are more desirable because they are more aesthetically pleasing than conventional power plants. In the strong version, however, one argument stated that additional nuclear

plants could help reduce the emissions of greenhouse gases by replacing a number of conventional power plants.

### Dependent Measures

**Perceived strength of opposition or support.** Following the manipulation of source expertise, but before learning the message topic, participants reported expectations of how strongly the source would support or oppose their opinion on an issue. These perceptions were measured on two scales (1 = *not at all* to 9 = *very much*) and the presentation order was counterbalanced across participants. One item targeted potential receipt of a counterattitudinal message: "If Paul Chambers was arguing against something that you believe, to what extent would you expect him to provide strong opposition to your opinion?" The other question focused on receipt of a proattitudinal message: "If Paul Chambers was arguing in favor of something that you believe, to what extent would you expect him to provide strong support to your opinion?"

**Postmessage attitudes.** After reading the message, participants reported their postmessage attitudes on six scales. The first five items used the stem "Nuclear power plants are:" (1 = *bad, useless, harmful, negative, unnecessary*, to 9 = *good, useful, beneficial, positive, necessary*). The sixth item was as follows: "Building nuclear power plants in the United States is a good idea" (1 = *strongly disagree* to 9 = *strongly agree*). Responses to these measures were averaged to form an index of postmessage attitude ( $\alpha = .96$ ).

**Thought listing.** Following measures of postmessage attitudes, participants engaged in the same thought-listing and thought-rating task used in Study 1. In addition, overall favorability of thoughts was calculated the same as in Study 1.

### Results

**Perceived strength of opposition or support.** Separate centered regressions were performed on the measures of perceived opposition and support strength, respectively. Each analysis included the measure of premessage attitude (i.e., message discrepancy), the manipulation of source expertise, the manipulation of argument quality, and all interaction terms as centered predictors. As anticipated, results on each dependent measure showed only the predicted main effect of the source expertise manipulation (all other main effects and interactions,  $ps > .22$ ). On the measure targeting potential receipt of a counterattitudinal appeal, beliefs that the source would likely provide strong opposition were stronger for participants who received the high-expertise source ( $M = 7.06$ ) compared to the low-expertise source ( $M_{\text{high}} = 7.06$  vs.  $M_{\text{low}} = 5.63$ ),  $b = 1.40$ ,  $t(185) = 4.22$ ,  $p < .001$ ,  $r = .31$ . For the measure regarding possible receipt of a proattitudinal message, participants also believed that the expert source would likely provide stronger support for their opinion compared to the nonexpert advocate ( $M_{\text{high}} = 7.77$  vs.  $M_{\text{low}} = 6.67$ ),

$b = 1.10$ ,  $t(185) = 4.03$ ,  $p < .001$ ,  $r = .29$ . These results are consistent with the idea that the opposing effects of expertise as a function of message discrepancy may be due to differences in the perceived strength of potential opposition or support.

**Postmessage attitudes.** A centered regression analysis revealed the predicted Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality interaction,  $b = -.40$ ,  $t(185) = -2.28$ ,  $p = .024$ ,  $r = .17$ . When message discrepancy was relatively high (counterattitudinal; 1 *SD* below the mean on the premessage attitude measure), argument quality significantly influenced postmessage attitudes when expertise was high ( $\hat{Y}_{\text{strong}} = 5.69$  vs.  $\hat{Y}_{\text{weak}} = 4.39$ ),  $b = 1.30$ ,  $t(185) = 3.67$ ,  $p < .001$ ,  $r = .26$ , but not when expertise was low ( $\hat{Y}_{\text{strong}} = 4.65$  vs.  $\hat{Y}_{\text{weak}} = 4.26$ ),  $b = .39$ ,  $t(185) = 1.12$ ,  $p = .265$ . However, when message discrepancy was low (proattitudinal; 1 *SD* above the mean on the premessage attitude measure), the quality of arguments affected attitudes when expertise was low ( $\hat{Y}_{\text{strong}} = 7.65$  vs.  $\hat{Y}_{\text{weak}} = 6.73$ ),  $b = .92$ ,  $t(185) = 2.54$ ,  $p = .012$ ,  $r = .18$ , but not when expertise was high ( $\hat{Y}_{\text{strong}} = 7.30$  vs.  $\hat{Y}_{\text{weak}} = 7.08$ ),  $b = .22$ ,  $t < 1$ . Also paralleling previous results, main effects of message discrepancy,  $b = .61$ ,  $t(185) = 13.87$ ,  $p < .001$ ,  $r = .71$ , and argument quality,  $b = .71$ ,  $t(185) = 4.02$ ,  $p < .001$ ,  $r = .28$ , were observed.

**Thought favorability.** The three-way interaction on the favorability of participants' thoughts approached significance,  $b = -.15$ ,  $t(185) = -1.75$ ,  $p = .081$ ,  $r = .13$ . Simple effects of argument quality at different levels of message discrepancy and expertise mirrored effects found on postmessage attitudes. When message discrepancy was high (counterattitudinal), argument quality affected thoughts when source expertise was high ( $\hat{Y}_{\text{strong}} = .19$  vs.  $\hat{Y}_{\text{weak}} = -.30$ ),  $b = .49$ ,  $t(185) = 2.79$ ,  $p = .006$ ,  $r = .20$ , but not when it was low ( $\hat{Y}_{\text{strong}} = -.25$  vs.  $\hat{Y}_{\text{weak}} = -.38$ ),  $b = .13$ ,  $t < 1$ . In contrast, when message discrepancy was relatively low (proattitudinal), argument quality tended to influence thought favorability when the source was low ( $\hat{Y}_{\text{strong}} = .38$  vs.  $\hat{Y}_{\text{weak}} = .07$ ),  $b = .31$ ,  $t(185) = 1.73$ ,  $p = .086$ ,  $r = .13$ , but not high in expertise ( $\hat{Y}_{\text{strong}} = .46$  vs.  $\hat{Y}_{\text{weak}} = .40$ ),  $b = .06$ ,  $t < 1$ . Significant main effects of message discrepancy,  $b = .13$ ,  $t(185) = 5.83$ ,  $p < .001$ ,  $r = .39$ ; source expertise,  $b = .23$ ,  $t(185) = 2.64$ ,  $p = .009$ ,  $r = .19$ ; and argument quality,  $b = .25$ ,  $t(185) = 2.83$ ,  $p = .005$ ,  $r = .20$ , were also found.

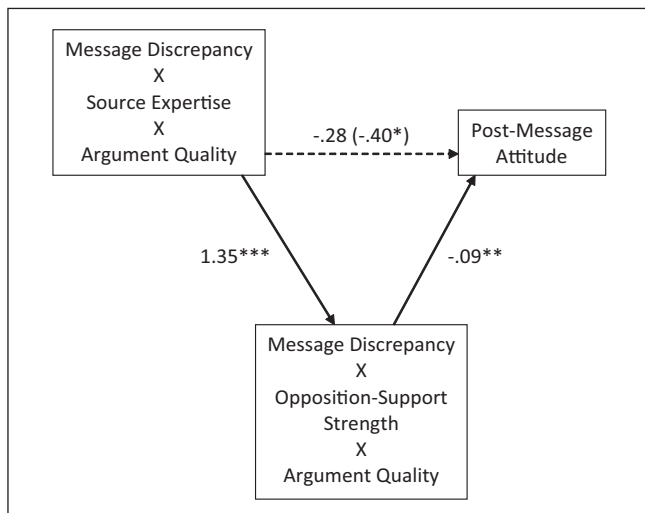
**Mediation of argument quality effects on postmessage attitudes by thoughts.** The same procedures employed in Study 1 were used to test the extent to which the three-way interaction of the distal variables on postmessage attitudes was mediated by the valence of participants' thoughts. As previously presented, both thought favorability and postmessage attitudes were influenced by the Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality interaction. For the mediational analysis, a subsequent regression included message discrepancy, source expertise, and argument quality terms (and all of their interactions), but also included a

thought favorability term as a predictor of postmessage attitudes. As in Study 1, a robust main effect of thought favorability on postmessage attitudes emerged,  $b = .97$ ,  $t(184) = 7.42$ ,  $p < .001$ ,  $r = .48$ . This effect was coupled with a diminished impact of the Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality interaction on attitudes,  $b = -.25$ ,  $t(184) = -1.62$ ,  $p = .107$ . Bootstrapping analyses (identical to those used in Study 1) showed that this pattern of mediation was marginally significant, estimated mean indirect effect = .15, BC 93% CI [.0015, .3255]. As with Study 1, these results suggest that effects of the distal variables on postmessage attitudes may have been due to underlying differences in the favorability of thoughts about the message.

**Mediation of expertise effects on processing by perceived strength of opposition or support.** Beyond conceptually replicating the findings of Study 1, the primary aim of Study 2 was to more directly examine the expectations that may drive the observed processing effects. We predicted that the expected strength of potential opposition or support should account for why source expertise is associated with differential processing of pro- and counterattitudinal messages. To test this hypothesis, mediated moderation regression analyses were performed (Muller et al., 2005). As reported earlier, when asked to consider the possibility of the source providing either a counter- or proattitudinal appeal (on separate measures), source expertise had robust effects on beliefs about whether a source would likely provide strong opposition (counterattitudinal) or support (proattitudinal) to one's opinion. To create a single measure of opposition–support strength, scores from one of the two measures were selected based on participants' premessage attitudes toward nuclear power. Responses on the "opposition" measure targeting counterattitudinal message reception were used for participants who reported a premessage attitude of 5 or below on the 9-point scale. Scores from the "support" measure about proattitudinal message reception were used for all remaining participants.

The plausibility of opposition–support strength as a mediator of effects on processing was enhanced by a significant Message Discrepancy  $\times$  Opposition–Support Strength  $\times$  Argument Quality interaction on postmessage attitudes,  $b = -.11$ ,  $t(185) = -2.95$ ,  $p = .004$ ,  $r = .21$ , and on thought favorability,  $b = -.06$ ,  $t(185) = -3.10$ ,  $p = .002$ ,  $r = .22$ . These patterns mirrored the Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality effects reported earlier. Specifically, when message discrepancy was high (counterattitudinal), strong arguments were more persuasive than weak arguments when the strength of perceived opposition was relatively high—attitudes:  $b = 1.31$ ,  $t(185) = 3.69$ ,  $p < .001$ ,  $r = .26$ ; thoughts:  $b = .56$ ,  $t(185) = 3.15$ ,  $p = .002$ ,  $r = .23$ —but not when it was low—attitudes:  $b = .55$ ,  $t(185) = 1.84$ ,  $p = .068$ ; thoughts:  $b = .14$ ,  $t < 1$ . When message discrepancy was low (proattitudinal), however, argument quality affected persuasion when strength of support was relatively





**Figure 2.** Regression analyses on relations among the Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality interaction and the Message Discrepancy  $\times$  Opposition-Support Strength  $\times$  Argument Quality interaction on postmessage attitudes in Study 2 \* $p < .05$ . \*\* $p < .02$ . \*\*\* $p < .001$ .

low—attitudes:  $b = 1.18$ ,  $t(185) = 3.00$ ,  $p = .003$ ,  $r = .22$ ; thoughts:  $b = .50$ ,  $t(185) = 2.57$ ,  $p = .011$ ,  $r = .19$ —but not when it was high—attitudes:  $b = .04$ ,  $t < 1$ ; thoughts:  $b = -.07$ ,  $t < 1$ .

If expectations of support strength are responsible for effects of source expertise on processing, terms using opposition-support strength should reduce the effects of the same terms using source expertise. Therefore, we needed to assess whether the Message Discrepancy  $\times$  Opposition-Support Strength  $\times$  Argument Quality interaction accounted for the Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality interactions reported earlier on attitudes and thoughts. Regressions simultaneously included previously constructed terms for message discrepancy, source expertise, and argument quality (including all centered main effects and interactions), as well as parallel terms that replaced source expertise with perceived opposition-support strength.

With postmessage attitudes as the dependent measure, this analysis showed that the Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality interaction decreased substantially and became nonsignificant,  $b = -.28$ ,  $t(181) = -1.52$ ,  $p = .131$ . In contrast, the Message Discrepancy  $\times$  Opposition-Support Strength  $\times$  Argument Quality interaction remained robust,  $b = -.09$ ,  $t(181) = -2.38$ ,  $p = .019$ ,  $r = .17$  (see Figure 2). In a parallel analysis of the thought favorability dependent measure, a similar mediational pattern emerged. The Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality interaction was reduced,  $b = -.09$ ,  $t(181) = -.96$ ,  $p = .337$ , whereas the Message Discrepancy  $\times$  Opposition-Support Strength  $\times$  Argument Quality remained a significant predictor,  $b = -.05$ ,  $t(181) = -2.71$ ,  $p = .007$ ,  $r = .20$ . Moreover, bootstrapping analyses showed that the mediational patterns

on both postmessage attitudes and thought favorability were statistically robust, with the estimated mean indirect effect on attitudes = .12, BC 95% CI [.0050, .3707], and the estimated mean indirect effect on thoughts = .07, BC 96% CI [.0013, .2040].<sup>1</sup> Therefore, the mediational analyses were consistent with the idea that expectations of strength of opposition or support were responsible for the effects of source expertise on processing of pro- versus counterattitudinal messages.

## Discussion

Study 2 provides additional support for the proposed interactive effects of message discrepancy and source expertise on message scrutiny. As in Study 1, the high-expertise source was associated with substantive processing when message discrepancy was high (counterattitudinal) but not when the message was relatively consistent with premessage attitudes (proattitudinal). However, the low-expertise source was associated with message scrutiny when message discrepancy was low but not when it was high. The Study 2 findings also suggest that expectations regarding potential strength of opposition or support determined the extent of careful scrutiny paid by message recipients. When participants were asked to consider encountering a counterattitudinal message from the source, the expert was perceived as more likely to offer strong opposition to one's opinion compared to the nonexpert. However, when considering potential receipt of a proattitudinal appeal, the low-expertise source produced expectations of weaker support for one's preferred position than the expert advocate. Furthermore, these differences in the perceived strength of opposition or support mediated effects of message discrepancy and source expertise on message scrutiny.

## General Discussion

Previous research has found that higher levels of source expertise are associated with greater scrutiny of persuasive message arguments (e.g., Heesacker et al., 1983; Tobin & Raymundo, 2009). These findings are consistent with early conceptualizations that high expertise motivates attention because of stronger expectations of validity or accuracy of the information to be disseminated. However, these types of expectations carry different motivational implications when the message involved is counter- rather than proattitudinal. The current studies offer converging evidence that message discrepancy plays a key moderating role that completely reverses effects of expertise (and the accompanying expectations of strong opposition or support) on message scrutiny. In particular, when motivation and ability to think is not constrained to be low or high (moderate), knowledge of an advocate's expertise works in concert with the position of a message to determine the extent of message scrutiny. Across Studies 1 and 2, postmessage attitudes and thought favorability

in response to counterattitudinal messages were affected by the quality of the arguments when source expertise was high but not when it was low. However, the opposite relation was found when messages were relatively proattitudinal or largely consistent with premessage views. In these situations, evidence of substantive processing was found when sources were manipulated to be low rather than high in expertise on the issue.

These effects were postulated to be driven by expectations about a source's ability to strongly oppose or support a message recipient's views. When a message advocates disagreeable changes, a source perceived as likely to provide compelling information may motivate recipients to carefully process information because the proposed negative outcomes may seem likely to come to fruition. In contrast, when an advocacy is agreeable, a source viewed as unlikely to provide compelling arguments may motivate message recipients to think because the outcomes they prefer may seem unlikely to be facilitated. Consistent with this conceptualization, Study 2 showed that the expert was viewed as more likely to provide strong opposition than the low-expertise source, and these expectations mediated expertise effects on processing of a counterattitudinal message. On the other hand, compared to the expert source, the nonexpert advocate was anticipated to provide weaker support, and these expectations accounted for the processing effects of expertise when the message was proattitudinal.

### *Implications and Future Directions*

The current findings hold many implications and should present several avenues for future research. One direction could be to extend the demonstrated effects to different kinds of persuasive appeals. For instance, compared to messages that advocate a change to the status quo (e.g., implementing junk food taxes), messages that argue against change (e.g., opposing potential junk food taxes) are less frequently examined in persuasion research. That said, previous work on concern-based motives and message discrepancy has demonstrated identical processing effects regardless of whether an appeal champions for or argues against a particular change (see Clark et al., 2008a). And, in the current context, it stands to reason that the expertise of a communicator would guide processing in a similar way for both types of messages. For a message that argues against change, recipients who initially view the change as desirable (i.e., message is counterattitudinal) should perceive an expert as providing stronger opposition than a nonexpert. On the other hand, recipients who are initially against change (i.e., message is proattitudinal), should view a nonexpert as providing weaker support than an expert. Moreover, greater processing of counterattitudinal messages should be motivated by stronger perceived opposition (high expertise), whereas enhanced scrutiny of proattitudinal appeals should be associated with weaker perceived support (low expertise).

A number of variables might moderate these effects. Factors such as one's familiarity with arguments for a position (Sawicki et al., 2011), the amount of issue-relevant knowledge (e.g., Petty & Cacioppo, 1986), or the extent to which recipients feel committed to their opinion (see Hass, 1981) might each play a substantial role. In the current research, the topics of junk food taxation and nuclear power were selected because past research demonstrated that each was not highly important or personally relevant among college students (see Clark, 2007; Clark & Wegener, 2009). Along with these perceptions, it is likely that participants' level of familiarity, knowledge, or attitudinal commitment was also not high in relation to these topics (for a review of associations between these variables, see Petty & Krosnick, 1995). With this in mind, the investigated effects may be different when recipients are more familiar, knowledgeable, and so on, about an issue. For example, consider the pattern observed when message discrepancy was low (proattitudinal) and weak arguments were received—less persuasion and more negative attitudes when a source was low rather than high in expertise. This relation may have been facilitated by participants holding little knowledge on the topic. Although participants carefully scrutinized the message when the source was nonexpert, they may have lacked the ability to generate their own compelling arguments for this preferred position. And without this buoy, participants may have been particularly susceptible to the weakness of the advocacy and the unfavorable thoughts it elicited.

Beyond the study of source expertise per se, the present findings add to the growing list of factors that can determine effects of message discrepancy on thinking. Some classic attitude change research suggested that people process counterattitudinal information, presumably because of increased concern or threat to one's opinion (e.g., Brock, 1967; Cacioppo & Petty, 1979). However, a number of more recent investigations have shown that people can engage in greater elaboration of pro- rather than counterattitudinal messages depending on several factors that often may be present in persuasion settings (e.g., Baker & Petty, 1994; Clark et al., 2008b; Wegener, Petty, & Smith, 1995). For some of these documented effects, the concern-based conceptualization highlighted in the current work may provide additional insight. For example, in research on majority and minority status, Baker and Petty (1994) found greater processing of a counterattitudinal message when it was portrayed as the majority position. However, enhanced scrutiny of a proattitudinal message was associated with a minority, rather than a majority, portrayal. These effects were postulated as being due to the recipients experiencing surprise upon learning that their existing views fell in the minority. In conjunction with surprise, it is plausible that majorities presenting a counterattitudinal message represent strong opposition whereas minorities advocating a proattitudinal proposal serve as insufficient support. Hence, increases in scrutiny may be due (at least in part) to enhanced concern.

## Conclusion

Perceptions of communicator expertise have received a considerable amount of attention in the study of persuasion. Source expertise has been shown to affect persuasion in number of different ways (see Briñol & Petty 2009). In particular, prior research has shown that expert sources can affect persuasion by motivating recipients to more carefully attend to their messages compared to low-expertise advocates (e.g., Heesacker et al., 1983; Tobin & Raymundo, 2009). However, we postulated that this effect may be limited to situations in which an advocacy is perceived as relatively counterattitudinal and an opposite relation should emerge for proattitudinal appeals (i.e., greater scrutiny when expertise is low rather than high). The results of two studies were consistent with these predictions. In addition, evidence suggested that these opposing patterns were due to expectations regarding how strongly a source would oppose or support message recipients' existing views. These findings expand our understanding of how source expertise can influence attitude change. We hope that this research will stimulate future investigations into source characteristics and the implications of message discrepancy for persuasion.

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## Note

1. The same patterns were also found when participants with a premessage attitude rating of 5 were classified as "proattitudinal" in creating the opposition–support strength index. In simultaneous regressions, the Message Discrepancy  $\times$  Source Expertise  $\times$  Argument Quality interaction was reduced—attitudes:  $b = -.28$ ,  $t(181) = -1.50$ ,  $p = .135$ ; thoughts:  $b = -.09$ ,  $t(181) = -.95$ ,  $p = .341$ —whereas the Message Discrepancy  $\times$  Opposition-Support  $\times$  Argument Quality interaction remained robust—attitudes:  $b = -.08$ ,  $t(181) = -2.16$ ,  $p = .032$ ; thoughts:

$b = -.04$ ,  $t(181) = -2.22$ ,  $p = .028$ . These patterns were found to approach significance—attitudes: estimated mean indirect effect = .10, biased-corrected (BC) 94% CI [.0016, .3381]; thoughts: estimated mean indirect effect = .05, BC 94% CI [.0026, .1789].

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