Communication Research

http://crx.sagepub.com/

The Influences of Message and Source Factors on Advice Outcomes

Bo Feng and Erina L. MacGeorge Communication Research 2010 37: 553 originally published online 9 June 2010 DOI: 10.1177/0093650210368258

> The online version of this article can be found at: http://crx.sagepub.com/content/37/4/553

> > Published by:

http://www.sagepublications.com

Additional services and information for Communication Research can be found at:

Email Alerts: http://crx.sagepub.com/cgi/alerts

Subscriptions: http://crx.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Citations: http://crx.sagepub.com/content/37/4/553.refs.html

The Influences of Message and Source Factors on Advice Outcomes

Communication Research 37(4) 553–575 © The Author(s) 2010 Reprints and permission: http://www. sagepub.com/journalsPermissions.nav DOI: 10.1177/0093650210368258 http://crx.sagepub.com



Bo Feng¹ and Erina L. MacGeorge²

Abstract

Guided by an integration of existing theories on advice and persuasion, the current study presented and assessed the influence of multiple message and source factors on responses to advice in supportive interactions. A total of 262 participants completed survey instruments designed to assess message and source factors and advice outcomes with regard to a recent instance of having received advice for a personal difficulty. Results showed that the sets of source factors (expertise, liking, trust, and similarity) and message factors (politeness, response efficacy, feasibility, absence of limitations, and confirmation) each had independent influences on advice outcomes (evaluation of advice quality, facilitation of coping, and intention to implement the advice), but the effect of source factors was partially mediated by message factors. In addition, the message factors had a stronger impact on advice outcomes as problem seriousness increased. The results also showed a different pattern of prediction for implementation intention than for the other advice outcomes.

Keywords

advice, source factors, message factors, problem seriousness

When people seek support for problems or challenges in their lives, support providers often respond with advice, telling the support seeker what to do, think, or feel to improve the situation (MacGeorge, Graves, Feng, Gillihan, & Burleson, 2004). Research indicates that advice has widely varying outcomes (for a review, see MacGeorge, Feng, & Thompson, 2008). In some cases, it is viewed as helpful and supportive and promotes coping (Arora, Rutten, Gustafson, Moser, & Hawkins, 2007), but perhaps just as often it is regarded as unhelpful and insensitive and may make coping more difficult (Dakof & Taylor, 1990;

Corresponding Author:

¹University of California, Davis ²Purdue University, West Lafayette, IN

Bo Feng, Department of Communication, One Shields Avenue, University of California, Davis, CA 95616 Email: bfeng@ucdavis.edu

Servaty-Seib & Burleson, 2007). As a consequence, researchers have become interested in explaining this variability in responses to advice (MacGeorge et al., 2008).

To date, research on advice has been conducted across two separate disciplinary domains, with corresponding differences in the variables that have been examined, and the consequence that neither theory nor research findings have been well integrated. Accordingly, the current article synthesizes existing theory and research into a more comprehensive theoretical model, extends this model by drawing on dual-process models of message processing, and presents a study testing hypotheses derived from the new model.

Theorizing About Message Factors

One major segment of past research on advice has been conducted by interpersonal and health communication scholars who conceptualize advice as a form of instrumental sup*port*, defined as behavior intended to help another person solve or manage a problem. Consistent with a communication perspective on support (see Burleson & MacGeorge, 2002), these scholars have focused on the qualities of advice messages that affect how recipients respond (Goldsmith & MacGeorge, 2000; MacGeorge, Feng et al., 2004). In this line of research, the most explicit theoretical position has been articulated by Goldsmith and colleagues (Goldsmith, 1994, 2000; Goldsmith & MacGeorge, 2000; MacGeorge, Lichtman, & Pressey, 2002). Based on Brown and Levinson's (1987) politeness theory, Goldsmith (1994) argued that advice messages are potentially threatening to the public self-image or face of the recipient. In particular, advice may threaten the recipient's positive face (the desire to be liked and included) if the message is given in a condescending or blaming manner and threaten the recipient's negative face (the desire for autonomy) if it is viewed as bossy. Threats to face create unpleasant feelings, which result in less positive responses to advice. Consistent with this theoretical position, several studies have shown that advice perceived as more polite (i.e., less threatening to one or both aspects of the recipient's face) receives higher evaluations of quality (Goldsmith, 2000; MacGeorge et al., 2002) and is viewed as more facilitative of the target's coping efforts (MacGeorge, Feng et al., 2004). This line of research supports the idea that the style in which advice messages are given influences recipients' emotional responses and consequently the outcomes of the messages.

More recently, MacGeorge, Feng, and colleagues (2004) have produced a line of research informed by the notion that responses to advice messages are fundamentally affected by how well the advised action is perceived to support problem solving. Drawing from argumentation theory and the concept of *stases* or stock issues, MacGeorge, Feng, and colleagues proposed that advice recipients will respond most positively when they view an advised action as having characteristics necessary for successful problem solving, including response efficacy (i.e., will solve or alleviate the problem), feasibility (i.e., can be performed by the recipient), and absence of limitations (i.e., doesn't have too many drawbacks). Several studies have supported MacGeorge et al.'s content-focused theory (Feng & Burleson, 2008; Hung & Feeley, 2005; MacGeorge, Feng et al., 2004), showing that perceptions or manipulations of response efficacy, feasibility, and absence of

limitations predict substantial variance in advice outcomes. In addition, these studies have consistently found that these three content variables exhibit additive rather than interactive effects. More recently, MacGeorge et al. (2008) have suggested that confirmation, or the extent to which advice recommends an action that was already intended by its recipient, is another content factor that may influence responses to advice (see also Yaniv, 2004; Yaniv & Kleinberger, 2000). This idea is also consistent with research guided by social judgment theory (Sherif & Hovland, 1961), which indicates that people are more likely to be persuaded by messages advocating positions that are more proximate to their original attitudes (for reviews, see O'Keefe, 1990; Perloff, 2008).

These two theoretical positions are distinctive in identifying different features of advice messages (style vs. content) and mechanisms (emotion vs. cognition) that influence recipients' responses to advice. However, they are not incompatible positions: Different kinds of message features may operate additively or interactively to influence outcomes. In an effort to compare and integrate the politeness- and content-focused theories of advice outcomes, MacGeorge and colleagues have conducted two studies (Feng & Burleson, 2008; MacGeorge, Feng et al., 2004) simultaneously testing the influence of perceived politeness with several content variables. In both studies, content variables and politeness exerted significant, independent main effects on advice outcomes; interaction terms were generally not significant. Thus, these studies support an integrated theoretical model in which content and politeness independently influence responses to advice and provide the basis for the following hypothesis:

Hypothesis 1 (H1): Message factors (politeness, feasibility, absence of limitations, response efficacy, and confirmation) will positively influence advice outcomes (recipients' evaluation of advice quality, perceived facilitation of coping, and intention to implement the advice).

In an effort to provide greater theoretical specificity, MacGeorge and colleagues have also begun to examine whether content and politeness variables exert distinctive influences on different advice outcomes. MacGeorge, Feng et al. (2004) examined three different outcomes of support interactions containing advice: the recipient's evaluation of the advice (perceived message quality), facilitation of the recipient's ability to cope with the problem, and recipient's intention to implement the advised action. They found that politeness had a significantly stronger influence on perceived facilitation of the recipient's coping than implementation intention or evaluation of message quality. As MacGeorge, Feng et al. (2004) argued, this finding suggests that politeness may have a stronger impact on advice recipients' emotional outcomes than on evaluative or persuasive outcomes; in other words, politeness may be most important for helping recipients' feel better, with less impact on overall judgments of the advice or decisions about what action should be taken. However, the research evidence on this point is limited, and differences in predictive strength for features of advice messages with respect to the three outcome variables have not been examined with the full set of predictor variables included above. (Mac-George et al. did not include response efficacy or confirmation as variables in their study.) Accordingly, the following research question was proposed:

Research Question 1: Are there differences across the outcomes of advice variables in the predictive strength of the message style and content variables?

Source and Message Factors: Theorizing About Combined Effects

Yet a third line of research on advice has been conducted primarily by industrialorganizational psychologists (for a review, see Bonaccio & Dalal, 2006). These scholars have viewed advice as a form of persuasion that affects decision making (e.g., financial decisions), and they have concentrated on identifying source factors that account for variance in the implementation of advice when decisions are made. Thus, for example, multiple studies show that the advised action is more likely to be implemented when it is delivered by sources with greater expertise (actual or perceived; Bonaccio & Dalal, 2006; Feng & MacGeorge, 2006; Jungermann & Fischer, 2005; Sniezek & Van Swol, 2001) and when sources are perceived as more trustworthy (Sniezek & Van Swol, 2001; Thom, Kravitz, Bell, Krupat, & Azarid, 2002; White, 2005).

Persuasion theory and research suggest two additional source factors that may be important influences on advice outcomes: liking and similarity (Perloff, 2008). Multiple studies indicate that people are more likely to be persuaded by sources they like or perceive as similar to themselves (e.g., Anderson & McMillion, 1995; Hass, 1981; Silvia, 2005). Correspondingly, to the extent that an advice giver is liked and viewed as similar, a recipient may respond more favorably to advice.

Despite the number of studies examining source factors as influences on advice implementation, there has been little explicit theorizing about the underlying process(es) that produce these effects. In addition, because most research on source factors has been conducted independently of research on message factors, there has been no theory specifically focused on explaining how source and message factors might collectively influence advice outcomes. However, dual-process theories of persuasion, such as the elaboration likelihood model (ELM; Petty, Rucker, Bizer, & Cacioppo, 2004) and the heuristic-systematic model (HSM; Todorov, Chaiken, & Henderson, 2002), provide a basis for developing the necessary theory.

Logically, source and message factors might collectively influence advice outcomes in one of several ways. One possibility is that source factors and message factors have independent influences. Dual-process theories of persuasion explain that under certain circumstances source qualities can serve as cues that invoke heuristic or shortcut responses to messages. For example, if a message source is highly expert, then message targets may change attitudes or behaviors in direct response to the expertise of the source rather than being convinced by the persuasive message itself. This type of direct effect for source is theorized to be strongest when there is little or no systematic thinking (i.e., elaboration) about the persuasive message and weakest when there is extensive message elaboration. Thus, this suggests that message and source factors can have independent effects on responses to advice but that these effects are qualified by the extent of elaboration: Source factors will have the strongest direct effect on outcomes when there is least elaboration of the advice message, and message factors will have the strongest direct effect when there is most elaboration (for a somewhat similar view, see the discussion of the attenuation hypothesis by Todorov et al., 2002).

Another possibility is that source factors influence message factors, which in turn affect advice outcomes. In other words, the effect of source factors may be mediated by message factors. This position does not necessarily contradict the independent effects proposition previously theorized. Dual-process theories of persuasion (Petty et al., 2004; Todorov et al., 2002) suggest that as message elaboration increases, the direct influence of source variables on message outcomes decreases, but these same variables increasingly act to bias the direction of thinking about a message. This bias takes the form of influencing messages to be evaluated more positively as the source is evaluated more positively or more negatively as the source is evaluated more negatively. Thus, provided that the recipient was thinking systematically about the advice message, source features such as expertise would affect the processing of message features such as response efficacy, which in turn would determine advice outcomes. For example, if a source is viewed as highly expert and trustworthy, this should enhance the perceived efficacy, feasibility, and so on of the advised action, which should in turn increase the perceived quality of the advice, facilitation of coping, and implementation intention. Therefore, the strength of this mediated relationship should be moderated by message elaboration: It should become stronger as advice recipients think more carefully about the messages they receive.

Message Elaboration and Problem Seriousness

What determines the extent to which an advice recipient thinks carefully about an advice message? Dual-process models assert that message elaboration can be affected by the recipient's motivation or ability (or both) to process the message; a variety of specific variables affect message targets' motivation and ability to elaborate (Petty et al., 2004). For example, multiple studies have demonstrated that targets for whom an issue is more personally relevant or important think more carefully about persuasive messages focused on that issue (e.g., Johnson & Eagly, 1989; Petty, Cacioppo, & Goldman, 1981). In the context of support interactions, the seriousness of an advice recipient's problem should function similarly to issue relevance, influencing the extent of message processing (see Bodie & Burleson, 2008). Specifically, when recipients view their problems as more serious, they should be more invested in resolving the problem and therefore more motivated to think carefully about any advice being offered.

To summarize, dual-process models of persuasion provide a basis for theorizing about the way in which source and message factors work together to influence advice outcomes. Based on the preceding discussion, we proposed the following hypotheses about the influence of source and message factors:

Hypothesis 2 (H2): Source factors (expertise, trustworthiness, liking, and similarity) will be positively associated with advice outcomes (recipients' evaluation of advice quality, perceived facilitation of coping, and intention to implement the advice).

- *Hypothesis 3 (H3):* The effect of source factors on advice outcomes will increase as problem severity decreases.
- *Hypothesis 4 (H4):* The effect of message factors on advice outcomes will increase as problem severity increases.
- *Hypothesis 5 (H5):* Message factors will mediate the effect of source factors on advice outcomes.
- *Hypothesis 6 (H6):* The mediating effect of source factors will be moderated by problem severity such that the extent of mediation will increase as problem severity increases.

Method

Participants

Study participants were 262 college students recruited from communication classes at a large, midwestern university. The students participated on a voluntary basis during one of eleven 3-hour data-collection sessions made available to them. All of the participants received a small amount of extra credit or research credit from their class instructor. The participants (172 females, 86 males) ranged in age from 18 to 39 and averaged 21 years old. Students were largely upperclassmen (17 first years, 38 second years, 94 third years, 85 fourth years, 20 fifth years, 3 sixth years). A range of majors was represented in the sample (40 business, 103 social sciences, 7 preprofessional [e.g., law, medicine], 18 humanities, 23 physical sciences, 9 engineering, 52 fine arts, 2 undecided, 9 unreported).

Procedures

After providing informed consent, participants were given a packet containing 10 questionnaires. Six of the questionnaires presented in the packet are not pertinent to the current study and will not be discussed further. The first of the questionnaires employed in this study obtained demographic information, such as gender, age, and major of the participants. The second questionnaire prompted participants to recall a recent conversation in which they discussed an upsetting problem in their lives with another person and this person gave them advice about the problem (i.e., told them how they "could or should act in response to the problem"). This questionnaire also asked participants to specify how long ago the conversation occurred. The third questionnaire contained closed-ended items assessing participants' perceptions of the advice giver (e.g., expertise, liking, trust, similarity, type of relationship). The fourth questionnaire started by asking participants to recall the advice they were given during the conversation and describe the advice briefly. These open-ended descriptions were not analyzed in this study, but the question was included to focus participants' attention on the advice they received, rather than other aspects of the interaction. The fourth questionnaire continued with closed-ended items measuring participants' perceptions of the advice they received (efficacy, feasibility, absence of limitations, confirmation, politeness). The fifth and

sixth questionnaires assessed advice quality and outcomes (facilitation of coping, intention to implement).

Measures

Advice quality. Five items on 5-point Likert-type scales (1 = strongly disagree, 5 = strongly agree) were used to assess participants' evaluation of the overall quality of the advice message. These items were identical to those used in several previous studies of advice (e.g., Goldsmith & MacGeorge, 2000; MacGeorge, Feng et al., 2004), and they assessed participants' perceptions of message helpfulness, appropriateness, sensitivity, supportiveness, and effectiveness. The five items exhibited good internal consistency (α = .88).

Facilitation of coping. Nine items on 5-point Likert-type scales (1 = *strongly disagree*, 5 = *strongly agree*) developed by MacGeorge, Feng et al. (2004) were used to assess facilitation of problem-focused coping (e.g., "I was more confident about my ability to improve the situation," "I felt I was better able to analyze the problem") and emotion-focused coping (e.g., "I felt better able to manage any emotional distress I was having," "I felt more capable of dealing with any upset feelings I had"). Reliability analyses indicated that the facilitation of coping items formed a reliable scale ($\alpha = .90$).

Implementation intention. Three items on 5-point Likert-type scales (1 = strongly disagree, 5 = strongly agree) developed by MacGeorge, Feng et al. (2004) were used to assess participants' intention to implement the advised action (e.g., "I would probably follow the advice I was given"). The reliability for the intention to implement items was also satisfactory ($\alpha = .92$).¹

Politeness. The four-item politeness measure employed by MacGeorge, Feng et al. (2004), which was originally adapted from Goldsmith (2000), was used in the current study to measure the extent to which the advice was offered in a manner that attended to the recipients' positive and negative face needs. The two positive politeness items were as follows: "The advice made me feel liked and accepted," and "The advice made me feel good about myself." The two negative politeness items were as follows: "The advice it wanted," and "The advice made it clear that I could choose whether or not to take it." Reliability assessment indicated that deleting one of the two negative politeness items ("The advice made it clear that I could choose whether or not to take it." Nevertheless, the reliability for the remaining three items was somewhat lower than the normally accepted level of .70 ($\alpha = .67$).

Response efficacy. Participants' perception of advice efficacy was measured with three Likert-type items on a 5-point scales ($1 = strongly \ disagree, 5 = strongly \ agree$) created by the authors ("I believed that the advised action could help to solve my problem," "I thought that the advised action could solve my difficulties," "I perceived that the advised action could help fix my problem"). The three items exhibited good internal consistency ($\alpha = .86$).

Feasibility. Participants' perception of the feasibility of the advice they received was measured with nine Likert-type items on a 5-point scales (1 = strongly disagree,

 $5 = strongly \ agree$) developed by MacGeorge (MacGeorge, Feng et al., 2004). Sample items included the following: "The advice given was something I could do," and "The advice was suited to the problem I was having." The nine items exhibited good internal consistency ($\alpha = .82$).

Absence of limitations. Participants' perception of the limitations of the advice they received was measured with three Likert-type items on a 5-point scales ($1 = strongly \, disagree$, $5 = strongly \, agree$) developed by MacGeorge (MacGeorge, Feng et al., 2004). Sample items included the following: "I could tell that the advised action would have undesirable effects," and "I could predict that the advised action would have serious drawbacks." Cronbach's alpha was deemed satisfactory at .84.

Confirmation. Three Likert-type items on a 5-point scales (1 = strongly disagree, 5 = strongly agree) were developed by the authors to measure the extent to which the advice was perceived to be consistent with what the participants had already planned to do. The items included the following: "The advised action was something I had already planned to do," "The advice recommended I do something I already intended to do," and "I had already anticipated doing what the advice told me to do." The three items constituted a reliable scale ($\alpha = .90$).

Expertise. Three items on 5-point Likert-type scales ($1 = considerably less than mine, 5 = considerably greater than mine) developed by the authors were used to measure the perceived level of problem-relevant expertise of the advice giver. The items included the following: "This person's expertise with the kind of problem had was . . . ," "This person's knowledge about the type of difficulty I had was . . . ," and "This person's experience with situations like the one I faced was" The reliability for the three items was acceptable (<math>\alpha = .85$).

Trustworthiness. Wheeless and Grotz' Individualized Trust Scale (1977) was used to measure participants' trust of the advice giver. The scale consists of 14 items measured on 7-point semantic differential scales (e.g., 1 = is trustworthy, 7 = is untrustworthy; 1 = is untrustworthe). The items constituted a reliable scale ($\alpha = .91$).

Liking. Rubin's (1970) liking scale was used to measure participants' liking of the advice giver. The scale consists of 13 items measured on 5-point Likert-type scales (1 = *strongly disagree*, 5 = *strongly agree*). Sample items included the following: "This person is one of the most likeable people I know," "This person is the sort of person whom I myself would like to be," and "It seems to me that it is very easy for this person to gain admiration." The scale was very reliable ($\alpha = .92$).

Similarity. The Attitude and Background subscales of the Perceived Homophily Scale (McCroskey, Richmond, & Daly, 1975) were used to measure similarity. The two subscales consist of a total of eight items measured on 7-point semantic differential scales (e.g., 1 = doesn't think like me, 7 = thinks like me, 1 = has a background different from mine, 7 = has a background similar to mine). The items constituted a reliable scale ($\alpha = .82$).

Problem seriousness. Four items measured on 5-point Likert-type scales (1 = strongly disagree, 5 = strongly agree) were used to measure perceived problem seriousness

("This was a major problem," "The problem was an important one," "The problem was a significant one," and "The problem was a trivial one" [reverse coded]). Reliability of the scale was satisfactory ($\alpha = .79$).

Results

Power

With a sample of 262, the power to detect a significant Pearson correlation between variables was .37 for small effects (r = .10) and in excess of .99 for medium effects (r = .30) and large effects (r = .50). In regression analyses involving all predictor variables, the power to detect a significant independent effect for each predictor variable was .63 for small effects ($f^2 = .02$) and in excess of .99 for medium effects ($f^2 = .15$) and large effects ($f^2 = .35$).

Descriptive Analyses

A total of 246 participants (93.9%) reported the type of relationship they had with the advice giver. Participants reported receiving advice from a variety of relationships, with the majority of them being personal relationships—friendship: 124 (50.4%), family or significant other: 94 (38.2%). A total of 252 (96.2%) reported how long it had been since the supportive interaction occurred; 97.6% of those reporting indicated that the interaction had taken place within the previous month, and 62.7% of those interactions had occurred within 15 days prior to their participation in the study. On average, the participants reported a 16-day lapse of time since the interaction during which they received advice.

Correlations Between the Predictor Variables and Dependent Variables

H1 and H2 predicted positive correlations between the predictor variables and the three advice outcome variables. These two hypotheses were initially examined by computing zero-order correlations between each of the predictor and dependent variables. The correlations are presented in Table 1, along with the correlations among the sets of predictor and dependent variables. As can be seen from the table, all the bivariate correlations between the predictor and dependent variables were positive and statistically significant (ps < .01). To assess the independent influence of each of the predictor variables, three multiple regression analyses were conducted, one for each of the dependent variables. In these analyses, all of the predictor variables were entered simultaneously.

The results showed that the message factors and source factors collectively accounted for 56% of the variance in advice quality, 54% of the variance in facilitation of coping, and 62% of the variance in intention to implement. The standardized regression weights for each of the predictor variables across the dependent variables are reported in Table 2. As can be seen from the table, all the predictor variables except similarity had a significant

				202							
Variables	2	з	4	5	9	7	8	6	10	Ξ	12
Message variables 1. Politeness 2. Response efficacy 3. Feasibility 4. Absence of limitations 5. Confirmation Source variables 6. Expertise 7. Trustworthiness 8. Liking 9. Similarity Dependent variables 10. Message quality 11. Facilitation to implement 12. Intention to implement	.42**	. 35 . 49*	.25* .28* .42*		.16** .17** .02 .07 .07	.16** .16** .13* .06 .09	.31* 26** .17** .16** .53**		.51** .55** .37** .43** .43** .33** .33**	.55** .56** .43** .35** .35** .35** .35** .37** .37** .38** .38**	.43*** .66*** .55*** .43*** .59*** .21*** .21*** .24*** .73***

 Table 1. Correlations Among Predictor and Dependent Variables

*p < .05. **p < .01.

	Dependent Variables				
Independent Variable	Message Quality	Facilitation of Coping	Intention to Implement		
Message variables					
Politeness	.18 ^{a,****}	.27 ^{a,****}	.02 ^b		
Response efficacy	.23 ^{a,*>**}	.24 ^{a,****}	.36 ^{b,****}		
Feasibility	.14*	.07	.13**		
Absence of limitations	.13**	.13**	.17***		
Confirmation	. ^{a,*}	.15 ^{a,**}	.29 ^{b,****}		
Source variables					
Expertise	.12***	.07	.09*		
Trustworthiness	.14 ^{a,***}	09 ^b	02 ^b		
Liking	.16**	.14*	.09*		
Similarity	.04ª	.16 ^{b,*>*}	.06		

Table 2. Summary of Multiple Regression Analyses: Standardized Regression Weights

Note: Within each row, regression coefficients having different superscript letters differ significantly (p < .05).

 $p^{*} < .05. p^{*} < .01. p^{*} < .001.$

independent effect on evaluation of advice quality. For the dependent variable of facilitation of coping, significant independent effects were detected for four of the message factors (response efficacy, absence of limitations, confirmation, politeness) and two of the source factors (liking and similarity). Finally, four of the message factors (response efficacy, feasibility, absence of limitations, confirmation) and one of the source factors (expertise) had significant independent effects on the dependent variable of intention to implement.

The Relative Effects of Message and Source Factors

Our research question concerning the relative predictive strength of each predictor across the dependent variables was addressed with an analytic procedure developed by P. Cohen, Brook, J. Cohen, Velez, and Garcia (1990) and described in J. Cohen, P. Cohen, West, and Aiken (2003). This procedure involves computing a difference score between each dependent variable and the predicted value of the comparison dependent variable. This difference score then becomes the dependent variable in a new regression model. A significant squared multiple correlation (R^2) for the difference score regressed on the predictor variables indicates that the two dependent variables are differentially affected by the predictor variables. Standardized regression coefficients that are significant with respect to the difference score indicate significant differences in the prediction of the two dependent variables by the predictor variables (for details of this complex procedure, see J. Cohen et al., 2003). This procedure was used to compare the effects of each predictor variable across the set of dependent variables. As there were three dependent variables, a total of three comparisons resulted.

For the comparison between advice quality and facilitation of coping, F(9, 251) = 4.71, p < .001, significant standardized regression coefficients indicated that the effect of similarity was significantly larger for facilitation of coping than for advice quality (p < .05) and that the effect of trust was significantly larger for advice quality than for facilitation of coping (p < .001). For the comparison between advice quality and intention to implement, F(9, 251) = 7.62, p < .001, significant regression coefficients indicated that the effects of response efficacy and confirmation were significantly larger for intention to implement than advice quality (ps < .001). Meanwhile, the effects of politeness and trust were stronger for advice quality than for implementation intention (ps < .01). For the comparison between facilitation of coping and intention to implement, F(9, 251) = 8.45, p < .001, the analyses indicated that the effects of response efficacy and confirmation were stronger for intention to implement than for facilitation of coping (ps < .001). However, the effect of politeness was stronger for facilitation of coping than for intention to implement (p < .001). Overall, the findings reported above indicate that politeness had a stronger impact on facilitation of coping and evaluation of advice quality than it did on implementation intention. Meanwhile, two of the content factors-response efficacy and confirmation-had a stronger influence on implementation intention than evaluation of advice quality or facilitation of coping.

The Moderating Effect of Problem Seriousness

Regression analyses were conducted to assess the moderating effect of problem seriousness on the associations between the predictor variables and advice outcomes (H3 and H4). To simplify the relevant analyses, a composite variable was created through secondary factor analysis for source factors and message factors, respectively. Following the recommendations of Cohen et al. (2003), prior to conducting the analyses, the predictor variables and problem seriousness were standardized (one method of centering) and product (interaction) terms among each pair of variables were formed. In the regression analysis for each outcome variable, the composite source factor, composite message factor, and problem seriousness were entered at the first step, and the product terms were entered at the second step.

Across the three outcome variables, the analyses showed no significant interaction between source factor and problem seriousness, although the interaction for facilitation of coping was marginally significant ($\beta = -.09$, p = .06). Hence, H3 was not supported. However, results of the regression analyses revealed a significant interaction between message factor and problem seriousness for evaluation of advice quality ($\beta = .09$, p < .05), facilitation of coping ($\beta = .14$, p < .01), and implementation intention ($\beta = .17$, p < .001), indicating that the composite message factor had a stronger impact on the outcome variables as problem seriousness increased. Therefore, H4 was supported. To further explore the nature of the interactions, the regression of each outcome variable on the composite message factor was examined for low (scores less than a standard deviation below the mean), medium (scores within a standard deviation from the mean), and high (scores greater than a standard deviation above the mean) levels of problem seriousness, and regression equations

	Dependent Variables			
Levels of Problem Seriousness	Message Quality	Facilitation of Coping	Intention to Implement	
Low	.63***	.57***	.64***	
Medium	.67***	.66***	.76***	
High	.71***	.75***	.88***	

 Table 3. Interaction Between Message Factor and Problem Seriousness: Standardized

 Regression Weights at Different Levels of Problem Seriousness

Note: ****p < .001.

 Table 4. Interaction Between Message Factor and Source Factor: Standardized Regression

 Weights at Different Levels of Source Factor

	Dependent Variables			
Levels of Source Factor	Message Quality	Intention to Implement		
Low	.65***	.77***		
Medium	.55***	.72***		
High	.45***	.67***		

Note: ****p < .001.

were recalculated (see Aiken & West, 1991). Results of these analyses are summarized in Table 3.

In addition, there was a significant interaction between message and source factors for evaluation of advice quality ($\beta = -.16$, p < .001) and implementation intention ($\beta = -.10$, p < .05), indicating that the impact of message factors on those two advice outcomes decreased as positivity of source characteristics, such as expertise and liking, increased. To clarify the form of these interactions between message and source factors, the procedures described by Aiken and West (1991) were used again to estimate the slopes of the regression line at low (scores less than a standard deviation below the mean), medium (scores within a standard deviation from the mean), and high (scores greater than a standard deviation above the mean) levels of the composite source factor. Results of these analyses are summarized in Table 4.

The Mediating Effects of Message Factors

H5 predicted that message factors would mediate the effect of source factors on advice outcomes. In recent years, bootstrapping procedures have been advocated as an approach that is well suited for testing hypothesized mediating effects (MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2004; Shrout & Bolger, 2002). In this study, we used bootstrapping procedures developed by Preacher and Hayes (2004). The results of the

	ι	Unstandardized Regression Coefficients				
		Direct Ef	fect	Indirect E	ffect	
Dependent Variables	Total Effect	Coefficient	%	Coefficient	%	
Advice quality	.480***	.302***	62.9%	.178*	37.1%	
Facilitation of coping	.327***	.156***	47.7%	.171*	52.3%	
Implementation intention	.376***	.106*	28.2%	.270*	71.8%	

Table 5. Summary of Bootstrapping Tests of the Mediating Effects of Message Factors

Note: All entries in the table are unstandardized regression coefficients. Percentages (%) refer to those of the total effect explained by a particular variable or effect.

*p < .05. ***p < .001.

bootstrapping tests are summarized in Table 5. The unstandardized regression coefficients reported in this table are based on 2000 resamples drawn from our sample of 261. Table 5 also reports estimates for effect magnitudes using the proportion of the total effect index proposed by MacKinnon and Dwyer (1993).

As can be seen in Table 5, the indirect effects for source factors on each of the three dependent variables were significant (ps < .05). These findings were consistent with H5, indicating that message factors mediated the effect of source factors on advice outcomes. Specifically, message factors mediated 37.1% of the effect of source factors on evaluation of advice quality, 52.3% on facilitation of coping, and 71.8% on implementation intention.

Having established that message factors mediated the effect of source factors on all three dependent variables, we performed additional bootstrapping analyses to test for moderation of this mediated relationship (H6). Following procedures outlined by Preacher, Rucker, and Hayes (2007), we examined whether the influence of source factors on message factors varied as a function of problem severity. These analyses indicated that problem severity did not moderate the influence of source factors on message factors; for each of the three dependent variables, the size of the indirect effect did not vary significantly as problem severity increased (all ps > .05; additional details of the analyses are available from the first author). Therefore, H6 was not supported.

Discussion

The primary objective of the current study was to assess an extensive and integrated model of responses to advice. In what follows, we discuss the major findings and theoretical implications of this study, along with limitations and suggestions for future research.

Individual Message and Source Factors as Predictors of Responses to Advice

Message factors. Consistent with previous research (e.g., Goldsmith & MacGeorge, 2000; MacGeorge et al., 2002), findings of this study revealed that the extent to which

advice exhibited regard for the recipient's face needs (i.e., politeness) was a strong predictor of message quality and facilitation of coping, though it did not independently predict intention to implement the advised action. Thus, advice that is protective of face is more likely to be evaluated highly and contribute to the recipient's capacity for coping but not necessarily more likely to be adopted. This pattern of findings was almost identical to that reported in MacGeorge, Feng et al. (2004). It provides additional empirical support to MacGeorge, Feng et al.'s supposition that attention to face functions mostly by helping the target to deal with feelings and engage in problem solving and may not matter very much when it comes to determining whether the advice should be implemented or not. The importance of facework with respect to facilitation of coping is consistent with Goldsmith's (1994) argument that receiving face-threatening advice can exacerbate emotional distress and weaken the individual's confidence about handling the problem. By giving advice in a manner that is attentive to the recipient's face concerns, advice givers can reduce distress and promote more successful problem solving (MacGeorge, Feng et al., 2004).

Like politeness, the content factors of response efficacy, feasibility, and absence of limitations were also important predictors of advice outcomes. Consistent with past research (Feng & Burleson, 2008; Hung & Feeley, 2005; MacGeorge, Feng et al., 2004), the current study found that advice perceived as more efficacious, more feasible, and having fewer limitations was viewed as higher in quality and more facilitative of coping; it also motivated stronger intention to implement the advice. Response efficacy was the most consistently strong predictor across the three outcome variables, suggesting that believing the advised action will be efficacious plays a pivotal role in prompting favorable responses to advice (Feng & Burleson, 2008).

Congruent with previous research on decision making (Bonaccio & Dalal, 2006; Yaniv & Kleinberger, 2000) and very recent work on advice in supportive interactions (MacGeorge et al., 2008), findings of the current study show that individuals are more likely to respond positively when advice confirms what they had already planned to do. This was true across all three outcome variables. This finding suggests that it may be advantageous or even necessary for an advice giver to adapt advice to the target's frame of reference by first soliciting the target's plan of action and then producing one's own recommendation in a way that takes the target's intention into account (Maynard, 1989).

Source factors. The four source characteristics examined in the current study—expertise, trustworthiness, liking, and similarity—were all associated with at least one of the advice outcomes. Expertise was an independent predictor of message quality and intention to implement, whereas trust was an independent predictor of message quality. Liking and similarity, which have been extensively studied with respect to other forms of persuasion (Perloff, 2008; Silvia, 2005) but not with regard to advice, were shown in the present study to influence facilitation of coping. Liking also had a positive influence on message quality, though similarity did not. These findings are broadly consistent with past research in which expertise and trust were predictors of advice utilization in decision making (Jungermann & Fischer, 2005; Sniezek & Van Swol, 2001; White, 2005). These findings also indicate that content-related source factors such as expertise are more likely to affect a recipient's

intention to implement advice, whereas affect-related source factors such as liking tend to influence the recipient's coping efforts.

Diverse outcomes. As in prior studies (Feng & Burleson, 2008; MacGeorge, Feng et al., 2004), the three dependent variables measured in this study were strongly correlated (with a low of .61 and a high of .73). However, the patterns of prediction by the message and source factors were by no means identical. Instead, those patterns varied in ways that are consistent with past research and suggest important directions for theory about responses to advice.

In the current study, the message and source factors that most strongly predicted intention to implement advice were different from those that predicted message quality or facilitation of coping. Intention to implement was more strongly predicted than the other dependent variables by response efficacy and confirmation, and was largely unpredicted by source factors, with the exception of a weak effect from source expertise. By contrast, both message quality and facilitation of coping were more strongly predicted by politeness (which was not a significant influence on intention to implement), and the source factors were more consistent predictors for these dependent variables. Thus, the current study suggests that specific message content factors (Will it work? Is it what I already planned to do?) are likely to most strongly determine what the advice recipient decides to do. In contrast, message style (politeness) and at least some characteristics of the source appear to combine with weaker influences from the message content factors to influence the recipient's evaluation of the overall quality of the advice and how much it facilitates coping.

These findings are somewhat similar to two previous studies in which intention to implement was predicted more strongly than facilitation of coping by message content factors and less strongly by politeness (Feng & Burleson, 2008; MacGeorge, Feng et al., 2004). However, in the two prior studies the pattern of strong predictors for advice quality was more like that of implementation intention than facilitation of coping. This may have occurred because these prior studies did not include any of the source factors that predicted advice quality in the current study. Alternatively, evaluations of message quality may exhibit a less reliable pattern of prediction because the items used to assess this variable combine some aspects of the other two variables (e.g., supportive suggests facilitation of coping, whereas effective suggests implementation intention).

Overall, studies that have compared multiple dependent variables suggest the need for a model of advice outcomes that incorporates distinctive patterns of influence by message and source factors on the persuasive outcomes of advice (e.g., intention to implement) and the supportive outcomes of advice (e.g., facilitation of coping). Further work is needed to elaborate and test this model.

Message and Source Factors: Competing, Mediated, and Moderated Effects

In addition to examining the influence of individual message and source variables on multiple advice outcomes, the current study tested several hypotheses focused on how message and source factors might compete or cooperate to influence advice outcomes. The findings support a number of conclusions that help to expand and integrate existing theory about responses to advice.

First, findings from the current study support the claim that the influence of source factors on advice outcomes is both weaker and substantially mediated through message factors. The bootstrapping analyses provided evidence of significant mediation with regard to all advice outcomes, with mediation exceeding 70% in the case of implementation intention. In addition, as shown by the regression coefficients in the simultaneous regression, message factors were stronger and more reliable influences across the dependent variables than were source factors. This finding is consistent with the idea that source factors such as expertise and similarity are typically processed as heuristic cues, which prompt message recipients to make inferences about features of advice messages (e.g., advice from an expert or someone with similar experience should be feasible and effective). Of course, the current findings may be a function of the particular source and message factors that were examined, so it remains for future research to examine whether other source variables may have a stronger direct influence. It is also important to note findings suggesting that advice recipients do not necessarily recognize the extent to which they are influenced by message factors (MacGeorge et al., 2008). This recommends continued attention to contradictions between recipients' perspectives and demonstrable effects and caution in conflating results from studies with these distinctive foci.

Second, despite the extent to which message and source factors have independent and shared (mediated) effects, the current study also indicates that there is some degree of competition for influence between these two sets of factors. As indicated by the significant interaction between message and source factors, the impact of message factors on advice outcomes decreases as positivity of source characteristics increases. This finding is consistent with the idea that source characteristics can influence the extent of message processing. Past research in the ELM paradigm has shown that seemingly peripheral variables such as source expertise and source attractiveness can affect the extent of systematic message processing (for a review, see DeBono & Harnish, 1988). For example, the perception that a source is highly expert may elicit less message processing (i.e., less elaboration) than the perception that a source is less expert. In the context of advice giving and receiving, it is thus possible that when an advice giver is viewed as an expert, trustworthy, likable, or similar to the recipient, the recipient engages in less effortful thinking of advice messages, thus weakening the impact of message factors on advice outcomes. However, it is important to underscore that this reduction of influence takes place in the context of relatively large overall effects for message characteristics.

Third, the current study indicates that the influence of message factors intensifies as problem seriousness increases. This is consistent with dual-process models of persuasion, which assert that the influence of message content is strongest when the extent of message processing is greatest. Advice recipients should be most motivated to think systematically about advice they receive for serious problems and consequently respond more strongly to the characteristics of the advice content. However, the current study did not detect the hypothesized moderating role of problem seriousness with regard to source factors. One possible explanation is that problem seriousness, as experienced by participants in this study, was never low enough to promote truly heuristic processing. On a 5-point scale, participants reported average (mean) seriousness of 3.8, with a standard deviation of .93. Thus, participants who were classified as having low problem seriousness might be more accurately classified as having moderate problem seriousness, which may have led these participants to adopt a more systematic rather than heuristic mode of processing the advice messages they received. If this supposition is correct, a fuller test of the dual-processing theory will include examination of responses to advice given with respect to problems that are experienced as low in seriousness. While it should be possible to do this, it is also possible that people typically do not seek or receive much advice for personal problems they experience as low in seriousness. Accordingly, the lack of an interaction between source factors and problem seriousness may suggest a situational constraint on the applicability of dual-process models of persuasion.

Limitations and Directions for Future Research

The first limitation of the current study concerns its sample. As in most research on advice, participants in the present study were college students. As some researchers (e.g., MacGeorge, Feng et al., 2004) have noted, older samples would likely differ in some important ways from younger samples, including the problems experienced and sources of advice (e.g., more spouses and coworkers for an older sample). It is unclear whether maturity-related factors might create differences in how younger and older people respond to advice, but this deserves examination in future work. In addition, this study used a predominantly European American sample, which leads to the concern that the study's findings may be unwittingly specific to members of that particular culture. Feng (2006) has argued that people from individualist and low-context cultures such as the United States may be more influenced by message factors than people from collectivist and high-context cultures such as China and Japan. Future research can thus build on the current study by examining responses to advice with more diverse samples.

Compared to past research that examined evaluations of advice using researcherconstructed advice messages (e.g., Feng & Burleson, 2008; Goldsmith & MacGeorge, 2000), the current study's focus on naturally occurring advice has its unique strengths, especially in terms of greater external validity for the findings. However, the study's crosssectional, retrospective self-report design also has its limitations. Since data were collected after the participants experienced the supportive interactions they reported, participants' memory of the details of what others actually said or did might have lacked precision and accuracy. In this study, we attempted to redress this limitation by having participants recall an advice-receiving interaction they have recently experienced, thus minimizing the inaccuracy of recalled information due to lapse of time. However, it is desirable that future research include in situ assessments of advice.

A related concern is that participants assessed message characteristics at the same time as they reported their responses to the advice. This raises the possibility that observed associations between message and source factors and advice outcomes are spurious, stemming from their joint association with some underlying factor, such as global affect surrounding the interaction due to resolution of the situation (see also MacGeorge, Feng et al., 2004). However, the different patterns of findings for the dependent variables speak against this possibility. In addition, recent experimental research on advice (e.g., Feng & Burleson, 2008) in which message content was manipulated rather than simply measured has produced findings that are consistent with the current study. Still, there is a need for further experimental and laboratory research, as well as longitudinal research, tracking how people evaluate, respond to, and use advice over time. Research using those types of designs may be especially important for determining more definitively how source and message factors influence advice outcomes, since source factors have been studied primarily in lab environments where the advice implementation took place almost immediately, whereas message factors have been studied outside of the lab, with retrospective reports on advice that was already implemented.

Finally, it is important to note that the current study did not directly assess the extent of systematic thought about advice messages. Instead, it was assumed that greater problem seriousness would motivate more systematic message processing, which in turn would result in greater influence for message factors when problem seriousness was high. Thus, although the findings with respect to problem seriousness and message factors are consistent with the Elaboration likelihood model, the study does not constitute a direct test. To support theoretical development, future work should include assessments of message processing whenever possible.

Pragmatic Implications

Findings of this study highlight several considerations for would-be advice givers (see also MacGeorge et al., 2008). First, for the most positive responses by recipients, advice givers should try to advise actions that will do something about the problem, can be accomplished, and have as few limitations as possible—keeping in mind that all of this needs to be true from the recipient's perspective. Asking questions and listening carefully to the recipient's description of the problem will help the advice giver ascertain what that perspective is, including whether the recipient has a preferred course of action already planned out. If a different course of action is deemed more appropriate by the helper, advice recommending the alternative plan should be formulated with great care, since recipients are most likely to implement actions they've already planned. Second, good advice is defined by not only what it says but also how it is delivered. Attending to the target's face concerns is important, especially for helping recipients cope (even if they don't actually use the advice). Third, source factors may not matter as much as message factors, but if you're not an expert on the problem, or not close to the advice recipient, it may be best to avoid giving advice or to give it only if specifically requested.

Authors' Note

The research reported in this article is based on the first author's doctoral dissertation, which was directed by the second author and Dr. Brant Burleson from Purdue University. The authors thank editor Michael E. Roloff and two anonymous reviewers for their constructive comments on earlier drafts of this article.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the authorship and/or publication of this article.

Funding

The authors received no financial support for the research and/or authorship of this article.

Note

1. Actual adaptation of advice was also measured in the original design, and preliminary analyses showed that there was a strong correlation (r = .75, p < .001) between actual implementation and intention to implement advice. Given that implementation intention measures advice recipients' intention to carry out the advice immediately following the advice episode, it should better reflect the influences of factors examined in the current study (e.g., what was said and who said it). Hence, implementation intention should serve as a more appropriate dependent/outcome measure than actual implementation of advice.

References

- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Anderson, R. B., & McMillion, P. Y. (1995). Effects of similar and diversified modeling on African American women's efficacy expectations and intentions to perform breast self-examination. *Health Communication*, 7, 327-343.
- Arora, N. K., Rutten, L. J. F., Gustafson, D. H., Moser, R., & Hawkins, R. P. (2007). Perceived helpfulness and impact of social support provided by family, friends, and health care providers to women newly diagnosed with breast cancer. *Psycho-Oncology*, 16, 474-486.
- Bodie, G. D., & Burleson, B. R. (2008). Explaining variations in the effects of supportive messages: A dual-process framework. In C. Beck (Ed.), *Communication yearbook*, 32 (pp. 354-398). New York: Routledge.
- Bonaccio, S., & Dalal, R. S. (2006). Advice taking and decision-making: An integrative review of the literature. Organizational Behavior and Human Decision Processes, 101, 127-151.
- Brown, P., & Levinson, S. C. (1987). Politeness: Some universals in language usage. Cambridge, UK: Cambridge University Press.
- Burleson, B. R., & MacGeorge, E. L. (2002). Supportive communication. In M. L. Knapp & J. A. Daly (Eds.), *Handbook of interpersonal communication* (3rd ed., pp. 374-424). Thousand Oaks, CA: Sage.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Erlbaum.
- Cohen, P., Brook, J. S., Cohen, J., Velez, C. N., & Garcia, M. (1990). Common and uncommon pathways to adolescent psychopathology and problem behavior. In L. Robins & M. Rutter (Eds.), *Straight and devious pathways from childhood to adulthood* (pp. 242-258). London: Cambridge University Press.
- Dakof, G. A., & Taylor, S. E. (1990). Victims' perceptions of social support: What is helpful from whom? Journal of Personality and Social Psychology, 58, 80-89.

- 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.
- Feng, B. (2006). Features and effects of advice in supportive interactions in two cultures. West Lafayette, IN: Purdue University.
- Feng, B., & Burleson, B. R. (2008). The effects of argument explicitness on responses to advice in supportive interactions. *Communication Research*, 35, 849-874.
- Feng, B., & MacGeorge, E. L. (2006). Predicting receptiveness to advice: Characteristics of the problem, the advice-giver, and the recipient. *Southern Communication Journal*, 71, 67-85.
- Goldsmith, D. J. (1994). The role of facework in supportive communication. In B. R. Burleson, T. L. Albrecht, & I. G. Sarason (Eds.), *Communication of social support: Messages, interactions, relationships, and community* (pp. 29-49). Thousand Oaks, CA: Sage.
- Goldsmith, D. J. (2000). Soliciting advice: The role of sequential placement in mitigating face threat. *Communication Monographs*, 67(1), 1-19.
- Goldsmith, D. J., & MacGeorge, E. L. (2000). The impact of politeness and relationship on perceived quality of advice about a problem. *Human Communication Research*, 26, 234-263.
- Hass, R. G. (1981). Effects of source characteristics on cognitive responses and persuasion. In R. E. Petty, T. Ostrom, & T. Brock (Eds.), *Cognitive responses in persuasion* (pp. 141-172). Hillsdale, NJ: Erlbaum.
- Hung, H. Y., & Feeley, T. H. (2005). Evaluating advice in supportive social interaction: A replication of MacGeorge, Feng, Butler, and Budarz (2004). Paper presented at the International Communication Association, New York.
- Johnson, B. T., & Eagly, A. H. (1989). The effects of involvement on persuasion: A meta-analysis. *Psychological Bulletin*, 106, 290-314.
- Jungermann, H., & Fischer, K. (2005). Using expertise and experience for giving and taking advice. In T. Betsch & S. Haberstroh (Eds.), *The routines of decision making* (pp. 157-173). Mahwah, NJ: Lawrence Erlbaum.
- MacGeorge, E. L., Feng, B., Butler, G. L., & Budarz, S. K. (2004). Understanding advice in supportive Interactions: Beyond the facework and message evaluation paradigm. *Human Communication Research*, 30, 42-70.
- MacGeorge, E. L., Feng, B., & Thompson, E. R. (2008). "Good" and "bad" advice: How to advise more effectively. In M. Motley (Ed.), *Applied interpersonal communication: Behaviors that affect outcomes* (pp. 145-164). Thousand Oaks, CA: Sage.
- MacGeorge, E. L., Graves, A. R., Feng, B., Gillihan, S. J., & Burleson, B. R. (2004). The myth of gender cultures: Similarities outweigh differences in men's and women's provision of and responses to supportive communication. Sex Roles, 50, 143-175.
- MacGeorge, E. L., Lichtman, R. M., & Pressey, L. C. (2002). The evaluation of advice in supportive interactions: Facework and contextual factors. *Human Communication Research*, 28, 451-463.
- MacKinnon, D. P., & Dwyer, J. H. (1993). Estimating mediated effects in prevention studies. *Evaluation Review*, 17, 144-158.
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39, 99-128.
- Maynard, D. W. (1989). Perspective-display sequences in conversation. Western Journal of Speech Communication, 53, 91-113.

- McCroskey, J. C., Richmond, V. P., & Daly, J. A. (1975). The development of a measure of perceived homophily in interpersonal communication. *Human Communication Research*, 1, 323-333.
- O'Keefe, D. (1990). Persuasion: Theory and research. Newbury Park, CA: Sage.
- Perloff, R. M. (2008). The dynamics of persuasion: Communication and attitudes in the 21st century. New York: Lawrence Erlbaum.
- Petty, R. E., Cacioppo, J. T., & Goldman, R. (1981). Personal involvement as a determinant of argumentbased persuasion. *Journal of Personality and Social Psychology*, 41, 847-855.
- Petty, R. E., Rucker, D. D., Bizer, G. Y., & Cacioppo, J. T. (2004). The elaboration likelihood model of persuasion. In J. S. Seiter & R. H. Gass (Eds.), *Perspectives on persuasion, social influence, and compliance gaining* (pp. 65-89). Boston: Allyn & Bacon.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36*, 717-731.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Assessing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185-227.
- Rubin, Z. (1970). Measurement of romantic love. Journal of Personality and Social Psychology, 16, 265-273.
- Servaty-Seib, H. L., & Burleson, B. R. (2007). Bereaved adolescents' evaluations of the helpfulness of support-intended statements: Associations with person centeredness and demographic, personality, and contextual factors. *Journal of Social and Personal Relationships*, 24, 207-223.
- Sherif, M., & Hovland, C. I. (1961). Social judgment. New Haven, CT: Yale University Press.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422-445.
- Silvia, P. J. (2005). Deflecting reactance: The role of similarity in increasing compliance and reducing resistance. *Basic and Applied Social Psychology*, 27, 277-284.
- Sniezek, J. A., & Van Swol, L. M. (2001). Trust, confidence, and expertise in a judge-advisor system. Organizational Behavior and Human Decision Processes, 84, 288-307.
- Thom, D. H., Kravitz, R. L., Bell, R. A., Krupat, E., & Azarid, R. (2002). Patient trust in the physician: Relationship to patient request. *Family Practice*, 19, 476-483.
- Todorov, A., Chaiken, S., & Henderson, M. D. (2002). The heuristic-systematic model of social information processing. In J. Dillard & M. Pfau (Eds.), *The persuasion handbook: Developments in theory and practice* (pp. 195-211). Thousand Oaks, CA: Sage.
- Wheeless, L. R., & Grotz, J. (1977). The measurement of trust and its relationship to self-disclosure. *Human Communication Research*, 3, 250-257.
- White, T. B. (2005). Consumer trust and advice acceptance: The moderating roles of benevolence, expertise, and negative emotions. *Journal of Consumer Psychology*, 15, 141-148.
- Yaniv, I. (2004). Receiving other people's advice: Influence and benefit. Organizational Behavior and Human Decision Processes, 93, 1-13.
- Yaniv, I., & Kleinberger, E. (2000). Advice taking in decision making: Egocentric discounting and reputation formation. Organizational Behavior and Human Decision Processes, 84, 260-281.

Bios

Bo Feng (PhD, Purdue University, 2006) is an assistant professor in the Department of Communication at University of California, Davis. Her research focuses on the processes through which people seek, provide, and respond to various forms of social support as well as cultural and gender similarities and differences in these processes.

Erina L. MacGeorge (PhD, University of Illinois, Urbana-Champaign, 1999) is an associate professor in the Department of Communication at Purdue University, West Lafayette. Her work focuses on communication and coping, including comforting, advice giving, and prayer.