Implicit Theories of Persuasion

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This research explores whether individuals have implicit theories of persuasion. The first study sought to understand how persuasive strategies are cognitively represented. Using multidimensional scaling, two dimensions were identified. The first dimension distinguishes the types of tactics used to bring about attitude change. The second dimension differentiated the social acceptability of the persuasive strategies. The second stage of this research explored the nature of people's implicit theories of persuasion. Experiment 1 demonstrated that implicit theories of persuasion are sensitive to the operation of multiple goals in a situation. Experiment 2 found that implicit theories of persuasion reflect the audience's familiarity with the topic. In Experiment 3, implicit theories were demonstrated to be sensitive to the topic-relevant knowledge of the communicator.

Implicit theories of persuasion involve commonsense beliefs about persuasion and persuasive strategy use. These implicit theories of persuasion should have important implications for understanding persuasive interactions because they are the foundations from which expectations concerning persuasive strategy use arise. However, little research has focused on implicit theories of persuasion (O'Keefe, 1993), which is unfortunate because persuasion is a common goal of interpersonal communication (Rule, Bisanz, & Kohn, 1985). The following research explores whether individuals have implicit theories of persuasion. The first study sought to understand how persuasive strategies are cognitively represented. The second stage of this research involved three experiments exploring the nature of people's implicit theories of persuasion.

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Past research has demonstrated that implicit theories concerning others are an important component of social interaction because they influence expectations about other people's behavior (Wegner & Vallacher, 1977; Yuill, 1993) and how other people are evaluated (Perse, Pavitt, & Burggraf, 1990). Expectations, in turn, can have significant influences on social interaction. For example, our expectations of others can influence our interpretation of their behavior in that ambiguous behaviors will be interpreted to be consistent with expectations (Jones, 1986; Wegner & Vallacher, 1977). Likewise, self-fulfilling prophecies are the result of expectations influencing how other people act (Harris & Rosenthal, 1985; Rosenthal, 1994). Implicit theories can also influence how information is processed about the self (Breckler, Pratkanis, & McCann, 1991) and how the self is perceived (Jones, 1986) and can result in biased reconstructive memory concerning past behaviors (Ross, 1986).

Expectations concerning communicative behaviors, in particular, influence social interaction. People have clear expectations concerning which compliance-gaining strategies other people will use (Burgoon, Birk, & Hall, 1991; Dillard, Henwood, Giles, Coupland, & Coupland, 1990), and these expectations influence how individuals are perceived in compliance-gaining interactions (Burgoon & LePoirer, 1993; Burgoon, LePoirer, & Rosenthal, 1995; Burgoon et al., 1991). Expectations about which compliance-gaining strategies an individual will use also influence the success of the compliance-gaining attempt (Burgoon, 1995).

Although we know that expectations influence social interaction, little is known about the foundations of our expectations (Burgoon, 1995); that is, little is known about the implicit theories behind the expectations. The starting point for exploring expectations concerning, in particular, persuasion and persuasive strategy choice is identifying whether people have implicit theories of persuasion.

Research that indirectly sheds light on implicit theories of persuasion focuses on how compliance-gaining strategies are differentiated. In this vein, early research demonstrated that compliance-gaining strategies are differentiated along an instrumental aggression dimension (Dillard, 1988; Dillard & Burgoon, 1985; Hunter & Boster, 1987). Later research showed that this dimension was important in determining expectations about compliance-gaining attempts (Burgoon & LePoirer, 1993; Burgoon et al., 1995). Thus, this dimension reflects the foundation of the expectations. Other than this attempt at understanding the foundation of expectations regarding compliance-gaining strategies, much of the work on compliance-gaining strategies since the 1970s has focused on developing typologies for the classification of compliance-gaining strategies (for reviews, see Cody & McLaughlin, 1990; Seibold, Cantrill, & Meyers, 1985). However, as Kellermann and Cole (1994) note, there are a number of problems with this earlier research, including failures to identify exhaustive sets of
compliance-gaining behaviors and the inability to develop sets of mutually exclusive strategies. This research moves away from the development of typologies of communicative behavior because the focus is on how persuasive strategies are cognitively represented and therefore is not tied to the assumption that there is an exhaustive set of mutually exclusive strategies.

This research is also distinct from earlier research on compliance-gaining strategies because of its focus on implicit theories of persuasive strategy choice. Kelman's (1958) classification of three different types of social influence—compliance, identification, and internalization—is useful for understanding the difference between compliance-gaining and persuasive strategies. Compliance involves change resulting from a powerful source motivating people to alter their behaviors. Identification entails opinion change brought about through the association of an attractive or likable source or ideal to the topic. Finally, change resulting from internalization grows out of the acceptance of information relevant to the topic.

Kelman's (1958) typology clearly implies a difference between compliance-gaining and persuasion, which is conceptualized as identification and internalization. Compliance tends to focus on short-term change or immediate action and the strategies that are used in those situations. However, persuasion concerns internalized belief or opinion change that is intended to be of greater duration (Burgoon & Miller, 1990; Seibold et al., 1985). In support of this distinction, Rule et al. (1985) found that people listed compliance-gaining and opinion change as distinct communicative goals. To the extent that compliance-gaining and opinion change are different although overlapping goals, different strategies should be used in the two situations.

In an attempt to lay the foundation for understanding implicit theories of persuasion, Study 1 attempts to answer the following research question:

**RQ1: How are persuasive strategies mentally represented in memory?**

The three experiments that follow Study 1 rely on the representation of persuasive strategies identified in Study 1 to explore the nature of implicit theories of persuasion. In addition, Cronkhite and Liska's (1980) GOALS/GRASP model provides a model for exploring implicit theories of persuasion. The GOALS/GRASP model posits that people make inferences about the acceptability of a message by matching the criteria that are derived by the message recipient for judging the particular event with the characteristics of the message (Liska & Cronkhite, 1982). Of interest is how the criteria are derived for judging the message because these criteria should be involved in creating expectations about persuasive messages. Cronkhite and Liska (1980) propose two relevant properties of the situ-
ation: the goal-relevant aspects of the situation perceived (GRASP) and the goals operant and achievable in light of the situation (GOALS). Obviously, the goals of the communicator constitute an important factor influencing persuasive strategy choice. GRASP is concerned with the features of the situation that hinder or augment the achievement of the GOALS. Features of the situation may include characteristics of the communicator and message recipient (e.g., topic-relevant knowledge) and the nature of the situation (e.g., formal/informal). Thus, the characteristics of the message recipient, the situation, and the persuader should be components of implicit theories of persuasion. Experiments 1 through 3 used the GOALS/GRASP model to explore the role of goals operating in the persuasive setting and the influence of audience and speaker characteristics on implicit theories of persuasion. Thus, Experiments 1 through 3 measured which persuasive strategies people expect others to use under different operating goals to investigate people's use of their implicit theories of persuasion.

STUDY 1: IDENTIFYING THE COGNITIVE REPRESENTATION OF PERSUASIVE STRATEGIES

This study involved two phases. In the first phase, subjects sorted 89 persuasive strategies into piles according to how similar the various strategies were to one another; the sorting data were then submitted to a multidimensional scaling (MDS) solution. MDS provides a useful conceptual framework for identifying the dimensions used to differentiate strategies. In the second phase, likely interpretations of the cognitive representations found in the first stage were identified.

Method

Selection of Persuasive Strategies

The goal in generating the persuasive strategies was to obtain a diverse and representative sample of persuasive strategies (e.g., techniques or methods for changing people's beliefs or attitudes). To accomplish this, a large number of sources were consulted, including public-speaking textbooks, social psychology textbooks, books on attitude change, empirically oriented papers on attitude change and compliance-gaining behaviors, and treatises on rhetoric. Colleagues (five faculty and eight graduate students) were consulted to determine if any category of strategies was excluded from the set. A total of 89 persuasive strategies was identified.
Participants

A total of 40 students from Indiana University participated in the first phase (i.e., the sorting task). These students also participated in the second phase (i.e., the rating task). Specifically, they rated each of the strategies along the first three dimensions (Questions 1-3 in Table 1) after completing the sorting task. An additional 30 students rated five potential interpretations of the MDS dimensions (Questions 4-8). A final set of 40 students rated the 89 strategies along four possible dimensions (Questions 9-12). All students received extra credit for participating in the study.

Procedure

Participants were placed in individual cubicles and told that the study involved the perception of the type of arguments, strategies, and tactics that are used to persuade other people to change their opinions. Each of the 89 strategies appeared on separate cards. The stack of cards was shuffled and given to the participants. The participants were instructed to sort the cards into piles based on how similar they perceived the strategies to be by placing similar strategies into the same piles. Participants were told that most people used 5 to 10 piles, but they were to use as many piles as they found necessary to create natural groups that captured the similarities and differences they perceived among the strategies.

Results

The sorting data were converted to dissimilarity scores, using a method proposed by Rosenberg, Nelson, and Vivekananthan (1968; Rosenberg & Sedlak, 1972). The dissimilarity scores were used as input to obtain a classical MDS configuration (with the program ALSCAL) by using a Euclidean distance metric.

Two criteria were used to decide the appropriate dimensionality of the solution: stress, and variance accounted for. Stress, is a measure of the goodness-of-fit between the dissimilarity scores and the actual proximities in the multidimensional space (Kruskal, 1964; Kruskal & Wish, 1986). An elbow in the stress-plot indicates that additional dimensions do not significantly improve the goodness-of-fit (Kruskal & Wish, 1986). The stress values for the present data showed an elbow at the two-dimensional solution (one dimension, s = .306; two dimensions, s = .133; three dimensions, s = .095). The second criterion involves the number of dimensions accounting for the most variance between the dissimilarity scores and the proximities produced by the MDS solution. A lower
dimensional solution should be used if additional dimensions do not substantially increase the percentage of variance accounted for. A one-dimensional solution accounted for approximately 73% of the variance. A two-dimensional solution improved the amount of variance accounted for by 18% ($R^2 = .91$); however, the three-dimensional solution added only 4% to the two-dimensional solution ($R^2 = .95$). Both the stress and variance results indicate that a two-dimensional solution best represents these data. Apparently, persuasive strategies are represented along two dimensions within the cognitive system.

The interpretation of dimensions in a classical MDS configuration is largely subjective because the MDS configuration can be rotated to aid the identification of dimensions. In addition, the dimensions do not have to be orthogonal (Kruskal & Wish, 1986). Fortunately, empirical techniques exist that aid the interpretation of the configuration. A common method involves identifying possible dimensions and then gathering ratings of all stimuli along each possible dimension. The mean ratings of the stimuli serve as the predicted variables, and their coordinates in the MDS space become the predictor variables in a multiple regression analysis (Kruskal & Wish, 1986; Rosenberg et al., 1968). The multiple $R$ serves as an estimate of the correspondence between the rated dimension and a dimension in the MDS configuration. Ideally, this strategy would uncover dimensions of the MDS solution that are relatively orthogonal. Twelve potential dimensions were identified and rated in this study.
Identifying the Nature of the Dimensions: The Rating Task

Stimulus Materials and Procedure

Three possible dimensions were identified a priori. One dimension was the perceived effectiveness of the strategy. A second dimension was the social acceptability of the strategies. The viability of this dimension seems likely, given the role of interaction and impression management goals in communication (Dillard, 1990; Dillard, Segrin, & Harden, 1989). Furthermore, an important component of social perception is evaluation (Breckler et al., 1991; Forgas, 1981; Rosenberg & Sedlak, 1972). The third dimension was the objective/subjective nature of each strategy. This question attempted to capture a rational/nonrational component identified in earlier studies on the perception of compliance-gaining behaviors (Falbo, 1977; Hazleton, Cupach, & Liska, 1986; Kipnis, Schmidt, & Wilson, 1980). Explanations of the remaining nine dimensions, each identified after examining the MDS space, follow.

Three dimensions involved how likely the subject was to use the strategy if the topic was opinion oriented, factual in nature, or important to them, reflecting the idea that the nature of the topic may influence how persuasive strategies are perceived. A seventh dimension dealt with how obvious it was that a person using that strategy was trying to persuade someone. Falbo (1977; Falbo & Peplau, 1980) found that manipulative strategies differ along a direct/indirect dimension, which may correspond to this obviousness dimension. An eighth dimension involved whether the strategy relied on pointing out the type of person or kind of ideals that supports a given position (association-oriented strategies) or the style, tone, or factual content of the message (message-oriented strategies). This dimension related to Kelman’s (1958) typology of the different types of social influence. The association strategies match Kelman’s identification function, and the message-oriented strategies closely resemble the internalization function.

The ninth dimension asked how much information the strategy provided about the issue. The 10th dimension dealt with the amount of pressure applied by each strategy because the perceived assertiveness of a strategy is one factor used to judge messages (Hazleton et al., 1986; Kipnis et al., 1980). An 11th dimension solicited subjects’ rating of the perceived aggressiveness of each strategy. Instrumental aggression has been identified as a central dimension used to distinguish compliance-gaining strategies (Dillard, 1988; Dillard & Burgoon, 1985; Hunter & Boster, 1987). The final dimension asked participants to indicate how likely they were to use the strategy if the person they are trying to
persuade is an individual toward whom it is important to maintain a positive relationship.

All ratings were made on 11-point scales. The scales for the likelihood-of-use questions (Dimensions 4, 5, and 6) ranged from 0 (not at all likely) to 10 (extremely likely). The scales for the presence or absence of an attribute (Dimensions 1, 7, 9, 10, and 11) also ranged from 0 to 10 (e.g., 0 = not at all aggressive to 10 = extremely aggressive). Finally, scales in which the strategy fell along a continuum (Dimensions 2, 3, 8, and 12) ranged from -5 to 5 (e.g., -5 = not at all socially acceptable to 5 = extremely socially acceptable).

The participants rated all the strategies along one dimension before moving to the next dimension, and the order of the dimensions was randomized. The 89 strategies were randomly ordered for each questionnaire.

Results

The mean score for each strategy was computed for each of the rating scales. The mean of these 89 strategies served as the dependent variable, and the coordinates for the 89 strategies in the two-dimensional configuration were the independent variables in a multiple regression equation (Kruskal & Wish, 1986). A regression analysis was completed for each of the 12 dimensions. In addition, the rating for the likelihood of use with a factual topic was subtracted from the likelihood of use for an opinion topic to obtain a general opinion versus factual topic scale. Table 1 shows the multiple R for each of the 13 sets of ratings.

This approach identified several viable candidates for dimensions in the multidimensional space (see Table 1). However, the two dimensions with the highest R values (association vs. message-oriented strategies, R = .89, and social acceptability, R = .88) were selected as best interpreting the two-dimensional space. Figure 1 shows these two dimensions mapped onto the MDS space, using the beta weights from the regression analysis (Kruskal & Wish, 1986).

One of the two dimensions is association strategies versus message-oriented strategies. This dimension captures subjects’ concern about the type of tactic they should use to change another’s belief. Henceforth, this dimension will be referred to as the tactic dimension. The second dimension reflects the social acceptability of a persuasive strategy. However, a number of other possible dimensions provide an acceptable fit with the dimension space and are highly correlated with this dimension (see Table 2). Social acceptability was chosen as the appropriate dimension for several reasons. First, the social acceptability dimension reflects the evaluative nature of social perception (Breckler et al., 1991; Forgas, 1981; Rosenberg & Sedlak, 1972). Second, social acceptability had the highest multiple R after the tactic dimension. Inspection of the strategies along this dimension clearly illustrates that they vary in their social acceptability. Third, the high
Figure 1: The Two-Dimensional Space for the 89 Persuasive Strategies With the Social Acceptability and Tactic Dimensions
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NOTE: Correlations in **bold** are significant at $p < .05$. 
correlation of the social acceptability of a strategy with a multiplicity of other judgments indicates that these other characteristics of the strategies influence why they are socially acceptable. For example, socially acceptable strategies are perceived as more objective \((r = .83)\), providing more information \((r = .84)\), and less aggressive \((r = -.47)\). Fourth, in replications of this study, the social acceptability dimension consistently provides a good fit for the dimensional space\(^3\) (see also Note 5). Finally, earlier research has shown that people are sensitive to social acceptability concerns when choosing communicative strategies (Burleson et al., 1988).

A potential problem with the choice of the tactic and social acceptability dimensions is that the dimensions are not orthogonal \((r = .44)\). However, when the dimensions are highly correlated, oblique axes sometimes provide a better interpretation of the domain (Kruskal & Wish, 1986; Rosenberg et al., 1968). For example, the use of configurations with oblique axes has proven very useful in understanding people's implicit theories of personality (Rosenberg et al., 1968).

Discussion

Two dimensions were used to differentiate persuasive strategies. One dimension was whether the strategy relies on associating the topic with valued people, ideals, and so forth or focusing on what is said and how to present the message. This dimension indicates that people differentiate persuasive strategies by the potential function the strategy may serve, and it corresponds to Kelman's (1958) identification and internalization functions. Association-oriented strategies rely on identifying the beliefs of an individual with valued others/ideals. Message-oriented strategies appear to be more concerned with long-term change in the person's opinions via internalization.

A second dimension is a social acceptability dimension. This is not unexpected because a number of goals in communicative settings rely on understanding the social acceptability of a strategy (Dillard, 1990; Dillard et al., 1989). Impression management and interaction concerns are important considerations across most, if not all, communicative settings. Furthermore, almost all social perception appears to be evaluative in nature (Forgas, 1981; Rosenberg & Sedlak, 1972).

An important finding of the studies is that persuasive strategies and compliance-gaining strategies are discriminated along distinctive dimensions. Instrumental aggression has been identified as the chief dimension on which compliance-gaining strategies are differentiated (Dillard, 1988; Dillard & Burgoon, 1985; Hunter & Boster, 1987). In the present studies, the perceived aggressiveness of a strategy provided the worst fit \((R = .42)\) of the 13 dimensions tested. However, this finding should not be surprising. Within Kelman's typology of social influence, compliance-gaining
results from a powerful source motivating people to alter their behaviors. The influence agent is successful through the use of instrumental aggression. In other words, compliance-gaining strategies function through instrumental aggression, whereas persuasive strategies function through identification (association-oriented strategies) and internalization (message-oriented strategies).

Two important limitations of this study should be noted. First, the research is not an attempt to develop a typology of persuasive strategies, and there may be important differences between lay theories of persuasion and social scientific theories of persuasion (O'Keefe, 1993). Second, some dimensions used to differentiate persuasive strategies may not have been identified in this study because of the stimuli that were used. For example, Falbo (1977; Falbo & Peplau, 1980) found that manipulative tactics differed along an indirect/direct dimension. The perceived directness of a persuasive strategy may reflect the language that is used to instantiate the strategy. The stimuli that were used in these studies would not capture this potential difference. Nevertheless, these studies clearly indicate two dimensions along which persuasive strategies are perceived to differ.

EXPERIMENTS 1 THROUGH 3

As discussed earlier, research on compliance-gaining demonstrated that the underlying representation of compliance-gaining strategies was important in determining expectations concerning compliance-gaining attempts. The following experiments explore expectations concerning persuasive strategy choice, with the goals of (a) validating that the social acceptability and tactic dimensions are important components of individuals’ implicit theories of persuasion and (b) advancing our understanding of implicit theories of persuasion. Using the GOALS/GRASP model (Cronkhite & Liska, 1980) to explore whether the underlying representation of persuasive strategies is reflected in implicit theories of persuasion, Experiments 1, 2, and 3 focus on the role of communicator goals, audience knowledge, and relative speaker knowledge on expectations of persuasive strategy use.

General Method

Participants

All participants in these experiments were undergraduates at Indiana University and received partial credit toward a course requirement. Par-
Participants were randomly assigned to the conditions of each experiment and tested in groups of 15 to 25. There were 100 participants in Experiment 1 and 75 each in Experiments 2 and 3. No student participated in more than one experiment.⁴

**Design and Stimulus Materials**

To study the factors influencing expected persuasive strategy choice, two within-subjects factors appeared in all three experiments—the social acceptability and tactical nature of the persuasive strategies. The multidimensional space was divided into four quadrants: (a) high social acceptable/association strategies, (b) high social acceptable/message-oriented strategies, (c) low social acceptable/association strategies, and (d) low social acceptable/message-oriented strategies. Ten strategies were chosen from each quadrant. Two criteria were used in choosing the strategies. First, strategies that clearly matched the meaning of the quadrant were selected. Second, strategies from across the dimensional space were used to ensure that a representative sample of strategies was used. The social acceptability ratings (Study 1) of the 40 strategies were analyzed in a 2 (levels of social acceptability) × 2 (levels of tactic) ANOVA to ensure that the strategies differed along the acceptability dimension. The main effect of acceptability was significant,\( F(1, 36) = 89.99, p < .0001 \). The main effect of tactic and the interaction were not significant. Similarly, the ratings of the 40 strategies along the tactic dimension from Study 1 were analyzed. The main effect of tactic was significant, \( F(1, 36) = 101.76, p < .0001 \). The main effect of social acceptability and the interaction were not significant.⁵

**Procedure**

The subjects were told that the experiment concerned which strategies, tactics, or arguments people use when trying to persuade other people to change their opinions. Subjects read a scenario in which Person A was attempting to persuade Person B to change his or her opinion toward a topic. Their task was to imagine a situation that matched the scenario and indicate the likelihood that each of 40 persuasive strategies would be used by a typical person in that situation, using an 11-point scale, ranging from 0 = *not at all likely to be used* to 10 = *extremely likely to be used*. Participants were asked to judge the strategy selection of "typical others" because individuals display a desirability bias in judgments of their own behavior (Burleson et al., 1988). Furthermore, ratings of typical others indicate which persuasive strategies are anticipated to be used in a particular setting.
After reading the instructions, subjects were presented with the 40 strategies to familiarize them with the strategies. Subjects then read the scenario and indicated the likelihood that a typical other would use each strategy in that scenario. Participants then estimated when a typical other would use each strategy within a persuasive campaign. The scale ranged from 10 = first strategy used, 8 = used fairly early, 2 = used in a last-ditch persuasion attempt, and 0 = would not use this strategy at all.

The likelihood-of-use and when-used ratings were highly correlated with one another across the three experiments (the correlations for each quadrant across the three experiments following an $r$ to $z$ transformation are as follows: high social acceptable/association strategies, $r = .74$; high social acceptable/message-oriented strategies, $r = .68$; low social acceptable/association strategies, $r = .68$; low social acceptable/message-oriented strategies, $r = .68$). For this reason, four scores, one for each of the four quadrants of strategies, were calculated for each participant, forming a composite rating of the likelihood-of-use and when-used ratings. The two measures were averaged for each of the 40 strategies, and then the means of the 10 strategies of each quadrant were calculated, forming the composite scores. After completing this measure, participants were debriefed and dismissed.

Experiment 1

The goals involved in a communicative setting should influence strategy choice (Clark & Delia, 1979; Cronkhite & Liska, 1980; O'Keefe, 1988). Bringing about change in the other individual's belief system is the overriding goal in a persuasive setting. However, this goal may be modified by two factors: the importance of the topic to the persuader and relationship maintenance concerns. These two factors were manipulated in Experiment 1 to explore their effects on expectations of persuasive strategy choice.

High topic importance should lead to expectations of the increased use of all persuasive strategies, including both socially acceptable and unacceptable strategies. People perceive themselves as having more knowledge about and being more emotionally committed to important topics (Abelson, 1988). Increased knowledge should make more strategies available to the persuader, and emotional commitment should lower the threshold for employing low socially acceptable strategies. In addition, the significant correlations between the topic importance and social acceptability dimensions ($r[87] = .81, p < .001$) and the topic importance and the tactic dimensions ($r[87] = .32, p < .005$) found in Study 1 suggest that more socially acceptable strategies and message-oriented strategies
should be used when the topic is important. The following three hypotheses were advanced:

H1: Participants will predict more frequent use of persuasive strategies by typical others overall (e.g., across all quadrants of the MDS) when topic importance is high rather than low. A main effect of topic importance was predicted.

H2: Participants will predict more frequent use of persuasive strategies from the high social desirability quadrants of the MDS by typical others when topic importance is high rather than low. A two-way interaction between topic importance and social acceptability was predicted.

H3: Participants will predict more frequent use of persuasive strategies from message-oriented quadrants of the MDS by typical others when topic importance is high rather than low. A two-way interaction between topic importance and tactic was predicted.

On the other hand, relational importance should heighten the expectation that the communicator will be concerned with avoiding negative reactions from the recipient. Because high socially acceptable strategies are much less likely to result in negative reactions (Hunter & Boster, 1987), the following hypothesis was proposed:

H4: Participants will predict more frequent use of persuasive strategies from the high social desirability quadrants of the MDS by typical others when relational maintenance concerns are high rather than low. A two-way interaction between relational maintenance concerns and social acceptability was predicted.

Study 1 already provides support for this hypothesis because there was a strong correlation between the social acceptability dimension and the likelihood of using a strategy when the relationship is important, $r(87) = .77, p < .001$.

Although there is evidence that relational maintenance concerns are incompatible with the goal of persuasion (McCann & Higgins, 1988), it is not known whether topic importance will interact with relational maintenance concerns. Therefore, no a priori prediction regarding the possibility of an interaction was made.

Method

Design. The experiment was a 2 (levels of topic importance: high vs. low) × 2 (levels of relational maintenance concerns: high vs. low) × 2 (tactic: association vs. message oriented) × 2 (levels of social acceptability: high
vs. low) full factorial design. Topic importance and relational maintenance were between-subjects variables.

**Stimulus materials.** There were four scenarios in this experiment. In the high relational maintenance concerns conditions, subjects were told that the semester had just started; Persons A and B were meeting at the cafeteria in the university's union building; and Person B, the target of the persuasion attempt, and Person A were required to work on a class project for the entire semester. As a result of the long-term class project, it would be important for Person A to maintain a positive relationship with Person B. In the low relational maintenance concerns conditions, Person A was eating at the cafeteria in the student union and started a conversation with Person B, an individual Person A did not know. In this situation, the future maintenance of the relationship was left open. Although the maintenance of a positive relationship may be desirable in this condition, there are no overriding forces dictating the importance of maintaining this relationship.

Topic importance was introduced in the high and low relational maintenance scenarios by describing how Person A felt toward the topic of the persuasion attempt. In the high topic importance conditions, the topic was described as one toward which Person A felt very strongly. To reinforce this, statements that Person A had made were reported (adapted from Abelson, 1988), such as, “I can't imagine changing my opinion on this topic,” “I think about X often and I hold my views very strongly,” and “I've held my view on X for a very long time.” In the low topic importance conditions, Person A was described as not feeling at all strongly about this issue. Furthermore, it was reported that Person A had been heard to say, “It would not take much to change my opinion about this topic,” “I rarely think about X so I guess my views are not that well developed,” and “I've only recently even thought about this topic.”

The manipulation of topic importance and relational maintenance concerns was ascertained in a pilot study. Nineteen students were given copies of the four scenarios in a random order. After reading each scenario, the students rated how important it was for Person A to maintain the relationship (0 = not at all important, 10 = extremely important) and how important this topic was to Person A (0 = not at all important, 10 = extremely important). The data were analyzed using a 2 (topic importance) × 2 (relational maintenance concerns) within-subjects ANOVA. For the relational importance question, there was a main effect of relational maintenance concerns, \( F(1, 18) = 37.93, p < .0001 \). The relationship was judged as more important in the high relational maintenance concerns conditions (\( M = 6.32 \)) than in the low relational maintenance concerns conditions (\( M = 3.53 \)). The main effect of topic importance and the interaction were not significant. For the topic importance question, the topic was judged as more
important in the high topic importance conditions ($M = 9.08$) than in the low topic importance conditions ($M = 2.03$), $F(1, 18) = 189.12, p < .0001$. The main effect of relational maintenance concerns and the interaction were not significant. Based on these analyses, the manipulation of relational maintenance concerns and topic importance was judged to be effective.

**Results and Discussion**

The composite ratings were analyzed using a $2$ (topic importance) $\times$ $2$ (relational maintenance concerns) $\times$ $2$ (social acceptability) $\times$ $2$ (tactic) full factorial ANOVA. Three subjects were dropped from the analysis for failing to complete the dependent measures.

The results, although more complex than anticipated, reveal an interesting account of people's implicit theories of persuasion. As predicted by Hypothesis 1, subjects indicated that typical others would be likely to use a greater variety of strategies in the high topic importance condition than in the low topic importance condition ($M = 5.60$ and $4.76$, respectively), $F(1, 93) = 24.45, p < .0001, \eta^2 = .063$. Typical others were perceived as having a wider pool of potential strategies available for use when the topic is important.

Consistent with Hypothesis 2, the Topic Importance $\times$ Social Acceptability interaction was significant, $F(1, 93) = 6.73, p < .05, \eta^2 = .009$. High acceptable strategies were used more when topic importance was high than when it was low ($7.08$ and $5.61$, respectively). Topic importance made less difference in the use of unacceptable strategies ($4.12$ and $3.46$ for high and low topic importance, respectively). Likewise, Hypothesis 3 was supported by a significant Topic Importance $\times$ Tactic interaction, $F(1, 93) = 4.32, p < .05, \eta^2 = .003$. Message-oriented strategies were more likely to be used when the topic was important than when it was not ($6.19$ and $4.90$, respectively). Topic importance made a smaller difference in the use of association strategies ($5.01$ and $4.16$ for high and low topic importance, respectively).

The interaction consistent with Hypothesis 4 between relational maintenance concerns and social acceptability was in the predicted direction, but the interaction was only marginally significant, $F(1, 93) = 3.09, p < .10, \eta^2 = .004$. The mean ratings in the high maintenance condition were $6.60$ for high socially acceptable strategies and $3.77$ for low socially acceptable ones. Low maintenance ratings were $6.09$ for high acceptable and $3.81$ for low acceptable strategies.

In addition, there was a four-way interaction involving topic importance, relational maintenance concerns, social acceptability, and tactic, $F(1, 93) = 4.95, p < .05, \eta^2 = .003$ (Table 3). To ease the interpretation of this interaction, typical others' composite likelihood-of-use scores were ana-
**TABLE 3**

Experiment 1: Mean Composite Scores for Ratings of Typical Others

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Low Topic</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Relation</td>
<td>High Relation</td>
<td>Low Relation</td>
<td>High Relation</td>
</tr>
<tr>
<td>High acceptable: Message oriented</td>
<td>5.15&lt;sub&gt;a&lt;/sub&gt;</td>
<td>7.11&lt;sub&gt;b&lt;/sub&gt;</td>
<td>7.81&lt;sub&gt;c&lt;/sub&gt;</td>
<td>7.66&lt;sub&gt;bc&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>(1.99)</td>
<td>(1.37)</td>
<td>(.88)</td>
<td>(1.25)</td>
</tr>
<tr>
<td>High acceptable: Association</td>
<td>4.75&lt;sub&gt;a&lt;/sub&gt;</td>
<td>5.41&lt;sub&gt;b&lt;/sub&gt;</td>
<td>6.63&lt;sub&gt;c&lt;/sub&gt;</td>
<td>6.21&lt;sub&gt;c&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>(1.82)</td>
<td>(1.61)</td>
<td>(1.49)</td>
<td>(1.13)</td>
</tr>
<tr>
<td>Low acceptable: Message oriented</td>
<td>3.57&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.77&lt;sub&gt;a&lt;/sub&gt;</td>
<td>4.75&lt;sub&gt;b&lt;/sub&gt;</td>
<td>4.53&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>(1.87)</td>
<td>(1.43)</td>
<td>(1.38)</td>
<td>(1.36)</td>
</tr>
<tr>
<td>Low acceptable: Association</td>
<td>2.94&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.54&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>3.96&lt;sub&gt;b&lt;/sub&gt;</td>
<td>3.25&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>(1.52)</td>
<td>(1.76)</td>
<td>(1.69)</td>
<td>(1.16)</td>
</tr>
</tbody>
</table>

NOTE: Scheffé post hoc analyses were used to determine significant differences across the rows (MSe = 1.14). Scores in the same row with the same subscript (a, b, or c) are not significantly different. The standard deviation is in parentheses.

...analyzed separately for strategies from each quadrant of the MDS, using 2 (topic importance) × 2 (relational maintenance concerns) ANOVAs. The mean squared error term from the four-way interaction was used as the denominator of the F ratio in these ANOVAs. Each quadrant will be discussed in turn.

High acceptable/message-oriented strategies were the strategies of choice across all conditions. The results of the ANOVA on this subset revealed effects of topic importance, F(1, 96) = 52.51, p < .001; relational maintenance concerns, F(1, 96) = 16.76, p < .001; and their interaction, F(1, 96) = 23.70, p < .001. High acceptable/message-oriented strategies are expected to be used more when the topic is important than when it is not and when relational concerns are high compared to when they are low. The increased use of socially acceptable, message-oriented strategies when the topic is important and when relational concerns are high may reflect the perception that they are effective at inducing opinion change and are not likely to offend the message recipient. The interaction reflects a decline in the judged use of these strategies by typical others when maintaining that the relationship is important but the topic is not, and it also reflects a further decline when both topic importance and relational maintenance concerns are low. When the topic was not important, the persuader was described as not often thinking about the topic, indicating a lack of familiarity with the topic. Because these strategies (e.g., high-quality or logical arguments) presumably require topic-relevant knowledge to be effectively used, the decreased use of the strategies with an unimportant topic is understandable.
For the high acceptable/association strategies, the effect of topic importance was significant, $F(1, 96) = 36.75, p < .001$. High acceptable/association strategies were most likely to be used when the topic was important. This quadrant includes value appeals, and Abelson (1988) found that people who hold convictions about a topic have a moral sense of what is correct in relation to that topic. Thus, strong conviction may increase the use of the value-oriented appeals found in this quadrant. The interaction, $F(1, 96) = 6.18, p < .05$, indicated that relational maintenance concerns had an effect, with strategies more likely to be used in the high relation context than in the low relation context, but only when topic importance was low. These strategies may be anticipated to be used when relational maintenance concerns are high enough to build a sense of camaraderie with the target of the persuasion attempt by establishing a common ground (e.g., we have the same values, likes, friends, and so forth).

For low acceptable/message-oriented strategies, the main effect of topic importance again was significant, $F(1, 96) = 19.96, p < .001$, with these strategies anticipated to be used more in high topic importance conditions than in low importance conditions. This quadrant includes emotional appeals and strategies that rely on exaggeration. The anticipated use of this type of strategy when the topic is important to the individual should not be surprising.

Overall, low acceptable/association strategies were expected to be the least-used strategies. Nonetheless, the Topic Importance x Relational Maintenance Concerns interaction was reliable, $F(1, 96) = 9.13, p < .01$. Low acceptable/association strategies were anticipated to be used when topic importance was high and relational maintenance concerns were low. Participants' implicit theories indicate that these strategies were least likely to be used in both the high importance/high relational maintenance concerns and low topic/low relation conditions. The strategies in this quadrant focus on characteristics of the recipient (e.g., appeals to negative self-image, positive altercasting, appeal to positive/negative consequences) and involve a risk of offending the message recipient. Participants judged typical others as reluctant to use these strategies, except when the topic is important and relational maintenance concerns are low. In this instance, the goals of effective persuasion and relational maintenance are not incongruent, and typical others are rated as more willing to use potentially offensive strategies.

Experiment 2

People adapt the content of their messages to reflect their intended audience (Higgins, 1981; Higgins & McCann, 1984; McCann & Hancock, 1983; Newton & Czerlinsky, 1974), but whether people are judged to be
sensitive to the probable effectiveness of various persuasive strategies across different audiences is uncertain. Several recent theories (Chaiken, Liberman, & Eagly, 1989; Petty & Cacioppo, 1986) postulate that people cognitively process messages using central and peripheral processing. When a message is processed centrally, its content is critically examined. When the message is processed peripherally, the message recipient focuses on cues external to the content of the message (e.g., likability of the speaker). One factor that influences whether a message is processed centrally or peripherally is the topic-relevant knowledge level of the message recipient (Petty & Cacioppo, 1986). People with low topic-relevant knowledge are more likely to process the message peripherally because they do not possess adequate information for a systematic scrutiny of the content of the message. On the other hand, people who are highly familiar with the topic are more likely to use central processing because they have the requisite knowledge structures.

Experiment 2 examined whether people are anticipated to adapt their messages according to the manner in which recipients are likely to process the persuasive appeal. It tests whether people’s implicit theories of persuasion are sensitive to the types of appeals that are likely to be successful when presented to a low-, moderate-, or high-knowledge audience. Intuitively, when the audience is not familiar with the topic of the persuasive appeal and the speaker is aware of this lack of knowledge, the speaker should be more likely to use association strategies because these strategies focus on peripheral cues (e.g., credibility appeals, appeals to general values). On the other hand, when both the speaker and recipient are familiar with the issues, the speaker is expected to rely more on message-oriented strategies because this type of strategy focuses on the content of the message (e.g., provide reasons, use high-quality arguments). However, as O’Keefe (1993) has noted, lay theories of persuasion often do not conform to social scientific theories of persuasion. Nevertheless, the following hypothesis was proposed:

**H1:** Participants will predict more frequent use of persuasive strategies from the message-oriented quadrants of the MDS by typical others as audience knowledge increases. Conversely, participants will predict less frequent use of persuasive strategies from the association strategy quadrants of the MDS by typical others as audience knowledge increases. A Tactic \times Audience Knowledge Level interaction was predicted.

**Method**

**Design.** The experiment was a 3 (levels of audience knowledge: low, moderate, or high) \times 2 (tactic: association vs. message oriented) \times 2 (levels
of social acceptability: high vs. low) full factorial design. Audience knowledge was a between-subjects factor.

**Stimulus materials.** In all scenarios, Person A (the persuader) was described as being "aware of the major issues involved with this topic." In the high audience knowledge condition, Person B was described as being "very familiar with the issues relevant to this topic." In the moderate audience knowledge condition, Person B was described as having the same general familiarity with the issues as Person A. In the low audience knowledge condition, Person B was described as "not at all familiar with the issues relevant to this topic." In all three scenarios, subjects were explicitly told that Person A was aware of Person B's knowledge of the topic.

The manipulation of recipient knowledge level was tested in a pilot study. A total of 28 students were given copies of the three scenarios in a random order. After reading each scenario, the students rated the topic-relevant knowledge of Person A (the persuader) and Person B (the recipient) on a scale ranging from 0 = *not at all knowledgeable* to 10 = *extremely knowledgeable.* The data were analyzed using a 2 (Person A or B) × 3 (level of audience knowledge) within-subjects ANOVA. The main effect of audience knowledge level, $F(2, 54) = 38.57, p < .0001$; the main effect of person, $F(1, 27) = 5.16, p < .05$; and the interaction between person and audience knowledge were significant, $F(2, 54) = 47.95, p < .0001$. Person A's (the persuader) knowledge level was constant across the three conditions of audience knowledge ($M$s = 6.36, 5.79, and 5.68 in the low, moderate, and high audience knowledge level conditions, respectively). However, Person B's (the recipient's) knowledge increased across the three conditions ($M$s = 2.18, 5.36, and 8.29 in the low-, moderate-, and high-knowledge level conditions, respectively).

**Results and Discussion**

The composite ratings were analyzed using a 3 (audience knowledge) × 2 (tactic) × 2 (social acceptability) ANOVA. As in Experiment 1, subjects believed that high socially acceptable strategies were more likely to be used by typical others than low socially acceptable strategies ($M$s = 6.62 and 4.11, respectively), $F(1, 72) = 204.77, p < .0001$, $\eta^2 = .437$. Subjects also indicated that typical others would use message-oriented strategies more than association strategies (5.74 and 4.99, respectively), $F(1, 72) = 26.50, p < .0001$, $\eta^2 = .031$.

Consistent with Hypothesis 1, the audience knowledge and tactic factors interacted reliably, $F(2, 72) = 7.54, p < .001$, $\eta^2 = .017$ (see Table 4). As predicted, the perceived use of association strategies by typical others
increased as the familiarity of the audience decreased. Also as predicted, the estimated usage of message-oriented strategies by typical others was greater in the moderate audience knowledge condition than in the low audience knowledge condition. However, the expected likelihood that typical others would use message-oriented strategies in the high audience knowledge condition did not differ from either the low or moderate audience knowledge conditions. There were no other significant main effects or interactions.

The results support the hypothesis that implicit theories of persuasion reflect the differential use of message-oriented and association strategies, depending on the audience's level of knowledge about the topic. When the audience had little knowledge of topic, typical others were judged to use association strategies more than when the audience was at least moderately aware of the issues. Message-oriented strategies were judged to be used less by typical others with low-knowledge audiences than with moderate- or high-knowledge audiences. If the audience does not have the requisite knowledge to understand a persuasive appeal (e.g., logic, strong arguments), using those strategies would be futile; rather, association strategies would be more likely to be effective in this context. The participants' implicit theories of persuasion indicated that when the audience is likely to process the message centrally because of topic familiarity, the communicator relies more on strategies that focus on the content of the message than on strategies that are peripheral to the content of the message.

The drop in the anticipated use of message-oriented strategies in the high audience knowledge condition relative to the moderate audience knowledge condition deserves comment. This decline in the use of message-oriented strategies may reflect the topic knowledge of the persuader (moderate) compared to the knowledge of the recipient (high). A typical

### TABLE 4

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Audience Knowledge</td>
<td>Audience Knowledge</td>
<td>Audience Knowledge</td>
</tr>
<tr>
<td>Message-oriented strategies</td>
<td>5.13&lt;sub&gt;a&lt;/sub&gt; (1.33)</td>
<td>5.85&lt;sub&gt;b&lt;/sub&gt; (1.29)</td>
<td>5.45&lt;sub&gt;ab&lt;/sub&gt; (1.61)</td>
</tr>
<tr>
<td>Association strategies</td>
<td>5.18&lt;sub&gt;a&lt;/sub&gt; (1.40)</td>
<td>4.72&lt;sub&gt;ab&lt;/sub&gt; (1.43)</td>
<td>4.36&lt;sub&gt;b&lt;/sub&gt; (1.74)</td>
</tr>
</tbody>
</table>

NOTE: Scheffé post hoc analyses were used to determine significant differences across the rows \( (MSe = 1.49) \). Scores in the same row with the same subscript \((a\) or \(b)\) are not significantly different. The standard deviation is in parentheses.
other may be perceived as reticent to present arguments, even though the arguments are message oriented and thus presumably able to withstand critical examination to a person who is more versed with the topic.

Experiment 3

Experiment 3 concerns whether people's implicit theories of persuasion include the types of strategies a persuader is likely to use, based on the persuader's knowledge of the topic of the persuasive message. In this experiment, the topic-relevant knowledge of the persuader was manipulated, and the audience's familiarity with the topic of discussion was held constant.

In the low speaker knowledge condition, the persuader should be judged to be less likely to use message-oriented strategies because the low knowledge of the speaker limits the persuasive strategies available for use. In the moderate speaker knowledge condition, the persuader has the knowledge available to use message-oriented strategies and should be expected to be more likely to use them than in the low persuader knowledge condition. In the high speaker knowledge condition, one may anticipate that the persuader will use message-oriented strategies even more than in the moderate speaker knowledge condition. However, the persuader is addressing an audience that is only moderately familiar with the issues; message-oriented strategies that are of high quality for the persuader may be beyond the intellectual capabilities of the audience. As a result, the expectation may be that the use of message-oriented strategies in this condition may be equivalent to that in the moderate speaker knowledge condition. The following hypothesis was proposed:

H1: Participants will predict the least frequent use of persuasive strategies from the message-oriented quadrants of the MDS by typical others when speaker knowledge is low rather than high. Conversely, participants will predict the most frequent use of persuasive strategies from the association strategy quadrants of the MDS by typical others when speaker knowledge is low rather than moderate or high. An interaction between speaker knowledge and the tactic dimension was predicted.

Method

Design. The experiment was a 3 (levels of speaker knowledge: low, moderate, or high) \times 2 (tactic: association vs. message oriented) \times 2 (levels of social acceptability: high vs. low) full factorial design. Speaker knowledge was a between-subjects factor.
**Stimulus materials.** Person B (the recipient of the persuasion attempt) was always described as having a moderate level of knowledge about the topic. Person A (the persuader) was always portrayed as aware of Person B's knowledge level. In the high self-knowledge condition, Person A was described as being "very familiar with the issues relevant to this topic." In the moderate self-knowledge condition, Person A was described as having the same general familiarity with the issues as Person B. In the low self-knowledge condition, Person A was described as "not at all familiar with the issues relevant to this topic."

The manipulation of persuader knowledge level was ascertained in a pilot study. A total of 28 students were given copies of the three scenarios in a random order. After reading each scenario, the students rated the topic-relevant knowledge of Person A (the persuader) and Person B (the recipient) on a scale ranging from 0 = *not at all knowledgeable* to 10 = *extremely knowledgeable*. The data were analyzed using a 2 (Person A or B) × 3 (level of speaker knowledge) within-subjects ANOVA. The main effect of the speaker's knowledge level, $F(2, 54) = 90.46, p < .0001$; the main effect of the recipient's knowledge level, $F(1, 27) = 14.88, p < .05$; and the interaction between recipient and speaker knowledge were significant, $F(2, 54) = 261.81, p < .0001$. Person B's (the recipient) knowledge level was constant across the three conditions of speaker knowledge (Ms = 6.07, 5.71, and 5.39 in the low, moderate, and high speaker knowledge level conditions, respectively). However, Person A's (the persuader's) knowledge increased across the three conditions (Ms = .86, 5.79, and 8.75 in the low-, moderate-, and high-knowledge level conditions, respectively).

**Results and Discussion**

The composite scores were analyzed using a 3 (speaker knowledge) × 2 (tactic) × 2 (social acceptability) ANOVA. Replicating the results of Experiments 1 and 2, subjects indicated that others would be more likely to use high acceptable strategies (M = 6.41) than low acceptable strategies (M = 4.15), $F(1, 72) = 189.15, p < .0001, \eta^2 = .394$, and that typical others would show a greater willingness to use message-oriented strategies (M = 5.55) than association strategies (M = 5.02), $F(1, 72) = 21.49, p < .0005, \eta^2 = .022$.

The expected interaction between speaker knowledge and tactical strategies was not significant, $F(1, 72) = 1.69, p > .15$. Although the predictions were not supported, the pattern of results reveal an interesting depiction of subjects' implicit theories of persuasion. Two interactions were observed: one between the social acceptability dimension and speaker knowledge, $F(2, 72) = 12.64, p < .001, \eta^2 = .053$, and the other between the social acceptability and tactic dimensions and the level of
### TABLE 5
Experiment 3: Mean Composite Scores for Ratings of Typical Others

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Low Speaker Knowledge</th>
<th>Moderate Speaker Knowledge</th>
<th>High Speaker Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>High acceptable: Message oriented</td>
<td>5.98&lt;sub&gt;a&lt;/sub&gt; (1.74)</td>
<td>7.11&lt;sub&gt;b&lt;/sub&gt; (0.99)</td>
<td>6.86&lt;sub&gt;b&lt;/sub&gt; (1.02)</td>
</tr>
<tr>
<td>High acceptable: Association</td>
<td>6.07&lt;sub&gt;a&lt;/sub&gt; (1.10)</td>
<td>6.00&lt;sub&gt;a&lt;/sub&gt; (1.53)</td>
<td>6.43&lt;sub&gt;a&lt;/sub&gt; (1.22)</td>
</tr>
<tr>
<td>Low acceptable: Message oriented</td>
<td>5.59&lt;sub&gt;a&lt;/sub&gt; (1.15)</td>
<td>4.05&lt;sub&gt;b&lt;/sub&gt; (1.47)</td>
<td>3.71&lt;sub&gt;b&lt;/sub&gt; (1.15)</td>
</tr>
<tr>
<td>Low acceptable: Association</td>
<td>4.26&lt;sub&gt;a&lt;/sub&gt; (1.25)</td>
<td>3.67&lt;sub&gt;b&lt;/sub&gt; (1.49)</td>
<td>3.65&lt;sub&gt;b&lt;/sub&gt; (1.43)</td>
</tr>
</tbody>
</table>

NOTE: Scheffé post hoc analyses were used to determine significant differences across the rows (MSe = .82). Scores in the same row with the same subscript (a or b) are not significantly different. The standard deviation is in parentheses.

Speaker knowledge, $F(2, 72) = 10.04, p < .001, \eta^2 = .017$. Scheffé post hoc analyses of the Social Acceptability × Tactic × Speaker Knowledge interaction were conducted to help with its interpretation (see Table 5). Each quadrant of the MDS space is discussed below.

For high acceptable/message-oriented strategies, the results show the predicted trend. High acceptable/message-oriented strategies were judged to be used least by typical others in the low speaker knowledge condition. Furthermore, there was no significant difference in the use of high acceptable/message-oriented strategies in the moderate and high speaker knowledge conditions. Although the high knowledge of the persuader would have allowed for an increased use of high acceptable/message-oriented strategies compared to a persuader of moderate knowledge, the moderate knowledge of the audience may be anticipated to limit the effectiveness of these strategies.

The rated usage of low acceptable/message-oriented strategies was in the opposite direction of Hypothesis 1—that typical others would be expected to increase their reliance on these strategies as speaker knowledge increased. Rather, these low acceptable/message-oriented strategies were perceived to be used most by low-knowledge speakers, a finding that is particularly interesting. When the individual strategies of this quadrant are considered, it becomes obvious that many of the strategies are designed to disguise a persuader’s lack of topic-relevant knowledge (e.g., “be intentionally vague,” “exaggerate your point,” and “obscure the issue”). Typical others may be judged as likely to use these strategies because of the strategies’ apparent self-presentational value. To test whether there was an increase in the likelihood of using strategies that
TABLE 6
Experiment 3: Analysis of the Low Socially Acceptable/Message-Oriented Strategies Composite Scores for Ratings of Typical Others

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Level of Self-Knowledge</th>
<th>F(2, 72)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>Exaggerate the other position and attack it</td>
<td>5.28</td>
<td>3.64</td>
</tr>
<tr>
<td>Obscure the issue</td>
<td>4.80</td>
<td>2.66</td>
</tr>
<tr>
<td>Be intentionally ambiguous</td>
<td>5.94</td>
<td>2.90</td>
</tr>
<tr>
<td>Exaggerate your point</td>
<td>6.36</td>
<td>4.68</td>
</tr>
<tr>
<td>Redefine what is being discussed</td>
<td>6.14</td>
<td>4.30</td>
</tr>
<tr>
<td>Use intense language</td>
<td>6.46</td>
<td>4.74</td>
</tr>
<tr>
<td>Use emotional appeals</td>
<td>7.14</td>
<td>5.52</td>
</tr>
<tr>
<td>Use sarcasm</td>
<td>5.84</td>
<td>4.04</td>
</tr>
<tr>
<td>Be straightforward, even if offend</td>
<td>4.86</td>
<td>4.94</td>
</tr>
<tr>
<td>Present only complex arguments</td>
<td>3.06</td>
<td>3.12</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .0005.

hide a lack of knowledge, the composite likelihood-of-use ratings of these 10 strategies were analyzed by using one-way ANOVAs. Table 6 makes the point abundantly clear: Strategies that hide one's lack of knowledge accounted for the increased use of low acceptable/message-oriented strategies in the low speaker knowledge condition. The only strategies that were not used more in the low speaker knowledge condition ("be straightforward" and "use complex arguments") are difficult for a person with low knowledge to use.

For the remaining quadrants, high acceptable/association strategies were expected by the subjects to be used equally by low-, moderate-, and high-knowledge speakers, contrary to the predictions of Hypothesis 1. On the other hand, low acceptable/association strategies showed the anticipated pattern; typical others were judged to use association strategies more as speaker knowledge decreased (Table 5). Because the speaker lacks topic specific knowledge, typical others are judged to rely more on low desirable/association strategies in the low speaker knowledge condition.

Discussion of Experiments 1 Through 3

Experiment 1 demonstrated that communicator goals are reflected in implicit theories of persuasion. The four-way interaction found in Experiment 1 resulted from several trends. First, when the topic is important, implicit theories of persuasion reflect an expected increased use of all strategies, except the low acceptable/association ones (and topic importance increased the use of these strategies when relational maintenance
concerns were low). Notably, high topic importance increased the use of low acceptable/message-oriented strategies independent of relational maintenance concerns. Second, relational maintenance concerns were anticipated to increase the use of high acceptable strategies only when topic importance was low. Apparently, subjects' implicit theories of others' persuasive strategy choice reflect the role of various goals (i.e., topic importance and relational maintenance concerns) in persuasive discourse. Specifically, typical others are perceived as sensitive to multiple goals operating in a situation, aware of the relative importance of the goals within the situation, and flexible in their use of persuasive strategies to achieve these goals.

The results of Experiment 2 suggest that implicit theories of persuasion are rather sophisticated. When faced with audiences that are likely to process the message differently due to differential familiarity with the topic, typical others were judged to use strategies that would be more effective for that audience according to current theories of persuasion (Chaiken et al., 1989; Petty & Cacioppo, 1986). Although it is unclear whether participants understood why particular strategies would be effective, nonetheless, typical others were judged to be sensitive to fairly subtle differences in how an audience would process a message.

Finally, the results of Experiment 3 suggest that implicit theories of persuasion reflect the limitations of the speaker's knowledge and the speaker's desire to disguise this lack of knowledge. To summarize the three-way interaction found in Experiment 3, (a) high acceptable/message-oriented strategies were anticipated to be used least in the low speaker knowledge condition and equally likely to be used in the other two conditions, as predicted; (b) unexpectedly low acceptable/message-oriented strategies were anticipated to be used most in the low speaker knowledge condition and equally likely to be used in the other two conditions, a pattern that appears to result from the face-saving nature of these strategies; and (c) typical others were judged to use low acceptable/association strategies most in the low speaker knowledge condition.

GENERAL DISCUSSION

Implicit Theories of Persuasive Strategy Choice

Based on the results of the multidimensional scaling study and the three experiments, people appear to have rich implicit theories concerning persuasive strategy choice. The multidimensional scaling procedure used in Study 1 identified two dimensions that are used to differentiate persuasive strategies. The tactic dimension incorporates whether the strategy associates the topic with valued people/ideas or focuses on the
style, tone, and factual content of the message and coincides with Kelman's (1958) internalization and identification functions of social influence. The second dimension focuses on the social acceptability of the strategy. Earlier researchers have demonstrated that social stimuli are often differentiated along an evaluative dimension (Breckler et al., 1991; Forgas, 1981; Rosenberg & Sedlak, 1972). This research illustrates yet another domain in which social stimuli appear to be evaluatively differentiated. The regression analysis and the main effects for both the social acceptability and tactic dimensions found in all three experiments indicate that these two dimensions capture how differences are judged among the persuasive strategies used in this research.

The results of the three experiments are consistent with the GOALS/GRASP model of communication (Cronkhite & Liska, 1980). Experiment 1 demonstrated that implicit theories of persuasion are responsive to the goals operating in the situation. The interaction between the two goals indicates that people are expected to be sensitive to the operation of multiple goals in a situation and strive to achieve the various goals. Characteristics of the audience and the perceiver also influence subjects' implicit theories of persuasion. Experiment 2 found that perceived strategy use reflected the familiarity of the audience with the topic. Association strategies were anticipated to be used more when the audience was likely to process the message peripherally (i.e., audience knowledge of the topic was low), and message-oriented strategies were relied on when the message was most likely processed centrally (i.e., audience knowledge of the topic was moderate or high). In Experiment 3, evidence was obtained that typical others are judged to balance the knowledge and abilities of the communicator with the knowledge and ability of the audience. In addition, typical others were anticipated to use low desirable strategies when necessitated by face-saving concerns.

Future Research Directions

Future research should explore whether subjects' use of their implicit theories of persuasion predict the types of strategies they would use in actual social interactions. Research on compliance-gaining strategies indicates that subjects do a rather poor job at predicting the specific strategies they use (Burleson et al., 1988). Rather than looking at the prediction of specific strategies, though, it may be better to look at strategy "types" (Kellermann & Cole, 1994). In other words, when subjects are not familiar with the issues relevant to a topic and try to persuade someone to change his or her mind about that topic, the question should be whether subjects rely on those low acceptable message-oriented strategies that hide a lack of knowledge, not whether they use a specific strategy such as "redefine the issue." Indeed, one of the problems that has plagued the research on
compliance-gaining has been the difficulty in developing typologies of compliance-gaining behaviors that are exhaustive and mutually exclusive (Kellermann & Cole, 1994). However, the finding that persuasive strategies are represented dimensionally would suggest that people do not think in terms of "strategies" per se, but rather focus on a type of loosely configured set of strategies that overlap.

A second area of research concerns the effectiveness of various persuasive strategies. Understanding the underlying representation of persuasive strategies could augment attempts to understand why particular persuasive strategies are effective. Strategies may have been judged to be similar in the multidimensional scaling task because they operate in the same manner. For example, the other-referential credibility appeals may be highly similar because they operate through the same mechanism (i.e., they are peripheral cues). One implication of this assumption is that strategies close to one another in the MDS configuration would be effective in similar situations and would require the same contextual conditions to bring about attitude change. However, care should be taken in concluding that implicit theories of persuasion reflect an understanding of why these strategies operate; rather, the implicit theories may simply reflect an understanding of various contingencies within the environment that influence the effectiveness of persuasive strategies.

A final research topic concerns the long-standing assumption that communication plays an important role in the impression formation process. Unfortunately, this assumption has not been tested extensively (Higgins, 1981; Kraut & Higgins, 1984). Other than research exploring compliance-gaining strategy use (Burgoon & LePoire, 1993; Burgoon et al., 1995; Burgoon et al., 1991), little systematic research has focused on how persuasive communicative behavior is translated into information that is used to form impressions of people. An important stage in person perception is missing when the role of communication is excluded. Are there links between persuasive communicative behavior and person perception? The first step in answering this question is to determine whether people have clear expectations about the persuasive strategies that will be used in particular contexts. Experiments 1 through 3 provide the first indications that people have expectations, albeit complex ones, about which strategies are appropriate for various contexts. The second step is to match (or mismatch) the expected persuasive strategy choices to the actual strategy selection of the persuader. In those instances where the persuasive message deviates from an expected message, the nature of the strategies used should drive inferences about the speaker (Burgoon, 1995). In addition, the more a persuasive message confirms prior expectations about the speaker, situation, topic, and so forth, the more confidently expectation-based beliefs will be held (Cohen, 1981).
CONCLUSION

The study of attitudes and persuasion has been a central focus of social psychology since the 1930s, although the research has concentrated primarily on the consequences of a persuasive message for an audience's beliefs and attitudes. This research addresses a gap in the literature on persuasion: How do people perceive differences in persuasive strategies, and does the representation that underlies individuals' conceptualization of persuasive strategies reflect people's implicit theories of persuasion? People appear to have elaborate implicit theories of persuasion, and typical others' judged use of persuasive strategies are influenced in meaningful ways by the goals of the speaker and by characteristics of the audience and speaker.

The results of the three experiments indicate that people have a good understanding of the types of persuasive strategies that might be effective in particular contexts: Their naive theories of persuasion match current theorizing on persuasion. For example, when faced with audiences that are likely to process the message differently due to various levels of familiarity with the topic (Experiment 2), subjects indicated that typical others would use strategies that are most effective for that audience, according to Petty and Cacioppo's (1986) elaboration likelihood model and Chaiken et al.'s (1989) heuristic-systematic model of persuasion. The current data do not allow the conclusion that subjects understand why particular strategies would be effective, and probably they do not. However, these findings suggest that "naive" persuaders have relatively sophisticated implicit theories of persuasion.

NOTES

1. A complete list of the persuasive strategies used in this research is available from the author.

2. To test whether persuasive strategies were represented featurally, the dissimilarity data were analyzed using an additive similarity tree (ADDTREE) model (Sattath & Tversky, 1977; Tversky, 1977; Tversky & Hutchinson, 1986), which is a hierarchical, featured-based model. A two-dimensional MDS solution and an ADDTREE solution have the same number of free parameters, which allows for a fair comparison of the models (Sattath & Tversky, 1977). ADDTREE accounted for 79% of the variance in the dissimilarity scores, whereas the two-dimensional MDS accounted for 91% of the dissimilarity scores' variance, indicating that a dimensional model best described subjects' perception of persuasive strategies.

3. Study 1 was replicated at the University of Alabama. One persuasive strategy was omitted in the replication because the strategy was not a verbal persuasive strategy ("have people with me who will agree with what I say and will nonverbally show that agreement"). Forty students sorted the 88 strategies into piles based on how similar they perceived the strategies to be to one other. Again, a two-dimensional solution was the best fit for the dissimilarity scores (stress = .058, $R^2 = .98$). Likewise, the social acceptability ($R = .88$) and
the association versus message-oriented strategies ($R = .83$) provided the best fits among the 13 dimensions tested.

4. None of the subjects in Experiments 2 or 3 had been exposed to Petty and Cacioppo's (1986) elaboration likelihood model of persuasion or Chaiken et al.'s (1989) heuristic systematic model of persuasion in their courses.

5. Study 1 was replicated at the University of Alabama, using only the 40 strategies from Experiments 1 through 3. Forty students sorted the 40 strategies into piles based on how similar they perceived the strategies to be to one another. Again, a two-dimensional solution was the best fit for the dissimilarity scores (stress, $=.063, R^2 = .980$). The association versus message-oriented strategies ($R = .91$) and the social acceptability ($R = .78$) dimensions provided the best fits to the dimensions within this space.

6. There was a main effect for the social acceptability, $F(1, 93) = 275.18, p < .0001, \eta^2 = .358$, and tactic dimensions, $F(1, 93) = 81.12, p < .0001, \eta^2 = .51$. The remaining two-way interactions involved a social acceptability and tactic dimension interaction, $F(1, 93) = 4.27, p < .05, \eta^2 = .03$, and a Relational Concerns $\times$ Topic Importance interaction, $F(1, 93) = 8.09, p < .005, \eta^2 = .02$. These main effects and interactions are subsumed within the four-way interaction and will not be discussed further.

REFERENCES


