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# Selective Self-Categorization: Meaningful Categorization and the In-Group Persuasion Effect

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# Selective Self-Categorization: Meaningful Categorization and the In-Group Persuasion Effect

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ABSTRACT. Research stemming from self-categorization theory (Turner et al., 1987) has demonstrated that individuals are typically more persuaded by messages from their in-group than by messages from the out-group. The present research investigated the role of issue relevance in moderating these effects. In particular, it was predicted that in-groups would only be more persuasive when the dimension on which group membership was defined was meaningful or relevant to the attitude issue. In two studies, participants were presented with persuasive arguments from either an in-group source or an out-group source, where the basis of the in-group/out-group distinction was either relevant or irrelevant to the attitude issue. Participants' attitudes toward the issue were then measured. The results supported the predictions: Participants were more persuaded by in-group sources than out-group sources when the basis for defining the group was relevant to the attitude issue. However, when the defining characteristic of the group was irrelevant to the attitude issue, participants were equally persuaded by in-group and out-group sources. These results support the hypothesis that the fit between group membership and domain is an important moderator of self-categorization effects.

Keywords: self-categorization, in-group, persuasion effect

AT SOME TIME OR ANOTHER, nearly everyone receives the request, "Tell me about yourself"—a question to which most people are able to respond rather effortlessly. When asked to describe themselves, people are able to generate a combination of individual characteristics (such as personality traits, attitudes, and preferences) and group membership information (such as their gender, nationality, and occupation (Kuhn & McPartland, 1954). Our membership in different social groups clearly makes up an important part of our self-concepts (Brewer, 1991; Triandis, 1989). In some social contexts, our affiliation with a particular group may even overshadow our sense of ourselves as unique individuals (Turner et al., 1987).

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Of course, individual and group sources of information about the self are far from independent. In many situations, an individual's personal characteristics influence the groups to which they choose to belong—for example, when a nurturing individual becomes a nurse. There are also times when an individual may decide their position on a particular personality trait dimension or attitude issue by referring to an important in-group—for example, when a feminist looks to the National Organization of Women for guidance on how to vote in an upcoming election.

One domain in which group membership has well-established implications is persuasion. Research by Mackie and her colleagues (e.g., Mackie, Gastardo-Conaco, & Skelly, 1992; Mackie, Worth, & Asuncion, 1990) has shown that people are more persuaded by in-group than out-group sources. This "in-group persuasion effect" is apparently due to people's use of source information not only as a heuristic cue to accept the in-group's position but also as a cue to systematically process the in-group's arguments. For example, Mackie et al. (1990) reported two studies in which in-groups were found to be more persuasive than out-groups (e.g., participants were more persuaded by a student at their own university than by a student at another university when it came to abolishing the SAT as a college admissions criterion).

### What Processes Underlie the In-Group Persuasion Effect?

Self-categorization theory (SCT) provides one analysis of the conditions in which people think about themselves in terms of personal versus group characteristics (Turner et al., 1987). SCT is a general theory of interpersonal and intergroup behavior that conceives of the self-concept as fluctuating between personal and social identities. When their personal identity is salient, people conceive of themselves as distinct individuals and focus on individual characteristics. In contrast, when a social identity is salient, people conceive of themselves as interchangeable with other members of the social in-group, and their focus shifts to in-group characteristics.

In support of this view, Smith and Henry (1996; see also Smith, Coats, & Walling, 1999) suggest that information about our in-groups can become part of our self-concepts. Participants in their study were faster to make judgments about whether or not a particular personality trait described them if the trait *also* described their in-group than if it did not also describe their in-group. Smith and Henry argued that characteristics of the in-group are actually stored as part of one's representation of the self. These findings suggest that the nature of an in-group's influence is not simply superficial in nature, but rather characteristics of the in-group can become incorporated into the self-concept.

According to SCT, the perception that one is interchangeable with other group members occurs through a process of depersonalization. Depersonalization, by its very definition, involves the perception of similarity between oneself and

the in-group. Such perceived similarity may contribute to in-group persuasion effects in one of two ways. First, people may adopt in-group positions as their own in a heuristic fashion, based on the assumption that they will agree with similar others (Allen & Wilder, 1977, 1978, 1979). Second, messages coming from in-group sources may be seen as particularly credible or informative, leading people to systematically process such messages (e.g., Chaiken, 1980). If the message contains strong arguments, persuasion is likely to result (Chaiken, 1987; Petty & Cacioppo, 1986).

Likewise, Mackie et al. (1990) argued that the in-group persuasion effect occurs because people systematically process the in-group messages, leading to greater acceptance of the in-group's position when the arguments in those messages are strong. However, in later research, Mackie et al. (1992) concluded that perceivers are likely to systematically process in-group messages only when the position advocated in the message is not already known. When the position is known ahead of time, people are likely to use the in-group or out-group status of the source as a heuristic cue. In other words, when one knows that the in-group favors a particular position, one may accept the position without scrutinizing the in-group's arguments for it. In contrast, when the in-group's position is unknown, one is likely to systematically process the message in order to correctly ascertain the advocated position—thereby leading to greater persuasion in response to strong in-group messages.

## Moderators of Self-Categorization

Self-categorization theory has received broad support and has been applied in a wide variety of domains (see Hornsey, 2008). Moreover, the extent to which people operate at the level of a social (rather than personal) identity has been found to vary as a function of a number of important factors. For example, growing research suggests that individuals' focus on social group memberships is enhanced when they experience either a personal or group-level threat. Knowles and Gardner (2008) recently reported that participants who experienced social rejection were more likely to identify with social groups to which they belonged. On a larger scale, Rios Morrison and others (e.g., Rios Morrison & Ybarra, 2008; Rios Morrison, Fast, & Ybarra, 2009; Zarate, Garcia, Garza, & Hitlan, 2004) suggest that perceived threats towards one group also promote heightened in-group identification.

Furthermore, research within the social identity and self-categorization traditions has established that factors such as in-group identification (McGarty, Haslam, Hutchison, & Turner, 1994; Terry & Hogg, 1996), salience of in-group/out-group distinctions (Oakes, 1987), majority versus minority status (Martin, 1988), and uncertainty (Hogg, 2000) influence the likelihood that one's attitudes, judgments, and behavior are driven by social (rather than personal) identities. In general, factors that increase the salience of an in-group membership (e.g., due to high levels

of identification, minority status, or subjective uncertainty) are likely to produce greater focus on social identities.

### Meaningful Categorization and Persuasion

A further development in the work stemming from SCT—and one that may have important implications for the in-group persuasion effect—is that the "meaningfulness" of social categorization appears to be an important moderator of depersonalization (Oakes, 1987; Oakes, Turner, & Haslam, 1991). That is, depersonalization should only occur in situations where the basis for group membership is meaningful in terms of the judgment context. For example, categorizing oneself as a university professor might be meaningful if one is discussing grading policies with members of a student group. However, the same categorization would be less meaningful if one were discussing dog obedience with the same students. Essentially, the fit between the issue and the social context determines whether self-categorization and resulting depersonalization occur.

Simon, Hastedt, and Aufderheide (1997) have provided support for this argument. Simon et al. found that, when category meaningfulness was high, minority group members perceived greater similarity between themselves and the in-group and greater homogeneity within the in-group as a whole. These are signs of depersonalization, and they occurred only when there the basis for categorization into in-group and out-group was relevant, or "meaningful," for the topic at hand.

Meaningfulness may also be an important moderator in-group persuasion effects. Specifically, the fit between the attitude issue and the basis for group membership may vary widely. Indeed, it would be surprising to find that any one in-group was meaningful for all possible attitude issues. In cases where the in-group is not meaningful to an issue, this reasoning suggests that depersonalization should not occur, and hence in-group persuasion effects should not be observed.

### The Present Research

The purpose of the current studies was to test the role of categorization meaningfulness in the in-group persuasion effect. In particular, it is hypothesized that the in-group persuasion effect should only be observed under conditions where the attitude issue fits, or is meaningful in, the social context. Two studies tested this hypothesis by manipulating the fit between an attitude issue and the basis for group membership.

## STUDY 1

In the first study, the fit between attitude issue and the basis for group membership was manipulated by varying the issue about which participants read. Participants received a persuasive message from either their own political party

or the opposing political party. For some participants, the message conveyed support for or opposition to legalizing euthanasia—an issue that participants should view as politically relevant. For other participants, the message conveyed support for or opposition to increasing the credit requirement for a college degree from 4–5 years—an issue which participants should not view as particularly politically relevant.

## Method

### Participants

Ninety-five undergraduate students participated in the study. All participants indicated that they belonged to one of the two main political parties (39 Republicans and 56 Democrats). Students were enrolled in an introductory psychology course at the University of Illinois and completed the study in partial fulfillment of a course requirement. Participants completed the study in groups of 6—10.

### Design

The study involved a $2 \times 2 \times 2$ factorial design, where message source (in-group or out-group political party), issue relevance (relevant or irrelevant with respect to political party membership), and message position (supporting or opposing the issue) were all manipulated between-subjects. Issue relevance was operationalized as legalizing euthanasia (relevant issue) versus increasing credit requirements for an undergraduate degree (irrelevant issue).

### Materials and Procedure

At the beginning of each session, participants completed a brief demographic questionnaire in which they reported their political party membership. Participants then read one of four persuasive messages that were constructed for use in this study. Half of the participants learned that the message had been generated by their own political party (in-group source). The other half learned that the message had been generated by the opposing political party (out-group source).

The messages varied in the attitude issue they addressed (legalizing euthanasia versus increasing the credit requirements for a college degree from 4 to 5 years) and in the position (supporting versus opposing) taken on the issue. All four messages were rated as strong by an independent sample of 35 undergraduates (lowest $M = 5.37$ on a scale from 1 [very weak] to 7 [very strong]).

After reading one of the four messages, participants completed a post-message questionnaire. The questionnaire included measures of their attitudes toward the issue (*to what extent do you support legalizing euthanasia/increased credit requirements?*), the strength and persuasiveness of the message (*how strong/how persuasive did you find the message to be?*), and the knowledgeability and

trustworthiness of the source (*how knowledgeable/how trustworthy do you think the Democratic/Republican Party is on this issue?*). Participants also rated how certain they were of their attitude, how important the issue was to them, and the extent to which the message they read was consistent with what they expected from the source of the message. Participants responded to all items on −3 (not at all) to +3 (very much) rating scales.

# Results

*Attitudes*

Participants' attitudes toward the issue were analyzed using a univariate analysis of variance (ANOVA), in which message source, issue relevance, and message position were included as between-participants factors. As expected, there was a significant three-way interaction, $F(1, 87) = 7.61$, $p = .007$ $\eta_p^2 = .08$. Follow-up tests revealed a significant interaction between message source and message position within the *relevant* issue (legalized euthanasia) condition, $F(1, 48) = 26.69$, $p < .001$, $\eta_p^2 = .35$. Specifically, participants were more likely to support the position presented in the message if it came from their own political party than if it came from the opposing party, regardless of whether the message supported or opposed euthanasia. When the message advocated legalized euthanasia, participants expressed more positive attitudes if it had come from their own political party ($M = 1.69$, $s = 1.20$) than from the opposing party ($M = -0.88$, $s = 1.96$), $t(22) = 3.99$, $p < .001$, $d = 1.70$). When the message opposed legalized euthanasia, participants expressed more negative attitudes if it had come from their own party ($M = 0.00$, $s = 1.65$) than from the other party ($M = 1.75$, $s = 0.87$), $t(22) = 3.25$, $p < .001$, $d = 1.39$). There were no significant differences between in-group and out-group source conditions when it came to the irrelevant issue (increased credit requirements), all $F$s<1 (see Appendix).

Compared to the other messages, participants expressed significantly less certainty about their attitudes when exposed to messages in favor of increased credit requirements, as indicated by a significant interaction between issue and message position, $F(1, 87) = 8.48$, $p = .01$, $\eta_p^2 = .09$. Participants also reported that the same message was particularly consistent with their expectations of the message source (regardless of whether the source was their own or the opposing political party), $F(1, 86) = 4.18$, $p = .04$, $\eta_p^2 = .05$. No other significant effects emerged from analyses of attitude certainty, issue importance, or consistency with expectations of the source (see Appendix).

*Beliefs About the Message and the Source*

Participants' beliefs about the strength and persuasiveness of the message and the knowledgeability and trustworthiness of the message's source were also

examined. Reliability among the four belief ratings was high ($\alpha = .79$), thus they were averaged to form a belief positivity index (see Appendix for individual ratings). A univariate ANOVA testing the effects of message source, issue relevance, and message position on beliefs yielded significant main effects of issue relevance, $F(1, 87) = 4.49$, $p = .04$, $\eta_p^2 = .05$ and of the message source, $F(1, 87) = 16.00$, $p < .001$, $\eta_p^2 = .16$. Both of these were qualified, however, by a significant interaction between source and issue relevance, $F(1, 87) = 6.28$, $p = .01$, $\eta_p^2 = .07$. Independent-samples t-tests were conducted to decompose the interaction. These indicated that beliefs about the message and its source were more positive when messages came from the in-group than from the out-group, but this was only true when the issue was relevant (i.e., legalized euthanasia: $M_{in\text{-}group} = 1.21$, $s = .71$ vs. $M_{out\text{-}group} = -.03$, $s = 1.16$), $t(46) = 4.61$, $p < .001$, $d = 1.36$. The difference between in-group and out-group source conditions was not significant when the issue was irrelevant (i.e., increased credit requirements: $M_{in\text{-}group} = 1.17$, $s = 1.04$ vs. $M_{out\text{-}group} = .83$, $s = .81$), $t(45) = 1.22$, $p = .23$, $d = .36$.

Analyses were also carried out to assess whether beliefs mediated the effects of message source, issue relevance, and message position on attitudes. First, however, an ANCOVA was carried out on attitudes in which message source, issue relevance, and message position were entered as between-participants variables, and the beliefs index was entered as a covariate that was allowed to interact with all other variables (and with their higher-order interactions). This test indicated that beliefs did not interact with any other independent variable (largest $F(1, 79) = 1.52$, $p = .22$, $\eta_p^2 = .02$), thus the steps outlined by Baron and Kenny (1986) for testing mediation were followed.

Mediation analyses are best done within a multiple regression framework. The first step in testing mediation (Baron & Kenny, 1986) is to assess whether the independent variable (i.e., the three-way interaction between message source, issue relevance, and message position) significantly predicts the dependent variable (i.e., attitudes). A multiple regression replicated the ANOVA result reported above, as the three-way interaction was significant, $b = .43$, $t(94) = 2.76$. $p = .01$, $d = .57$. The second step is to determine whether the independent variable influences the mediating variable. A second multiple regression in which the beliefs index was regressed on the independent variables revealed a non- significant three-way interaction, $b = -.01$, $t(94) = .06$, $p = .95$, $d = .01$. The third step is to assess whether the mediator influences the dependent variable, which was tested by regressing attitudes onto the beliefs index. This test was not significant, $b = -.07$, $t(94) = .35$. $p = .73$, $d = .07$. The final step is to determine whether the effect of the predictor variable on the outcome variable is significantly diminished when the mediator is controlled for. This was accomplished with a multiple regression that replicated that reported in step 1, but with the beliefs index added as a predictor. This test produced an identical three-way interaction effect on attitudes, $b = .43$, $t(94) = 2.76$. $p = .01$, $d = .57$, indicating that beliefs did not account for any additional variance in attitudes. A Sobel test

provided further evidence that beliefs did not mediate effects on attitudes, *Sobel statistic* = .06, *p* = .95.

## Discussion

Participants were more influenced by persuasive messages that originated from an in-group than from an out-group, as would be expected based on past research on the in-group persuasion effect. However, this pattern was moderated by the fit between the issue and the basis for in-group membership. When the basis for belonging to a group (i.e., participants' political party) was meaningful for the issue at hand (i.e., euthanasia), an in-group persuasion effect emerged. However, when the basis for group membership was less meaningful for the issue (i.e., college credit requirements), participants were no more persuaded by messages from their in-group than by those from their out-group. Thus, as predicted, the meaningfulness of categorization is a crucial determinant of the in-group persuasion effect.

### Post-Test: Meaningfulness Versus Initial Attitude Strength

One alternative interpretation of Study 1's results is that participants simply had stronger *a priori* attitudes about the irrelevant issue. That is, increasing the credit requirement for college students may be more personally relevant to participants and might therefore elicit stronger attitudes in the absence of any persuasive communication. As such, those attitudes might be more difficult to change (but see Carmines & Stimson, 1980 for a discussion of the stability of attitudes towards issues like euthanasia). To further investigate this, an independent sample of 50 participants (from the same participant pool as Study 1) rated their agreement with a number of attitude statements, including those concerning euthanasia and increased credit requirements. These participants reported rather moderate (non-extreme) attitudes towards both issues (*M*'s = 1.4 and 1.8, respectively, on a −3 to +3 scale), and their attitudes towards the two issues were not significantly different, *t*(49) = 1.26, *p* = .21, *d* = .39. While not conclusive, these findings suggest that initial attitude strength is unlikely to account for the results of Study 1.

### Meaningfulness Versus the Group's Expertise

A second issue that potentially limits the ability to draw conclusions from Study 1 is that different types of groups might be seen as having more expertise when it comes to some issues than others, irrespective of how relevant those issues are to group membership. It could be argued that representatives of a political party are more knowledgeable about "hot" social issues such as euthanasia than they are about more mundane issues like increasing credit requirements.

Although no independent evidence was collected to address this issue, this study's finding that participants' perceptions of the message source's knowledge-ability and trustworthiness did not mediate their attitudes towards either issue seems to argue against this interpretation.

## STUDY 2

Although the results of Study 1 supported the hypothesis that meaningfulness (as defined as issue relevance) moderates the in-group persuasion effect, the design of that study confounded meaningfulness with the attitude issue. This creates a problem with interpreting the results, as it is possible that participants' attitudes about the relevant issue (euthanasia) were simply more changeable than the irrelevant issue (increased credit requirements). As noted above, this might be the case if, for example, increasing college credit requirements was perceived as more personally relevant to participants. If attitudes towards that issue were less open to change, then differences in the effects of in-group versus out-group messages cannot be clearly attributed to meaningfulness. In Study 2, meaningfulness was manipulated by varying the basis for group membership while keeping the attitude issue constant.

In addition, the measures collected in Study 1 did not allow an assessment of the processes underlying effects on attitudes. As described earlier, the in-group persuasion effect is believed to be the result of both heuristic acceptance of the in-group's position and systematic processing of the in-group's arguments. In Study 2, a cognitive response measure was included in order to gain some insight into the extent to which differences in attitudes may be attributed to differences in how the messages were processed. To the extent that attitudes reflect the outcome of systematic processing of the message, they should be mediated by the positivity of participants' cognitive responses (Petty, Ostrom, & Brock, 1981).

## Method

### Participants

Two hundred and twenty-one undergraduate students took part in this study. All participants were enrolled in an introductory psychology course at the University of California Santa Barbara and received partial credit towards a course requirement in exchange for their participation.

### Design

This study entailed a $2 \times 2 \times 2$ factorial design, in which message source (in-group or out-group political party), group relevance (relevant or irrelevant to attitude issue), and message position (supporting or opposing offshore oil drilling)

were manipulated between-participants. Unlike Study 1, which held the in-group/ out-group dimension constant and varied the relevance of the issue to that dimension, Study 2 held the issue (offshore oil drilling) constant and varied the relevance of the group to the issue. Thus, group relevance was operationalized as political party (relevant to the issue of offshore oil drilling) versus university affiliation (irrelevant to the issue of offshore oil-drilling). Political parties and universities were chosen as the relevant and irrelevant groups (respectively) on the basis of pilot testing, which indicated that most students expected different political parties (but not different universities) to differ in their positions on environmental issues. The dependent measures included attitudes towards offshore oil drilling as well as cognitive responses to the persuasive message.

*Materials and Procedure*

At the beginning of the session, participants completed a demographic questionnaire in which they reported both their university affiliation and their political party. Next, they read one of two persuasive messages, one supporting offshore oil drilling and the other opposing it. Both messages were rated as strong (lowest $M$=5.82 on a scale from 1 (very weak) to 7 (very strong)) by an independent sample of 35 undergraduates.

Half of the participants learned that the message had been generated by one of two political parties (relevant group) whereas the other half learned that the message had been generated by one of two universities (irrelevant group). Further, half of the participants learned that the message had come from an in-group source (their own political party or their own university), while the other half learned that it came from an out-group source (the opposing political party or a different university).

After reading the message, participants rated their support for offshore oil drilling by placing a mark along a 6-inch line, where support for oil drilling marked the left end of the scale, and opposition to oil drilling marked the right end of the scale. Participants then completed a cognitive response measure in which they wrote down their thoughts relating to the issue of offshore oil drilling and message they had just read. They were given several minutes to write down their thoughts, after which they were debriefed and excused.

**Results**

Prior to analyzing the data, participants were categorized according to their political party affiliation. Participants in the relevant group (i.e., political party) condition who indicated a party affiliation other than Democrat or Republican or who had no political party affiliation were excluded from the analysis (N = 25). Thus, the final analyses were conducted on data from 196 participants (121 Democrats and 75 Republicans).

*Attitudes*

Participants' responses to the attitude measure were coded by measuring the distance (in ¼ inch increments) from the left end-point of the line on which they marked their attitude. Thus, responses could range from 0 to 6. Responses were then reverse-scored so that higher numbers indicated greater support for offshore oil drilling. These responses were analyzed using a three-way analysis of variance (ANOVA). Consistent with predictions and with the results of Study 1, there was a significant three-way interaction between message source, group relevance, and message position, $F(1, 188) = 5.00$, $p = .03$, $\eta_p^2 = .03$. Follow-up analyses indicated that participants were more persuaded by their own political party than by the opposing political party, regardless of the position endorsed in the message (as reflected by a significant interaction between message source and message position within the relevant group condition, $F(1, 84) = 8.59$, $p = .004$, $\eta_p^2 = .10$). After reading a message advocating offshore oil drilling, participants expressed more positive attitudes if it had come from their own party ($M = 4.03$, $s = 1.45$) than from the other party ($M = 3.11$, $s = 1.27$), $t(42) = 2.21$, $p = .03$, $d = .68$. In contrast, after reading a message opposed to offshore oil drilling, participants reported more negative attitudes if the message came from their own party ($M = 1.02$, $s = 1.07$) than from the other party ($M = 1.76$, $s = 1.35$), $t(28) = 1.94$, $p = .06$, $d = .63$. This pattern did not occur in the irrelevant group (university affiliation) condition, all $Fs<1$.

*Cognitive Responses*

Participants' cognitive responses were coded for whether they were positive, negative, or neutral towards the issue of offshore oil drilling. Two independent raters coded a subset (approximately 20%) of the cognitive responses until they reached a level of 90% agreement. Once their ratings reached that level of agreement, the remaining cognitive responses were coded by only one rater. After coding, an index of the positivity of cognitive responses was calculated by subtracting the number of negative responses from the number of positive responses. Thus, higher scores on this index reflect more positive cognitive responses.

To the extent that participants engaged in systematic processing of the messages (rather than relying on the in-group/out-group status of the source as a heuristic cue), the effects of message source, group relevance, and message position on their attitudes should be mediated by the positivity of their cognitive responses. In order to examine this issue, a four-step procedure for testing mediation was used (Baron & Kenny, 1986). Before carrying out these steps, initial analyses were conducted to ensure that the mediating variable (positivity of cognitive responses) did not interact with any of the predictor variables (or with higher-order interactions among them). This was accomplished by an Analysis of Covariance (ANCOVA) in which cognitive response positivity was entered as a covariate

that was allowed to interact with the other variables. This analysis yielded no significant interactions involving cognitive response positivity, the largest $F(1, 188)$ = 2.30, $p = .13$ $\eta_p^2 = .01$.

The first step in testing mediation is to determine that the predictor variable influences the outcome variable. As reported above, the predictor variable (in this case, the three-way interaction between message source, group relevance, and message position) had a significant effect on the outcome variable (participants' attitudes towards oil drilling). A multiple regression that paralleled the ANOVA reported above produced a significant three-way interaction $b = .37$, $t(195) = 2.24$, $p = .03$, $d = .32$. The second step is to establish that the predictor variable influences the mediating variable. A second multiple regression in which the cognitive response index was regressed on the independent variables and their interactions produced a marginally significant interaction, $b = .36$, $t(195) = 1.86$, $p = .07$, $d = .27$. The third step is to establish that the mediator influences the outcome variable and was tested by regressing attitudes on the cognitive response index, which was significant, $b = .55$, $t(195) = 9.07$, $p < .001$, $d = 1.30$. The final step is to establish that the effect of the predictor variable on the outcome variable is significantly diminished when the mediator is controlled for. This step was accomplished with a multiple regression that replicated that reported in step 1, but adding the cognitive response index as a predictor, $b = .23$, $t(195) = 1.56$, $p = .12$, $d = .22$. A Sobel test provided further support for a mediating effect of cognitive responses, *Sobel statistic* $= 2.10$, $p = .04$.

## Discussion

The results of Study 2 corroborate those of the first study, in that the fit between the basis for in-group/out-group differentiation and the attitude issue in question determined the extent to which participants were more persuaded by in-group than out-group sources. By varying the in-group/out-group distinction constant while holding the issue constant, Study 2 provided converging evidence that the match between group and issue, rather than differences among particular issues, produces variation in the strength of in-group persuasion effect.

In addition to providing a conceptual replication of the results obtained in Study 1, this study also investigated the role of cognitive responses in generating persuasion. More positive attitudes tended to correspond to more positive cognitive responses about the issue, suggesting that they were based on systematic processing of the message rather than reliance on cues such as the group membership of the message source. This finding is consistent with the proposal by Mackie et al. (1992) that in-group sources prompt systematic processing which, in the present study, where only strong arguments were used, led to greater acceptance of the in-group position. More importantly, however, this was more likely to be true when the group membership was relevant to the issue in question (e.g., when receiving a message about offshore oil drilling from one's own political party).

*Post-Test: Meaningfulness Versus the Group's Centrality to the Self-Concept*

The results of Study 2 might also be explained in terms of the group's centrality to participants' self-concepts. That is, one's political party is a more specific identity, and might therefore be expected to be more central to self-concept than one's university affiliation. In order to explore this possibility, an independent sample of 40 participants (from the same participant pool as in Study 2) were asked to rate the importance of a number of group memberships, including their political party and their university affiliation. Participants' ratings indicated that their political party and university memberships were equally important to them, $t(39) = 1.03$, $p = .31$, $d = .33$. Therefore, differences in the centrality of various group memberships to participants' self-concepts are unlikely to account for the results of Study 2.

*Post-Test: Meaningfulness Versus the Group's Credibility*

A further complication in interpreting the results of both studies is the possible confounding of meaningfulness with the group's credibility or trustworthiness on the issue. That is, perhaps political parties are viewed as more credible than university groups when it comes to certain issues. Two pieces of evidence argue against this as an alternative account for the results reported here. First, as noted earlier, participants' ratings of the message source's knowledgeability and trustworthiness did not mediate their attitudes in Study 1. Second, the sample of 40 participants who completed the post-test above also rated a variety of group types (including university students and political parties) on their level of credibility when it came to various issues (including offshore oil-drilling, the issue used in Study 2). These ratings suggested that both groups were perceived as equally credible when it came to attitudes towards offshore oil-drilling, $t(39) = 1.21$, $p = .23$, $d = .39$.

## General Discussion

The two studies reported here highlight an important boundary condition on the in-group persuasion effect (Mackie et al., 1990, 1992). In-group attitudes are particularly influential only when membership in the group is meaningful to the attitude issue. In both studies, participants expressed attitudes that were consistent with those advocated by their in-groups, but not their out-groups. What is important, however, is that this was only true when there was a fit between the group and the issue being addressed. Thus, category meaningfulness appears to be an important moderator of the in-group persuasion effect.

*Evaluating the Depersonalization Account*

The results of the two studies reported here were largely consistent with the hypothesis, derived from Self-Categorization Theory (SCT), that when a

self-categorization is meaningful, depersonalization is particularly likely to occur. The in-group persuasion effect is one possible consequence of depersonalization. To the extent that individuals perceive themselves as interchangeable with other members of their in-group, persuasive messages from those members should be particularly compelling. Consistent with Oakes (1987; see also Simon et al., 1997), evidence of depersonalization (in the form of an in-group persuasion effect) was only observed when there was a good fit between the attitude issue and the basis for in-group/out-group differentiation.

There are, of course, other interpretations for the data reported here, some of which cannot be conclusively ruled out. First, one possible mediator of the effects reported here is that participants perceive themselves to be more similar to their in-groups on issues that match the basis for in-group membership. Earlier work (Brock, 1965; McGarry and Hendrick, 1974) found strong support for the hypothesis that people are more persuaded by similar than dissimilar sources. And indeed, pre-testing for the current studies indicated that participants expected that their attitudes were more similar to their in-groups than their out-groups when it came to issues that were relevant to group membership. A sample of 32 participants rated the extent to which they expected their beliefs to be similar to those of various groups on a number of issues. Ratings indicated that participants expected greater similarity in their attitudes on environmental issues with their own political party than the opposing political party ($t(29) = 2.54$, $p = .02$, $d = .94$) This pattern did not emerge when it came to their own university affiliation ($t(29) = 1.14$, $p = .26$, $d = .42$). On the other hand, participants expected that their attitudes about academic issues to be more similar to students at their own university than those at another university ($t(29) = 2.13$, $p = .04$, $d = .79$). This pattern did not emerge when it came to their political party affiliations ($t(29) = 0.87$, $p = .39$, $d = .32$). It is important to note that expectations of similarity may be based on factors that are independent of salient intergroup distinctions (e.g., past experience)—thus, it is likely that similarity-based differences in persuasion may also emerge even in the absence of self-categorization.

A second possibility is that participants were more persuaded by their in-groups when it came to relevant issues because they were more surprised when the in-group's position was inconsistent with their previous attitudes. If so, then they might have paid more attention to those counter-attitudinal messages, which may have resulted in greater persuasion. However, there is at least one reason to doubt this possibility. Specifically, participants' attitudes were not mediated by their ratings of how consistent the message they read was with their expectations of the group. If participants were particularly surprised by messages by which they were persuaded, then that should have been reflected in their ratings of how consistent the messages were with what they expected. Nonetheless, the potential role of surprise has not yet been adequately ruled out and should be further examined in subsequent research.

A similar point is suggested by studies by van Knippenberg and colleagues (van Knippenberg, Lossie, & Wilke, 1994; van Knippenberg & Wilke, 1992),

who suggest that people view arguments as stronger to the extent that they perceive them as typical of the in-group. As a result, they are more likely to be persuaded by such arguments. The fully factorial design employed in the present studies makes it unlikely that perceived typicality played a role in producing the results, as participants were equally likely to receive expectancy-consistent (i.e., typical) messages from either their in-group or their out-group.

### Relationship to Prior Research

The results of the present research may have implications for interpreting previous research on the in-group persuasion effect. As noted in the introduction, Mackie et al. (1990) reported that participants were more persuaded by their own university than by a different university when it came to issues related to college admissions. Although the meaningfulness of this categorization was not explicitly measured or manipulated, both the group and the attitude issue fell within the same (academic) domain. However, in subsequent studies, Mackie et al. did manipulate the *personal* relevance of the attitude issue to the in-group versus out-group, and found that the in-group persuasion effect was particularly strong when the issue was especially relevant to the in-group. It should be noted that category meaningfulness was likely lower in those studies than in the studies reported in this paper, and yet the in-group persuasion effect still emerged.

This finding is somewhat inconsistent with the present research, which indicated the in-group persuasion effect should only occur when category meaningfulness is high. Thus, it is possible that multiple factors—including both category meaningfulness and personal relevance—moderate the influence of in-groups on individuals' attitudes. As neither the Mackie et al. (1990) studies nor the current studies simultaneously manipulated meaningfulness and relevance, it is still unclear whether one or both of these factors are necessary (or sufficient) to bring about the in-group persuasion effect.

Mackie et al. (1990, 1992) also reported that in-group messages are more likely to be processed systematically than out-group messages. Although the current studies did not include manipulations of message quality (which is likely the best method for ascertaining whether or not participants are engaged in systematic processing), the cognitive response results from Study 2 did not replicate these findings. The positivity of participants' cognitive responses did not interact with the message source when it came to predicting attitudes—thus, there is no evidence that participants were more likely to engage in systematic processing when reading a message from the in-group than when reading a message from the out-group.

### Political Reasoning and Persuasion

It is worth noting that the research reported here is also consistent with contemporary theories of political reasoning that have been advanced within the

fields of political science and political psychology. For example, Sniderman, Brody, and Tetlock (1991) suggest that individuals make rational use of political heuristics when making decisions in the political domain. In line with this view, aspects of the current research suggest that politically relevant sources are deemed more valid in determining politically relevant attitudes (see also Carmines & Kuklinski, 1990; Ferejohn, 1990; Lupia & McCubbins, 1998). However, rather than serving as a heuristic cue to accept the position endorsed in the message, in-groups had their effect by influencing participants' cognitive responses towards the issue—suggesting that participants processed the message systematically.

The fact that participants systematically processed the message does not preclude the possibility that the in-group status of the source also served as a heuristic cue. The research reported here seems to suggest that individuals' use of political cues informed not only their final attitudes on political issues, but also their beliefs about political messages. Participants in the present studies not only endorsed political positions advocated by their political in-group, but also espoused the belief that arguments generated by their political party were stronger and more persuasive. These beliefs appeared to operate independently of persuasion per se, as they did not significantly mediate participants' attitudes.

*Implications and Conclusions*

The results reported here may have broad implications for persuasion in a number of contexts. In particular, the studies reported here focused on political attitudes, and indeed, in-group persuasion may be particularly relevant in the political domain. To the extent that political parties emphasize their relevance to specific issues, they may have a greater impact on voting behavior when it comes to those issues. Indeed, the increased influence of "Christian Coalition" in the United States since the 1990s may exemplify this possibility. One consequence of the religious right movement has been an expansion in the range of issues in which individuals perceive religious affiliation to be relevant. To the extent that religious individuals come to believe that their membership in religious groups is relevant to their political attitudes on objectively irrelevant issues (e.g., gun rights or environmental issues), they are more likely to be persuaded by the "official" position of their group.

Thus, the two studies reported here highlight the importance of considering conditions in which the in-group persuasion effect is most likely to emerge. In attempting to influence people's attitudes towards an issue, it may be best to select an in-group source, and particularly one that is meaningful when it comes to the attitude issue at hand. Of course, the studies here are only an initial demonstration of one limiting condition to the general effect, and further research will be needed to establish the generality of this limitation. Nevertheless, the meaningfulness of categorization, as well as other potential moderators, may prove to be a crucial factor in determining when and if the in-group persuasion effect occurs.

## AUTHOR NOTE

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**APPENDIX**

**Experiment 1: Means (standard deviations) on Attitude and Belief Measures, as a Function of Issue Relevance (Irrelevant = Increased Credit Requirements; Relevant = Legalized Euthanasia), Message Source (In-Group vs. Out-Group Political Party) and Message Position (Supporting vs. Opposing). All Items were Rated on 7-Point Scales ($-3$ to $+3$)**

| | Irrelevant issue | | | | Relevant issue | | | |
|---|---|---|---|---|---|---|---|---|
| | In-group | | Out-group | | In-group | | Out-group | |
| | Pro | Con | Pro | Con | Pro | Con | Pro | Con |
| To what extent do you support legalized euthanasia/increased credit requirement | $-0.08$ (1.68) | $-2.07$ (1.58) | $-0.91$ (1.76) | $-2.00$ (0.86) | 1.69 (1.20) | 0.00 (1.65) | $-0.88$ (1.96) | 1.75 (0.87) |
| How sure of your position are you | 1.00 (1.04) | 2.13 (0.92) | 1.00 (1.18) | 1.78 (0.97) | 1.75 (1.44) | 1.42 (1.16) | 2.00 (0.76) | 1.42 (1.38) |
| How important is the issue to you | 0.25 (1.48) | 1.47 (0.99) | 1.27 (1.62) | 0.78 (2.05) | 0.56 (1.55) | 0.25 (1.36) | 0.88 (0.99) | 0.17 (1.78) |
| How strong were the arguments | 1.00 (1.28) | 1.47 (1.19) | 0.73 (1.35) | 1.78 (1.09) | 1.13 (0.96) | 1.33 (1.07) | $-0.63$ (2.07) | 0.50 (1.68) |
| How persuasive was the message | 0.25 (1.42) | 1.13 (1.25) | 0.36 (1.36) | 1.00 (1.22) | 1.19 (0.83) | 0.83 (1.27) | 0.63 (1.69) | 0.25 (1.48) |
| How knowledgeable is the Democratic/Republican Party | 1.50 (1.17) | 1.33 (1.23) | 1.09 (1.04) | 1.25 (1.04) | 1.38 (0.96) | 1.75 (0.87) | 0.25 (1.58) | $-0.25$ (1.76) |
| How trustworthy is the Democratic/Republican Party | 1.17 (1.11) | 1.33 (1.05) | 0.09 (0.54) | 0.75 (0.71) | 0.94 (1.12) | 1.25 (0.97) | $-1.13$ (1.55) | $-0.08$ (1.16) |
| How consistent was the message with your expectations of the Democratic/Republican Party | 0.33 (0.78) | 1.40 (1.12) | 0.55 (1.04) | 1.13 (1.13) | 0.56 (1.50) | $-0.25$ (1.29) | 0.63 (1.30) | 1.00 (1.21) |