

## Self-Definition, Defensive Processing, and Influence: The Normative Impact of Majority and Minority Groups

Wendy Wood, Gregory J. Pool, Kira Leck, and Daniel Purvis  
Texas A&M University

Past research has found that recipients agree with majority group positions and resist minority group positions on direct measures of influence. The authors suggest that these attitude shifts reflect normative pressures to align with valued majorities and to differentiate from derogated minorities. In support of this idea, participants who considered a majority group relevant to their own self-definitions (but not those who judged it irrelevant), on learning that the group held a counterattitudinal position, shifted their attitudes to agree with the source. In a second study, recipients who judged a minority group (negatively) self-relevant, on learning that the group held a similar attitude to their own, shifted their attitudes to diverge from the source. These shifts in attitudes were based on participants' interpretations of the attitude issues.

The effects of opinion minorities on majority views is of interest to social scientists who study social change. Selected historical events suggest that these effects can be substantial, such as the influence achieved by the civil rights movement during the 1960s and, more recently, the political power of the Christian right. When minority influence has been studied in experimental research, *minorities* have typically been defined as groups or individuals who are numerically infrequent and who advocate an antinomic position (e.g., Moscovici, 1976, 1985a, 1985b). In addition, to differentiate opinion minorities from other, more socially advantaged groups who may advocate deviant views (e.g., experts and political leaders), definitions of minorities often specify that they possess no special competence or status.

A recent meta-analytic synthesis of 97 minority influence experiments examined the effects of opinion minorities under controlled laboratory conditions (Wood, Lundgren, Ouellette, Busceme, & Blackstone, 1994). One of the most striking results of this synthesis is that minority and majority sources apparently established unique normative pressures; recipients appear to have been motivated to differentiate themselves from minorities and to align themselves with majorities. The pressure to differentiate from minorities was apparent in the lesser agreement that emerged on direct rather than on more indirect

measures of influence. Recipients who were exposed to minority sources, in comparison to no-message controls, demonstrated small to moderate levels of agreement on the issue in the appeal when they publicly expressed their judgments to the source and when they expressed their judgments privately. However, significantly greater agreement was apparent on influence measures that assessed private judgments in a more indirect manner, such that recipients were relatively unaware of the link between their ratings and the influence appeal.<sup>1</sup> Thus, recipients appear to have limited their agreement with the minority source on measures directly related to the appeal (vs. less direct measures) so that they would not be aligned in judgment with the deviant minority.

Additional evidence of the normative pressures to avoid direct agreement with minority sources has emerged in studies that compared the influence of minorities with that of majority sources. Majorities proved more influential than minorities on measures of direct public agreement and direct private agreement. However, on the more indirect private measures, on which recipients were relatively unaware that their judgments could align them with the deviant minority, minority and majority sources did not differ.

Wood et al.'s (1994) synthesis also provided insight into the mechanisms underlying direct agreement. Minorities had uniform impact across public self-presentations, reflected in direct public measures of agreement, and private attitude judgments, were reflected in direct private measures. Thus, the normative pressures controlling direct agreement do not reside simply in recipients' public presentations of themselves to others. Instead, public and private attitude statements likely stem from a com-

---

Wendy Wood, Gregory J. Pool, Kira Leck, and Daniel Purvis, Department of Psychology, Texas A&M University.

A preliminary version of the first study in this article served as Daniel Purvis's undergraduate honors thesis, under the direction of Wendy Wood. This research was supported by grants from the National Institute of Mental Health (MH498975) and the National Science Foundation (SBR-9514537). We thank William Bryant, Carsten De Dreu, and Radmila Prisljin for their comments on a draft of this article.

Correspondence concerning this article should be addressed to Wendy Wood, Department of Psychology, Texas A&M University, College Station, Texas 77843. Electronic mail may be sent via the Internet to [wlw@psyc.tamu.edu](mailto:wlw@psyc.tamu.edu).

---

<sup>1</sup> Indirect measures assess change in attitudes without recipients' awareness that their responses indicate acceptance or rejection of the advocated position. For example, the source might advocate that corporations are primarily responsible for pollution, and an indirect measure of acceptance of this position might be recipients' disagreement with the idea that individuals are primarily responsible for pollution.

mon foundation, involving recipients' private desires not to be aligned in judgment with the minority source and to align with the majority one.

Certain types of minority sources were especially likely to inhibit recipients' direct agreement on public and private measures. Minorities that were defined as low-frequency social groups in the broader society (e.g., homosexual college students, an international feminist group that organizes "Take Back the Night" marches) presumably emphasized the social deviancy of the minority, and recipients agreed less with these minorities on direct than on indirect measures. In contrast, other studies that did not define minorities as members of unusual social groups presented the source as less of a social deviant (e.g., when the source was defined statistically, such as the 18% of the population who endorse a position). Recipients' agreement with these minorities was comparable on direct and indirect measures. It seems, then, that the negative normative pressures attenuating direct influence of minority sources are linked to the minority's deviant social identity. These normative pressures apparently arise in part from the implications of a negatively valued minority source for recipients' personal self-definitions (see Newcomb, 1950).

#### Normative Pressures Exerted by Majority and Minority Sources

Deutsch and Gerard (1955) originally used the term *normative pressure* to refer to a broad set of social motives and goals that excludes only informational reasons for agreement. Thus, *normative social influence* was defined as "influence to conform with the positive expectations of another" (p. 629). The "other" could be a group, another person, or oneself. Recipients who fulfill others' positive expectations experience positive feelings rather than negative feelings and solidarity rather than alienation. Fulfillment of positive *self*-expectations was thought to generate specific feelings of self-esteem and self-approval and to help an individual avoid anxiety and guilt.

The normative motivations to align the self with personally valued reference groups and to defend the self against alliance with derogated groups can be considered manifestations of a defensive orientation, reflecting recipients' "desire to hold attitudes and beliefs that are congruent with existing self-definitional attitudes and beliefs" (Chaiken, Giner-Sorolla, & Chen, 1996; Chaiken, Liberman, & Eagly, 1989). The defense motivation established by group membership is illustrated in the *hostile media phenomenon*, in which partisan group members process balanced media presentations in a biased manner, resulting in the perception of hostile media (Giner-Sorolla & Chaiken, 1994; Vallone, Ross, & Lepper, 1985). The general idea that attitudes are changed or maintained in the service of defense-oriented motivations has considerable precedence in the attitude literature (e.g., Johnson & Eagly's [1989] concept of value-relevant involvement, Katz's [1960] idea that attitudes serve an ego-defensive function; see also Swann's [1990] self-verification theory and Tesser's [1988] self-evaluation maintenance theory).

Minority and majority group sources are likely to instigate defensive normative pressures to the extent that group identity

is relevant to recipients' self-definitions. Indeed, classic research by Hovland and his coworkers at Yale (Hovland, Janis, & Kelley, 1953) suggested that recipients' group identity confers resistance to messages that counter group norms primarily when the group is personally important and salient. Thus, Boy Scouts who reported valuing their troop membership were more resistant to a message criticizing woodcraft activities than Scouts who placed little value on the troop (Kelley & Volkart, 1952). Similarly, Catholic high school students who had been reminded about their religious identity were more resistant to anti-Catholic positions (e.g., involving traditionalism of religious practices) than students who were not reminded of their Catholic identity (Kelley, 1955). We anticipated, then, that majority and minority sources who are not judged self-relevant would have limited impact on recipients' attitude judgments because they do not elicit defense-related motivations.

#### Process Models of Normatively Based Influence

What are the processes by which defensively linked normative pressures affect direct agreement with a source group? According to social identity and self-categorization theories, a source's in-group identity affects influence because attitudes and opinions are common category characteristics that are inferred from the social group category and are automatically assigned to all members, including oneself (Tajfel, 1978, 1982; Turner, 1991). In-group attitudes, especially those that are criterial attributes of category membership, are adopted with certainty and confidence because of their high subjective validity (Mackie & Skelly, 1994; McGarty, Turner, Oakes, & Haslam, 1993). Thus, majority group positions are endorsed in preference to minority views as part of the process of defining oneself as a majority group member.

According to self-categorization theory, then, agreement arises from the use of a heuristic-like rule in which individual group members are assumed to hold attitudes typical of the group as a whole (Hogg & Turner, 1987). We suggest that group identity can also instigate agreement through more systematic, central-route analyses of attitude issues. For example, Asch, (1940, 1948) argued that influence appeals from groups do not have a direct impact on recipients' attitudes but instead change recipients' interpretations of the object or issue referenced in the appeal. In one of Asch's (1940) experiments, participants who were exposed to others' favorable evaluations of the attitude object "politicians" assumed that this referred to "statesmen" and, because of this interpretation, reported relatively favorable views themselves. In contrast, participants who were exposed to others' unfavorable judgments inferred that "politician" must refer to the "more offensive forms" of the political animal (e.g., Tammany Hall, low politics, underlings), and they expressed relatively negative evaluations. Apparently, the positions "imputed to congenial groups produced changes in the meaning of the objects of judgment" (Asch, 1940, p. 462). Similar ideas have emerged, although in slightly different form, in other theoretical analyses within the Gestalt tradition (Festinger, 1957; Heider, 1958).

More recently, Allen and Wilder (1980) outlined a multistage process of meaning change in which (a) recipients modify their

interpretation of an issue in light of the position advocated by a majority, (b) this new interpretation of the issue makes the source's position seem reasonable and acceptable, and (c) recipients then agree with their (new) interpretation of the advocated position. In an elegant demonstration of this process, Allen and Wilder (1980) presented participants with a unanimous majority that claimed, for example, that "I would never go out of my way to help another person if it meant giving up some personal pleasure." Participants inferred that the phrase *go out of my way* must have an unusual interpretation, meaning "risk my life." Then, by adopting this unusual interpretation themselves, they were able to agree with the majority. In a comparison condition, participants were exposed to the opinions of a social supporter as well as the opposing majority view. Again, the majority group was judged to have adopted an unusual interpretation of the attitude issue, but the supporter was perceived to have adopted a more typical interpretation, similar to participants' own (i.e., "be inconvenienced"). The social supporter apparently freed participants to maintain their initial interpretation of the attitude issue and to resist conforming to the majority.

In summary, we propose that self-relevant majority groups establish normative pressures for recipients to align themselves with the majority position. Normative pressures instigate a defensively based interpretation of the issue in the appeal that allows recipients to adopt the majority group view. In a mirror image of this process, derogated minority groups may establish negative normative pressures to differentiate from the minority position. Negative pressures are likely to instigate a defensively based interpretation that allows recipients to reject the minority position.

The general ideas that recipients' group membership determines how they interpret messages and that interpretation determines message acceptance are consistent with social judgment theory (Sherif & Hovland, 1961). However, this earlier work was limited primarily to perceptual processes, and it treated the attitudes of ego-involved recipients as stable anchors that direct perceptions of messages as acceptable or unacceptable.

### The Present Research

In the present research we assessed the defensive motivation established by the self-definitional implications of majority and minority source groups and documented the informational processes by which these motivations affect influence. The first experiment was designed to replicate earlier informational explanations of majority influence, which demonstrated that attitude change toward the source position depends on shifts in interpretation of the attitude issue that make the source position seem reasonable and acceptable (Allen & Wilder, 1980; Asch, 1940). The second experiment addressed the (negative) self-definitional normative pressures exerted by derogated minority groups.

In the first study, recipients were told that a majority group of students at their university had expressed a position on an attitude topic that differed from the recipients' positions. The attitude issues were selected so that they were ambiguous and

open to multiple interpretations. Recipients gave their interpretation of the attitude issue and their own opinions. Self-relevance of the source group was assessed through questionnaire ratings of the extent to which recipients' self-definition was tied to their student identity.

We anticipated that, when the majority group was judged self-relevant, recipients would generate a defensively based interpretation of the issue in order to agree with the source. In contrast, Griffin and Buehler (1993; Buehler & Griffin, 1994) have recently argued that cognitive reinterpretation of a message (in their terminology, *situational construal*) typically follows attitude change, as an after-the-fact justification for agreement. In their view, recipients directly adopt majority views, perhaps by relying on heuristic principles, such as "there is strength in numbers" and "the majority rules." Recipients subsequently undertake a biased interpretation of the majority position when they are asked to justify their position.

Postchange justification processes seem most likely to occur when recipients are unmotivated or unable to carefully process the appeal before indicating their opinions but later are encouraged to do so as a means of justifying their new appeal-congruent attitudes. In the present study, however, we anticipated that participants who judged the majority group as highly relevant to their self-identity would experience sufficient self-definitional normative pressures to motivate a careful, thoughtful (although defensive) analysis of the source position before making attitude judgments. To test whether interpretations preceded or followed attitude change in the present study, we manipulated the ordering of the attitude and interpretation measures. We anticipated that the greatest attitude change would be observed when the interpretation questionnaire was administered before the attitude scale. In this condition, the interpretation measures should have cued recipients to generate inferences that would allow them to align with the source. Less attitude change should have been observed when the attitude questionnaire was given before the interpretation measures; because recipients in this condition rated their attitudes before they were provided with the interpretation scales, they were not provided with a structured opportunity to bias interpretation before stating their attitudes. In contrast, if Griffin and Buehler's (1993) post-attitude-change justification account is correct, questionnaire order should have little impact on attitudes. If attitude change is not dependent on biased interpretation, it can occur whether or not recipients are cued to reinterpret the issue.

The two theoretical accounts also make divergent predictions about interpretation results. In our account of interpretation-then-attitude-judgment, question order should not affect interpretations. Directed interpretation is a response to self-definitional normative pressures and should be found whether or not participants have already indicated their attitudes. However, in Griffin and Buehler's (1993) post-attitude-justification account, questionnaire order might affect interpretation ratings. Greater bias might occur when interpretations follow attitude ratings, and can justify the attitudes indicated, than when interpretation ratings come first and there is no explicit attitude judgment to justify.

In addition to assessing the relevance of the majority source for participants' own self-definitions and varying the order of

completion of the attitude and interpretation scales, we manipulated source group identity. Some participants were exposed to a majority source, and others were exposed to a comparison group source—foreign Texas A&M students—that was not especially relevant to the personal identities of our American-born students. Given that this comparison group elicits minimal self-definitional normative pressure, it should have had little effect on interpretations or attitudes.

## Experiment 1

### Method

#### Participants

One hundred ninety-eight (non-Hispanic) Caucasian U.S.-born students participated as part of a requirement in Introductory Psychology at Texas A&M University. Because 98 of these participants indicated that the majority group, Texas Aggies, was only moderately self-relevant (see relevance questionnaire, below), they did not meet the requirements of our experimental design and were not included in the reported analyses. An additional 10 participants were ineligible because they did not attend to the source, the message position information, or both (see below). Approximately equal numbers of participants were deleted from each cell in the design. The final sample consisted of 90 participants.

#### Development of Stimulus Materials

A separate group of 60 pretest participants rated their attitudes toward and gave their interpretations of a series of attitude statements. Interpretations were given in a free-response format and were coded by two independent raters to identify common themes in statement meanings. Eligible statements generated primarily two interpretations, one of which plausibly yielded a favorable attitude; the other interpretation yielded an unfavorable attitude. The two statements were: "I would not approve of a friend who took illegal drugs," and "Sex of employees should be considered in promotion." For the illegal drug issue, 69% of participants gave the phrase *would not approve* a qualified interpretation, suggesting that it meant continued interaction without personally condoning the habit. More extreme interpretations, given by 31% of the participants, included ending the friendship or turning the person in to the authorities. In addition, pretest participants endorsed the statement, giving it a mean rating of 8.89 on an 11-point evaluation scale. For the sex-and-promotion issue, 29% of participants gave the phrase *should be considered* a qualified interpretation, suggesting that it meant promote the best person (regardless of sex) unless the job requires certain physical skills, such as strength. A more extreme interpretation was given by 53%, suggesting that it referred to sex discrimination—that sex of employees determines who gets promoted. (Proportions do not total to 100%, because some responses could not be classified.) Pretest attitudes were strongly opposed to this statement, with a mean of 1.97 on the 11-point scale.

#### Procedure

Sessions were conducted with groups of 15–20 participants. The study was ostensibly designed to interpret the findings of an earlier attitude survey. Participants received a questionnaire packet that described the earlier survey as highly valid and reliable; they were told it had been conducted by the Gallup organization, with several thousand respondents, and the results were to be reported in *Time* magazine. The identity of the respondents in the earlier survey comprised the manipulation

of source identity. When the survey sample was to represent a majority group, they were described as "American Aggies." Supposedly, 87% of all students at the university fit this description. In a comparison condition, the source was described as a relatively neutrally evaluated group: "foreign A&M students." The comparison group was selected to be of only minimal self-relevance and was expected to instigate only limited defensive processing.

Participants were shown an 11-point attitude scale that indicated the mean judgment of the students in the earlier survey on one of the issues. So that the survey position opposed participants' initial opinions, for the illegal drugs issue, the sample of students had supposedly indicated a mean attitude of "1.5," reflecting strong disagreement, whereas for the sex-and-promotion issue the earlier students had indicated a mean position of "10.5," reflecting strong agreement.

To ensure that participants attended to the source identity and the advocated position, we asked them to recall, in a free-response format, the identity of the group and the group's position. As noted above, the data from 10 participants who failed to attend to this information were deleted from the analyses.

The third page of the questionnaire assessed inferences about the source group's interpretation of the issue, participants' own personal interpretations, and their own attitudes on the issue (see below). We varied the order of the attitude and interpretation measures across condition, so that half of the participants completed the attitude measure first and half completed the interpretation measure first. This constituted the questionnaire order manipulation.

Finally, to assess the extent of the self-definitional normative pressure exerted by the majority group, participants indicated the strength of their ties with the values and attitudes of students at the university (see below). Participants were then debriefed and excused.

#### Questionnaire Measures

**Interpretations.** On 9-point scales, participants indicated the interpretation they believed the original source group had used when responding to the attitude statement. Participants then gave their own personal interpretations. The scale anchors represented the two opposing interpretations that had been identified in pretesting. Thus, for the illegal drug issue, the phrase *would not condone* was rated on a scale with anchors of 1 (*would continue to interact but personally not condone the habit*) and 9 (*would take extreme measures—ending the friendship or turning the person in to the authorities*). For the sex-and-promotion issue, the scale anchors were 1 (*sex of employees should be an important determinant of who gets promoted*) and 9 (*promote the most qualified person regardless of sex unless the job requires certain physical skills like strength*).

**Attitudes.** On an 11-point scale anchored by *strongly agree* and *strongly disagree*, participants rated their agreement with the critical attitude statement. They also rated the statement on three 9-point semantic differential items with scale labels of *fair-unfair*, *good-bad*, and *positive-negative*. Responses to the four attitude scales proved to be related (coefficient  $\alpha = .73$  and  $.87$  for drug use and for sex and promotion, respectively) and were combined into an aggregate attitude index.

**Self-relevance of source.** To assess the self-definitional normative pressure exerted by the majority source group, participants indicated the extent to which the group was relevant to their self-definitions. On 11-point scales, they rated (a) whether they usually agree with the attitudes and values of most students at Texas A&M University (with scale anchors ranging from *almost always disagree* to *almost always agree*), (b) how important it was that they personify the values and attitudes of students at Texas A&M University (with anchors ranging from *extremely unimportant* to *extremely important*), and (c) the extent to which being an Aggie was an important part of who they are (anchors of

*extremely unimportant* and *extremely important*). Responses to these items were combined into a mean score (coefficient  $\alpha = .86$ ) that ranged from 1.67 to 10.67, with a mean of 6.91. We performed a three-way split on the aggregated scores: The upper group represented participants whose identity was closely tied to American Aggies ( $M = 9.50$ ,  $SD = 0.51$ ,  $n = 45$ ), the lower group represented those whose identity was not closely tied to the source group ( $M = 4.31$ ,  $SD = 1.23$ ,  $n = 45$ ), and the middle group represented those who were indifferent (but not opposed) to the majority group. Because we did not have clear predictions for the middle group, the scores of these 98 participants were not included in the analysis.<sup>2</sup>

### Results

We analyzed the data with a Source Identity (majority vs. comparison group)  $\times$  Self-Relevance of Majority Group (high vs. low)  $\times$  Question Order (attitude scale administered first vs. interpretation scale administered first)  $\times$  Issue (sex and promotion vs. drug use) analysis of variance (ANOVA).

#### Interpretation of the Attitude Statements

*Personal interpretation.* The anticipated interaction between source identity and self-relevance of the majority was obtained in analyses of participants' ratings of their own personal interpretation of the issue,  $F(1, 74) = 10.16$ ,  $p < .01$  (see Table 1). Planned comparisons revealed that participants who were exposed to a majority view were more likely to shift their interpretation when the group was rated self-relevant than when it was not rated as relevant,  $F(1, 74) = 21.56$ ,  $p < .001$ . In addition, comparisons revealed that the low-relevance participants who received a majority position did not differ from those who received the comparison source position ( $F_s < 1.75$ ).

Several additional effects were revealed by this analysis. A main effect for source type revealed a greater shift in interpretations of the issue for majority sources than for comparison group sources,  $F(1, 74) = 19.28$ ,  $p < .001$ . Also, a greater shift in interpretations was apparent for participants who rated the majority group self-relevant than those who did not,  $F(1, 74) = 7.03$ ,  $p < .05$ . Finally, an interaction between questionnaire order and issue,  $F(1, 74) = 8.41$ ,  $p < .01$ , revealed that, for the illegal drugs issue, more biased interpretation was given when interpretations were assessed first than when attitudes were assessed first ( $p < .05$ ). However, no differences for questionnaire order were obtained for the sex-and-promotion issue.

*Attributed source interpretation.* The only significant result was a main effect for question order,  $F(1, 74) = 8.27$ ,  $p < .01$ , indicating that the attributed source interpretation shifted more when interpretation was measured first ( $M = 5.74$ ) than when attitudes were measured first ( $M = 4.16$ ). Note that the direction of this effect counters a justification explanation for our findings. That is, if participants had been justifying their agreement with the source by distorting their interpretations of the message, greater bias in interpretations should have emerged when attitudes rather than interpretations were assessed first.

#### Participants' Attitudes

The attitude scale for the drug use issue was reverse scored so that, for both issues, higher numbers represent change toward

the source group position. The analyses yielded the anticipated three-way interaction among source type, self-relevance of majority, and questionnaire order, although it achieved only marginal significance,  $F(1, 71) = 3.30$ ,  $p < .08$ . As anticipated, participants who were exposed to the majority group source who judged the source self-relevant and gave their interpretations before attitudes reported the greatest amount of agreement (see Table 1). Thus, simple effects comparisons within the majority source condition revealed that high-self-relevant, interpretation-first participants gave attitudes closer to the source position than did the low-self-relevant, attitude-first group,  $F(1, 71) = 4.85$ ,  $p < .05$ . Although the high-self-relevant, interpretation-first group also indicated attitudes closer to the source than did participants in the other two majority conditions, comparisons with these conditions did not reveal significant differences. As anticipated, no differences emerged in the attitudes of participants who were exposed to the comparison source; in addition, participants in the comparison source conditions did not differ from those in the majority conditions in which attitude was assessed first or in which interpretation was assessed first but the source was judged of low self-relevance. The analyses also yielded a main effect of issue,  $F(1, 71) = 16.47$ ,  $p < .001$ , reflecting simply that participants reported more favorable attitudes on the illegal drugs issue ( $M = 6.67$ ) than on the sex-and-promotion issue ( $M = 4.91$ ).

#### Interpretations Mediate Attitude Change

We used regression analyses to examine whether interpretations mediate attitude change (Baron & Kenny, 1986). These analyses included only participants who answered the interpretation measures before giving their attitudes, because only their ratings allowed us to assess the hypothesized causal sequence.

In the first regression equation, attitudes were predicted from the independent variables. The three independent variables—source identity, rated self-relevance of source, and issue—were represented through effects coding and were entered as predictors along with the multiplicative interactions among them. The anticipated two-way interaction between source identity and self-relevance approached significance, regression coefficient  $B = -.29$ ,  $t(31) = 1.81$ ,  $p < .10$ ; no other effects approached significance. In the next equation, the mediator, rated personal interpretation, was predicted from the independent variables and the interactions among them. As anticipated, the two-way interaction between source identity and self-relevance of source was significant,  $B = -.30$ ,  $t(31) = -2.07$ ,  $p < .05$ . In addition, significant effects emerged for issue ( $p < .01$ ) and source identity ( $p < .05$ ). The final regression equation predicted attitudes from the independent variables, their interactions, and the critical mediator, rated personal interpretation. In this analysis, the two-way interaction between source identity and self-relevance

<sup>2</sup> We also conducted analyses that represented the self-relevance ratings as a continuous variable, and the results were comparable to those reported in the text. For simplicity of presentation, we report the findings for participants who scored at the extremes on this scale; these groups allow for the most straightforward test of our hypotheses.

Table 1  
*Mean Interpretation of Issue in Appeal and Mean Postappeal Attitudes: Experiment 1*

Question order	Majority source				Comparison source			
	Majority source judged self-relevant		Majority source judged not self-relevant		Majority source judged self-relevant		Majority source judged not self-relevant	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Personal interpretation								
Attitude first	7.67	1.41	4.17	2.95	3.71	2.05	3.75	2.24
Interpretation first	7.55	1.70	4.36	3.23	2.91	2.74	4.67	3.20
Postappeal attitudes								
Attitude first	5.60	2.00	5.10	2.42	6.09	2.07	5.44	2.91
Interpretation first	7.04	1.82	6.02	2.63	5.15	2.37	5.92	1.59

*Note.* Higher numbers represent greater endorsement of an interpretation that supports a counterattitudinal position (i.e., source's position) as well as greater attitude change toward the source position. Interpretations were given on a 9-point scale and attitudes were given on an 11-point scale. Cell *ns* range from 6 to 16.

of the majority was not even close to significance ( $B = -.10, t < 1, ns$ ). However, the mediator was significant,  $B = .58, t(30) = 2.62, p < .01$ . In addition, issue emerged as significant ( $p < .05$ ). Thus, the regression models are consistent with the idea that, when interpretations were measured before attitudes, recipients' own interpretations of the issue mediated the effects of source self-relevance and source identity on attitude change.

### Discussion

This experiment replicated earlier informational analyses of conformity by demonstrating that majority sources can generate attitude change by shifting recipients' interpretation of the issue in the influence appeal (Allen & Wilder, 1980; Asch, 1940). Furthermore, in support of our ideas about the normative pressures that underlie majority impact, interpretation shifts and attitude change emerged only when the majority group was judged highly relevant to recipients' self-definitions. That is, our participants who indicated that their personal identities were closely linked to the majority source group, American Aggies, experienced normative pressures to align themselves with the source, whereas those who reported that their identity was not linked to the majority group were apparently not motivated by a desire to align with the source.

The interpretation shifts demonstrated by participants who judged the source group as self-relevant rendered the source's counterattitudinal position reasonable and acceptable. Consider the participants who valued American Aggies and learned that, unlike them, this group believed that sex of employees should be considered in promotion. For these participants, the phrase *should be considered* acquired a new meaning, one in which sex discrimination was construed in relatively congenial terms that involved promoting the most qualified person regardless of sex unless the job required certain physical skills, such as strength. Recipients who adopted this interpretation

could then align their attitudes with that of the majority and endorse the statement themselves. Participants who were relatively indifferent to the majority group source and those who were exposed to the comparison group source of foreign Texas A&M students apparently experienced minimal normative pressure. They did not generate defensive interpretations of the attitude statements, and they demonstrated little shift in their attitude judgments.

We also manipulated the order in which participants completed the attitude and interpretation measures so that we could assess whether interpretations preceded attitude change or served as postchange justification. The results strongly suggest that biased interpretation was the mechanism through which normative pressures generated attitude change. Thus, for recipients who rated the majority group as self-relevant, completing the interpretation measures first served as a cue to change the meaning of the attitude statement. The new interpretation of the issue then rendered the source's deviant attitudes acceptable, and recipients changed their attitudes to be consistent with the source's position. When these participants responded to the attitude measure first, they did not demonstrate much attitude change, presumably because they were not cued by the interpretation scales to generate interpretations that enabled them to align with the source group.

It seems, then, that normative pressure alone was not sufficient to instigate directed interpretation of the appeal. Only when participants were given a structured opportunity to reinterpret the issue before indicating their attitudes did they change their attitudes to be congruent with the source's view. Apparently, participants who indicated their attitudes before their interpretation were not sufficiently motivated or able to spontaneously reinterpret the attitude issue before indicating their opinions. It may be that cognitive reinterpretation in the present paradigm is a relatively effortful, demanding process that requires very high levels of normative pressure. The self-defini-

tion we examined in the present investigation, school-linked identity, may not have been sufficient to spontaneously motivate such a process even among the high-relevance group.

Two aspects of interpretation were assessed in this study: the interpretations attributed to the source group and participants' personal interpretations. It is interesting that the anticipated effects emerged only with personal interpretations and that normative pressure did not motivate biased source interpretation. Thus, interpretation shifts were not undertaken to explain the majority source's counterattitudinal position. The primary impetus behind the shifts appears to have been participants' attempts to devise a seemingly rational interpretation of the source group's counterattitudinal position for themselves, one that ultimately allowed them to align with the majority view.

## Experiment 2

In the second experiment we extended our influence model to minority group sources and examined whether the normative pressures instigated by (negatively) self-relevant minority groups affect influence through directed interpretation of appeals. Unlike Study 1, the source group in this study was presented as holding a position that recipients also endorsed. Aligning source and recipient allowed us to examine the extent to which recipients shifted their own positions away from that of the minority group. Conceptually, this prediction parallels the negative normative pressures that appeared to attenuate direct (vs. indirect) agreement with minority group sources in Wood et al.'s (1994) review.

Specifically, recipients for whom the minority was negatively self-relevant should experience strong normative pressures to reject the minority view and should change their interpretation of the attitude issue to support an alternative attitude position. In contrast, recipients who reported that the minority source was not self-relevant should not experience strong normative pressures to differentiate from the minority, should not be motivated to engage in defensive interpretation of the minority appeal, and should express attitudes that do not differ as strongly from the advocated position.

The prediction that some recipients will show a boomerang effect and move their positions away from the minority source group might seem to contradict attributional analyses of social comparison, which suggest that agreement from dissimilar others can enhance people's confidence in their attitudes (e.g., Goethals & Darley, 1977, 1987). In this earlier work, the knowledge that other people with varying attributes and backgrounds agreed with them apparently suggested to participants that their own evaluation was a valid reaction to the attitude object and not an idiosyncratic perception. However, the "dissimilar other" in the present context is not simply an out-group member or someone with different values or attitudes. The source represents a derogated social group that is, for some of our participants, highly self-relevant; participants define themselves as not being members of the minority. This negative self-definitional motivation is likely to instigate movement away from the source.

As in Experiment 1, we varied the order of the attitude and the interpretation questionnaires. Our predictions followed

those in the first experiment: Although we did not anticipate that order would affect interpretation ratings, the greatest attitude shifts should be demonstrated by participants who strongly derogate the minority and are cued to change their interpretations by completing the interpretation ratings before the attitude scales. Thus, we anticipated that attitudes would yield an interaction between questionnaire order and self-relevance of the minority source.

In the second study we obtained a more precise measure of attitude shift than in the first experiment. Instead of estimating initial attitudes from a pretest control group, we obtained direct measures of participants' initial positions on the influence topic during a mass prescreening session at the beginning of the semester. During the prescreening, participants also gave initial ratings of the self-relevance of two minority source groups: the Ku Klux Klan and the Radical Lesbian Feminists. We were then able to evaluate whether the self-relevance of the source group remained stable after exposure to the influence appeal.

## Method

### Participants

One hundred-seventy students participated as part of a requirement for Introductory Psychology at Texas A&M University. Of these, 4 did not attend to the source and the message position (see below) and were deleted from the analyses. An additional 44 were ineligible for the design because they rated the minority source as only moderately self-relevant (see source-relevance questionnaire below). The final sample thus consisted of 122 participants (72% White, 10% African-American, 11% Hispanic, and 7% other).<sup>3</sup>

### Development of Stimulus Materials

A separate group of 37 pretest participants rated their attitudes toward a series of statements, listed their spontaneous interpretations of a central phrase in each statement, and rated their knowledge of various minority groups and the extent to which the groups were self-relevant. Interpretations were coded by two independent raters. The selected attitude statements could be interpreted in two general ways, with one interpretation yielding a favorable attitude and another yielding an unfavorable one. The statements were "In the US, *anyone who is willing and able to work hard* has a good chance of succeeding," and "Sex of employees *should be considered* in job promotion decisions."

For the work-and-success issue, 57% of participants interpreted the phrase *anyone who is willing and able* as meaning that success is attainable by anyone, regardless of race or sex, whereas 35% of participants gave a more qualified interpretation, suggesting that it meant that although most people can succeed if they work hard, women and minorities have it tougher than others because of discrimination. (The proportions do not total to 100% because some responses could not be classified.) Participants were moderately favorable toward the statement, with a mean pretest attitude of 8.26 on an 11-point agreement scale. For the sex-and-promotion issue, 43% of participants gave the phrase *should be considered* a qualified interpretation in which sex is considered relevant only for jobs that require physical skills such as strength, and 43% gave a more absolute interpretation, in which consideration of sex means discrimination against women. Participants' pre-

<sup>3</sup> Because of the small numbers of non-White participants, we were unable to conduct analyses on participant race/ethnicity.

test attitudes were unfavorable toward this statement, with a mean of 2.43 on the 11-point scale.

In addition, we selected the Ku Klux Klan and the Radical Lesbian Feminists as our two minority groups because most pretest participants indicated that they were familiar with them. In addition, the groups were judged to be moderately self-relevant with considerable variability across respondents in the relevance ratings.

We conducted additional pretesting with 81 participants to ensure that judged self-relevance of the minority was not related to initial attitudes or to interpretations. This pretest group completed the attitude and interpretation measures for both issues and rated the self-relevance of the source groups, without receiving any indication of the minority group positions. Participants who judged the Klan highly self-relevant indicated comparable opinions on the work-hard issue ( $M = 4.01, n = 43$ ) to those who judged the Klan not relevant ( $M = 4.29, n = 26, ns$ ).<sup>4</sup> They also indicated similar personal interpretations ( $M_s = 3.73$  and  $4.40$  for the not-relevant and highly relevant groups, respectively,  $ns$ ). Participants who judged the Lesbian Feminists highly relevant indicated comparable attitudes on the sex-and-promotion issue ( $M = 3.31, n = 32$ ) to those who indicated the Feminists were not relevant ( $M = 3.08, n = 29$ ). Furthermore, personal interpretations did not differ as a function of source relevance ( $M_s = 4.28$  and  $3.91$  for the not-relevant and highly relevant groups, respectively,  $ns$ ).

### Procedure

At a mass prescreening at the beginning of the semester, participants indicated their attitudes on the two critical issues and rated the self-relevance of the Ku Klux Klan and the Radical Lesbian Feminists (see below).

Approximately 1 month later, participants were recruited in groups of 15 for an ostensibly unrelated experiment. They were told that an earlier survey had assessed the attitudes of various social groups on a number of issues and that the present experiment was intended to determine the meaning of these groups' earlier responses.

Participants were randomly assigned to read either the Ku Klux Klan's position on the issue of working hard and success or the Radical Lesbian Feminists' position on the issue of sex-based promotion. They received a questionnaire packet that reported the opinions (supposedly) obtained in the earlier survey and included the dependent measures. The mean judgment of the group in the earlier survey was indicated on an 11-point attitude scale. So that the group's position corresponded with participants' initial opinions, for the work issue, Klan members had supposedly indicated a mean of 9, reflecting moderate agreement. For the sex-and-promotion issue, the Radical Lesbian Feminists supposedly reported a mean of 2, indicating strong disagreement.

To ensure that participants attended to the source identity and the advocated position, on the second page of the questionnaire they were asked to list the identity of the group and its attitude. As noted above, the data from the 4 participants who failed to do this correctly were deleted.

The third page of the questionnaire assessed inferences about the source group's interpretation of the issue, participants' own personal interpretations, and their attitudes on the issue (see below). The order of the attitude and interpretation measures was varied across condition, so that half of the participants completed the attitude measures first and half completed the interpretation measures first. All participants then completed the source-relevance questionnaire and indicated their race and sex. They were then debriefed and excused.

### Questionnaire Measures

**Interpretations.** On 11-point scales, participants rated the interpretation they believed the source group had used when responding to

the attitude statement and then gave their own interpretations. For the work-hard-and-success issue, the phrase *anyone who is willing and able* was rated on a scale with anchors of 1 (*the world is fair; people who work hard succeed regardless of their race or sex*) and 9 (*although most people can succeed if they work hard, women and minorities have it tougher than others because of discrimination*). For the sex-and-promotion issue, the phrase *should be considered* was rated on a scale with anchors of 1 (*discriminate against women*) and 9 (*sex of employee is only relevant for jobs that require physical skills such as strength*).

**Attitudes.** On an 11-point scale anchored by *strongly agree* and *strongly disagree*, participants rated their agreement with the critical attitude statement. Then they rated the statement on three 7-point semantic differential items with scale labels of *fair-unfair*, *good-bad*, and *positive-negative*. Responses to these attitude scales proved to be strongly related, and thus we combined them into an overall attitude index (coefficient  $\alpha_s = .90$  and  $.87$  for the work-hard and the sex-and-promotion issues, respectively, at prescreening;  $\alpha_s = .93$  and  $.91$  for the work-hard and the sex-and-promotion issues, respectively, during the experiment).

**Self-relevance of source.** To assess the negative normative pressure generated by the minority, we asked participants to indicate the extent to which differentiation from the applicable minority group (i.e., Klan or Feminists) formed an important basis for their self-definitions. On 11-point scales, they rated (a) whether they usually agree or disagree with the attitudes and values of the Klan or Lesbian Feminists (with scale anchors ranging from *almost always agree* to *almost always disagree*), (b) how important it was that they reject the values and attitudes of the minority group (with scale anchors ranging from *extremely unimportant* to *extremely important*), and (c) the extent to which being dissimilar from the group was an important part of who they are (with scale anchors ranging from *extremely unimportant* to *extremely important*). Responses to these items were closely related and were combined into an index representing relevance of the minority group (coefficient  $\alpha_s = .85$  and  $.90$  for the Klan and the Lesbian Feminists, respectively, during the prescreening; coefficient  $\alpha_s = .89$  and  $.91$  for the Klan and the Lesbian Feminists, respectively, during the experiment).

Ratings of self-relevance proved stable, with those given during the prescreening session highly correlated with those given during the experiment ( $r_s = .76$  and  $.80$  for the Klan and the Lesbian Feminists, respectively). To maintain comparability with the analyses in the first experiment, we classified participants according to the judgments they gave during the experiment. However, the Study 2 results were comparable whether source relevance was assessed from prescreening ratings or those given during the experimental session.<sup>5</sup>

For the Ku Klux Klan, judgments of self-relevance ranged from 2.67 to 11.00, yielding a mean of 8.95 ( $SD = 2.10, n = 85$ ). We performed a three-way split, with the upper portion representing participants whose identity was negatively tied to the Klan and who wished to differentiate from this group ( $M = 10.68, SD = 0.40, n = 38$ ). The lower portion of participants, whose identity was not closely tied to the Klan, represented those who were relatively indifferent to the minority; indeed, the mean rating of the low group was almost exactly at the scale midpoint ( $M = 6.26, SD = 1.52, n = 26$ ). We did not include the middle portion

<sup>4</sup> The designations of high and low relevance of the minority source were constructed to be the same as those used in the actual experiment.

<sup>5</sup> Participants rated the self-relevance of both minority groups at the pretest, allowing us to calculate the association between these judgments. The nonsignificant correlation ( $r = .14$ ) indicates that self-relevance ratings are specific to group identity and suggests that the interpretation and attitude change effects do not reflect any general disposition to align with in-groups and reject derogated out-groups (e.g., ethnocentrism, dogmatism).



from the three-way split in the analysis because we had no clear predictions concerning this group.

For the Radical Lesbian Feminists, judgments on the self-relevance measure ranged from 2.33 to 11.00, with a mean of 7.08 ( $SD = 2.11$ ,  $n = 80$ ). We performed a three-way split; the upper portion represented participants whose identity was negatively tied to the Feminists ( $M = 9.56$ ,  $SD = 1.10$ ,  $n = 26$ ). The lower group was relatively indifferent and indicated a mean rating that fell close to the scale midpoint ( $M = 5.18$ ,  $SD = 1.09$ ,  $n = 33$ ). The middle group was not included in the analyses.

### Results

We analyzed the data with a Self-Relevance of Minority Group (high vs. low)  $\times$  Question Order (attitude scale administered first vs. interpretation scale administered first)  $\times$  Replication Across Minority Source/Issue (Ku Klux Klan/work hard vs. Radical Lesbian Feminists/sex and promotion) ANOVA.

#### Interpretation of Attitude Statements

Participants who rated the minority group highly self-relevant should experience normative pressures to differentiate from the source. This negative pressure should generate interpretation shifts to justify an attitude judgment that was different than the position of the source group.

*Personal interpretation.* As we had anticipated, a significant main effect of self-relevance,  $F(1, 114) = 10.01$ ,  $p < .01$ , revealed that participants for whom the minority group source was (vs. was not) self-relevant shifted their interpretation of the issue to a more qualified meaning, supporting a position opposite to that of the source group. The only other effect was that of issue,  $F(1, 114) = 9.63$ ,  $p < .01$ . The direction of this effect was not especially interpretable; more extreme interpretations were given by recipients of the Klan position on hard work and success ( $M = 3.75$ ) than by recipients of the Radical Lesbian Feminists' position on sex and promotion ( $M = 4.92$ ).

*Attributed-source interpretation.* The only effect to emerge in this analysis was a main effect of issue,  $F(1, 114) = 9.32$ ,  $p < .01$ . Again, this was not interpretable except that the direction of the effect countered the one obtained with personal interpretations: More extreme source interpretations were inferred by recipients of the Radical Lesbian Feminists' position concerning sex and promotion ( $M = 2.89$ ) than by recipients of the Ku Klux Klan's position on hard work and success ( $M = 3.67$ ).

#### Participants' Attitudes

Analyses of attitude change revealed the anticipated interaction between self-relevance of source and question order,  $F(1, 114) = 3.86$ ,  $p = .05$ . Planned comparisons revealed that this effect was due to a boomerang away from the source position by the recipients who judged the minority to be self-relevant and who gave their interpretations before indicating their attitudes (see Table 2). These participants shifted their judgments toward the opposite end of the attitude scale to a greater extent than high-self-relevant participants who gave their attitudes first,  $F(1, 114) = 11.79$ ,  $p < .001$ . In addition, the high-self-

Table 2  
Mean Interpretation of the Issue in Appeal and Mean Attitude Change: Experiment 2

Question order	Minority source judged self-relevant		Minority source judged not self-relevant	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Personal interpretation				
Attitude first	4.86	2.82	3.48	2.08
Interpretation first	4.93	2.84	3.90	2.12
Attitude change				
Attitude first	0.07	1.53	0.47	0.98
Interpretation first	1.42	2.36	0.82	1.77

*Note.* Higher numbers represent greater endorsement of an interpretation that supports a position opposed to the source group (i.e., attitude change away from the source position). Interpretations were given on a 9-point scale and attitudes on an 11-point scale. Cell *ns* range from 29 to 35.

relevant, interpretation-first condition differed significantly from the low-self-relevant, attitude-first condition,  $F(1, 114) = 5.35$ ,  $p < .05$ , although not from the low-self-relevant, interpretation-first condition,  $F(1, 114) = 2.17$ , *ns*. The ANOVA also yielded a main effect of question order,  $F(1, 114) = 10.97$ ,  $p < .01$ , indicating greater change away from the source when interpretation was assessed first than when attitudes were assessed first. Also, the main effect of issue,  $F(1, 114) = 29.19$ ,  $p < .001$ , reflected the greater overall change on the sex-and-promotion issue with the Radical Lesbian Feminist source ( $M = 1.41$ ) than on the work-hard-and-success issue with the Ku Klux Klan source ( $M = -0.05$ ).

To compare the attitude results of this study with the results of the first experiment, we also conducted analyses on the postappeal attitude ratings. The attitude scale for the work-hard-and-success issue was reverse scored so that higher numbers represent change away from the source group position. The interaction between source relevance and question order,  $F(1, 115) = 4.48$ ,  $p < .05$ , yielded the predicted pattern: Less favorable attitudes were expressed by high-self-relevance participants who gave their interpretations first ( $M = 4.33$ ) than by high-self-relevance participants who gave their attitudes first ( $M = 3.21$ ),  $F(1, 115) = 5.39$ ,  $p < .05$ , whereas the attitudes of participants who did not consider the minority self-relevant did not differ from each other or from the high-self-relevant groups ( $M_s = 3.85$  and  $3.96$  for interpretation-first and attitude-first groups, respectively, all  $F_s < 1$ ). In addition, the ANOVA yielded an uninterpretable interaction between source relevance and issue,  $F(1, 115) = 8.32$ ,  $p < .01$ , which reflected that, collapsed across question order, low-self-relevant participants changed more than high-self-relevant participants when the Klan advocated that working hard leads to success, whereas the two groups did not differ when the Radical Lesbian Feminists argued that sex should not be a factor in job promotion.

### *Interpretations Mediate Attitude Change*

We conducted the mediation analyses with participants who answered the interpretation measures before giving their attitudes, because only for this group could we examine the hypothesized causal sequence.

In the first regression equation, attitude change was predicted from the independent variables (represented through effects coding). The predictors in the equation were self-relevance of source, issue, and the multiplicative interaction between these. As anticipated, self-relevance predicted attitude change, regression coefficient  $B = .23$ ,  $t(55) = 1.92$ ,  $p < .06$ . In addition, the analyses yielded an effect of issue ( $p < .01$ ). In the next equation, the mediator, personal interpretation, was predicted from the independent variables and the interaction. As anticipated, self-relevance of source emerged as a significant predictor,  $B = .27$ ,  $t(55) = 2.10$ ,  $p < .05$ . In addition, a significant effect for issue was obtained ( $p < .05$ ). The final equation predicted attitude change from the independent variables (self-relevance of source, issue, the interaction between self-relevance and issue) in addition to the mediator, personal interpretation. Demonstrating mediation, the effect of self-relevance was reduced to nonsignificance,  $B = .13$ ,  $t(54) = 1.14$ , *ns*, whereas personal interpretation remained a significant predictor,  $B = .36$ ,  $t(54) = 3.14$ ,  $p < .01$ . The main effect for issue remained significant as well ( $p < .01$ ). Thus, the regression models provided strong support for the idea that, when interpretations were measured before attitudes, participants' construals of the issue mediated the effects of self-relevance of source on attitude change.<sup>6</sup>

### *Discussion*

This study demonstrated that opinion minority groups, in this case the Ku Klux Klan and the Radical Lesbian Feminists, affect recipients' attitudes to the extent that recipients experience self-definitional normative pressures to differentiate from the source group. Participants who judged the minority group source as negatively self-relevant and learned that the group held a position that corresponded to their own views shifted away from the minority position. This boomerang effect was not obtained among participants for whom the minority was not especially self-relevant. These effects nicely maintained across the two source–issue pairings used in the study, both when the Klan advocated that working hard leads to success for everyone in the United States and when the Radical Lesbian Feminists argued against considering employee sex in hiring decisions.

As in the first experiment, attitude change proved to be mediated by interpretation of the issue in the influence appeal. The issues used in this experiment were selected to be ambiguous in meaning and open to at least two different interpretations. The negative self-relevance of the minority source motivated recipients to reinterpret the issue in a way that allowed them to differentiate themselves from the minority group. Thus, for example, interpretation shifts were found when recipients who defined themselves as different from the Radical Lesbian Feminists learned that, like them, the Lesbian Feminists disagreed that "Sex of employees should be considered in job promotion decisions." These participants shifted from an absolute inter-

pretation of the phrase *should be considered* to a more qualified interpretation, suggesting that it means promoting the most qualified person regardless of sex unless the job requires physical skills such as strength. Given this new interpretation, participants could then differentiate from the source and express some degree of agreement with the attitude statement.

Evidence that change in interpretations mediated attitude change was provided by the manipulation of question order. As in Experiment 1, only participants who completed the interpretation measure first, and not those who completed the attitude measure first, demonstrated the boomerang effect in attitude judgments. Apparently, for the self-relevant group, the interpretation measures served as a cue to base their attitude shifts on a change in their interpretation of the issue. In the absence of this cue before indicating their attitudes, participants did not shift their attitudes away from the source view.

The mediation analyses provided additional evidence that attitude change depended on interpretation shifts. We conducted these analyses only for participants who indicated their interpretations first, because only for these participants could we examine the effects of rated interpretation prior to attitude change. Indeed, the analyses revealed that the negative self-relevance of the minority source had no direct effect on attitude change. Instead, self-relevance instigated defensively based interpretation of the issue in the influence appeal, so that participants for whom the source group was highly relevant judged the issue in an unusual manner, and this interpretation then allowed attitude change away from the source position.

In this second experiment we assessed the negative self-relevance of the minority source at two points in time: once during a pretest at the beginning of the semester and again at the end of the experimental session, after participants had been exposed to the minority position. As we anticipated, the self-relevance ratings proved stable across assessments, with *rs* approaching .80. Furthermore, in the analyses with self-relevance as a predictor of interpretations and attitudes, the results remained constant whether we relied on initial or final ratings. Although we did not have any explicit predictions concerning stability of self-relevance, we conducted some exploratory analyses to determine whether these ratings changed as a function of the experimental variations. We calculated change scores by subtracting initial ratings from final ratings and analyzed these change scores with a Source Self-Relevance (initially high vs. low)  $\times$  Source Group/Issue (Klan's position on working hard vs. Lesbians' position on sex and promotion)  $\times$  Question Order (attitude vs. interpretation first) ANOVA. The analyses yielded a main effect of initial self-relevance,  $F(1, 114) = 24.98$ ,  $p < .001$ , indicating that participants who initially judged the source to be relatively low in self-relevance changed their judgments to be even lower in relevance ( $M = -1.59$ ), whereas participants who judged the source high in relevance showed little change ( $M = -0.33$ ). Thus, participants in the low-relevance group, who did not experience the normative pressure to change their attitudinal positions away from the minority

<sup>6</sup> When we conducted the mediation analyses with postattitude scores as the dependent measure, the results were similar to those obtained with attitude change scores reported in the text, but not as strong.

source, responded in a nondefensive manner to the information that an opinion minority group agreed with them. They changed their judgment of the minority and reported that they did not wish to differentiate from this source group even to the limited extent they had initially indicated. Given this self-relevance shift, these participants may be more accepting of the minority's appeals in the future.

### General Discussion

The present findings support Wood et al.'s (1994) conclusions that, on direct measures of influence, positive normative pressures underlie agreement with majority sources, and negative pressures underlie resistance to minorities. That is, positively valued majority social groups that are relevant to one's self-definition generate normative pressure to align in judgment with the attitudes and beliefs of the majority. Derogated minority social groups that are self-relevant generate normative pressures to differentiate from the position of the minority.

From our perspective, the unique pattern of influence associated with minority (vs. majority) sources that has emerged from the literature (cf. Wood et al., 1994) stems from the negative (and positive) self-reference functions of source groups. That is, past experimental research has often portrayed opinion minorities through a deviant, or at least nonnormative, social identity. Recipients reject this group identity by resisting influence on direct measures, the ones that might plausibly align them with the minority group. In contrast, opinion majority sources in past research have typically been portrayed as representing social consensus and thus may be positively valued. To assume or maintain a positive group identity themselves, recipients align with the majority. In this account, then, the impact of minority or majority group sources is not due to an intrinsic feature of minority or majority status per se but rather arises from the negative or positive implications of the source group for recipients' self-definitions.

We speculate that minority group sources are not always negatively self-relevant and majorities positively self-relevant. Under some conditions, minority groups can serve as a positive self-referent identity for recipients. The most obvious example is when recipients are also members of the minority and they personally value the group identity (e.g., Ethier & Deaux, 1994). In addition, in decision-making and judgment contexts, sources representing deviant positions may assume a positively valued identity, representing innovation, originality, and "courage" (Nemeth, 1986, 1994; Nemeth & Chiles, 1988). Recipients may wish to adopt the self-identity of innovator themselves, and may be influenced by a minority to generate novel, creative solutions. In such decision-making contexts, sources advocating majority, consensual positions may appear pedestrian and commonplace. Recipients may then reject majority views because they do not wish to represent such ordinary, banal positions themselves.

Although the present research provided nice documentation of the normative pressures that generate resistance to minority positions and acceptance of majority views on direct measures of influence, these direct effects represent only one facet of mi-

nority impact. On indirect measures, minorities appear to exert greater influence, presumably because recipients are less aware that they are aligning themselves with the minority source (see footnote 1). We believe that the negative normative pressures associated with minority advocacy can account for the greater tendency to agree with minorities on indirect than direct measures.

Proponents of minority influence have made the additional claim that, on indirect measures of agreement, minorities are more impactful than majorities (Moscovici, 1976, 1985a). Although Wood et al.'s (1994) meta-analytic review did not document any overall tendency for greater minority than majority impact on indirect measures, under certain conditions a minority advantage did emerge. Indirect influence might be generated through a variety of mechanisms. As Moscovici (1976, 1985a, 1994) has claimed, the minority status of the source may encourage participants to conduct a detailed, thoughtful analysis of the issue in the appeal. Although not likely when the minority source assumes a deviant, negatively valued identity, this outcome may be obtained in circumstances in which minority innovation is valued (Babcock & Wood, 1996). Recipients who attempt to innovate may carefully evaluate the minority view and use it to generate their own unique judgments, resulting in broad position shifts that emerge on direct and indirect measures of agreement. The typical majority may seem less innovative, encourage less creative thought, and thus yield less change than the minority on indirect measures. In addition, Wood et al. suggested that greater minority than majority impact on indirect measures may emerge over time as recipients forget the identity of a derogated minority source or the source identity is dissociated from the message (i.e., the "sleeper" effect). Another possibility is that derogated minority groups in real-world contexts do not exert immediate, direct influence but instead effect indirect change by shifting recipients' understanding of the range of possible positions on issues (cf. Wood et al., 1994). For example, the Black Panthers' extreme views on civil rights during the 1960s may have rendered moderate positions on civil rights acceptable to mainstream America. Finally, Alvaro and Crano (in press) argue that social norms to be lenient with in-group minorities can result in recipients favorably processing such positions, despite recipients' resistance to aligning directly with the minority's deviant views. In-group minorities thus may generate agreement on indirect but not direct measures.

### Conclusion and Implications

We have proposed a unified model of minority and majority influence in which the unique impact of these sources stems from the negative and positive self-definitional normative pressures exerted by typical minority and majority social groups on (the typically majority group) recipients. The present results suggest that these pressures function as a mirror image; the motivation to align with valued, self-relevant majorities differs only in direction from the motivation to differentiate from derogated, self-relevant minorities. Highlighting this symmetry, we used one of our attitude issues, involving sex of employees and job promotion, in both studies in our research, demonstrating

alignment with self-relevant majorities in Experiment 1 and differentiation from self-relevant minorities in Experiment 2.

However, positive and negative normative pressures may not mirror each other in all respects. The effects identified with the majority source in Experiment 1 were slightly larger in magnitude than those found in Experiment 2, despite our attempt to identify minority groups that were strongly self-relevant for at least some participants.<sup>7</sup> It may be that negative normative pressures are typically less strong than positive pressures. Supporting this idea, research on the self-concept has found that people are more likely to focus on attributes that they possess and groups to which they belong (e.g., "I am a Texan") rather than attributes that they lack (e.g., "I am not a New Yorker," see McGuire & McGuire's [1992] cognitive positivity bias). Indeed, affirmations of personal attributes hold considerably more information value than negations of attributes and should more effectively meet the self-relevant goals of a coherent identity (e.g., Swann, 1990) and a positive self-view (e.g., Tesser, 1988). An important exception to this generalization occurs when groups are in conflict with each other; self-definitions of not-the-enemy-group may be highly salient and important for members of hostile groups. However, in nonconflict situations, people may experience pressures to align with positively valued self-relevant groups more often and perhaps more intensely than pressures to differentiate from negatively valued self-relevant groups.

We propose further that normative pressures effect influence by motivating a defensive interpretation of the issue in the influence appeal. Defensively based interpretations and normative shifts in attitudes emerged in the present research only when recipients were cued to reinterpret the attitude issue before indicating their opinions. It thus appears that generating biased interpretations is a cognitively challenging process that requires the assistance of a structured reasoning paradigm or, potentially, more motivating self-definitional pressures than we were able to instigate in the present study.

Given the apparent effort involved in reinterpreting source positions, it seems plausible that recipients may often rely on less effortful defensive processing strategies. Especially when normative pressures are moderate in size, recipients may meet their self-definitional goals, aligning with positively valued majorities and rejecting derogated minorities, by following less demanding strategies. These could involve selective attention to influence appeals (e.g., not recognizing those from negatively self-relevant source groups) or misperception of or misremembering the source position (e.g., recalling the position of a positively self-relevant source group as more congenial than it actually is). The type of defensive processing strategy that recipients use has implications for the stability of changed attitudes. More superficial processing strategies may yield judgments with limited stability, whereas more thoughtful, extensive defensive processing strategies may yield relatively enduring attitude change that is apparent whenever the source group identity becomes salient. In general, our approach is consistent with the experimental literature on motivated reasoning, which has identified a variety of mechanisms by which people meet specific social goals (Kruglanski, 1990; Kunda, 1990). The present research has extended these accounts to consider some of the informa-

tional processes by which people defend and maintain valued group identities in social influence contexts.

<sup>7</sup> When we compared the attitudes expressed by participants who judged the source self-relevant and who completed the interpretation measures first with those who judged the source self-relevant but completed the attitude measures first, the effect for the majority group in the first study (standardized mean difference,  $d = .70$ ) was slightly larger than that for the minority in the second study ( $d = .58$ ). Similar results were obtained when only the interpretation-first conditions were evaluated, and we compared participants who judged the source group highly self-relevant with those who judged it not relevant ( $d_s = .50$  and  $.25$  for the majority group in Study 1 and the minority group in Study 2, respectively).

## References

- Allen, V., & Wilder, D. (1980). Impact of group consensus and social support on stimulus meaning: Mediation of conformity by cognitive restructuring. *Journal of Personality and Social Psychology, 39*, 1116-1124.
- Alvaro, E. M., & Crano, W. D. (in press). Indirect minority influence: Evidence of leniency in source evaluation and counterargumentation. *Journal of Personality and Social Psychology*.
- Asch, S. E. (1940). Studies in the principles of judgments and attitudes: II. Determination of judgments by group and by ego standards. *Journal of Social Psychology, 12*, 433-465.
- Asch, S. E. (1948). The doctrine of suggestion, prestige and imitation in social psychology. *Psychological Review, 55*, 250-276.
- Babcock, D., & Wood, W. (1996). [Pressures to innovate can enhance minority impact.] Unpublished raw data.
- Baron, R., & Kenny, D. (1986). The moderator-mediator distinction in social-psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Buehler, R., & Griffin, D. (1994). Change-of-meaning effects in conformity and dissent: Observing construal processes over time. *Journal of Personality and Social Psychology, 67*, 984-996.
- Chaiken, S., Giner-Sorolla, R., & Chen, S. (1996). Beyond accuracy: Defense and impression motives in heuristic and systematic information processing. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action* (pp. 553-578). New York: Guilford Press.
- Chaiken, S., Liberman, A., & Eagly, A. H. (1989). Heuristic and systematic information processing within and beyond the persuasion context. In J. S. Uleman & J. A. Bargh (Eds.), *Unintended thought* (pp. 212-252). New York: Guilford Press.
- Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational social influence upon individual judgment. *Journal of Abnormal and Social Psychology, 51*, 629-636.
- Ethier, K. A., & Deaux, K. (1994). Negotiating social identity when contexts change: Maintaining identification and responding to threat. *Journal of Personality and Social Psychology, 67*, 243-251.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson.
- Giner-Sorolla, R., & Chaiken, S. (1994). The causes of the hostile media effect. *Journal of Experimental Social Psychology, 30*, 165-180.
- Goethals, G. R., & Darley, J. M. (1977). Social comparison theory: An attributional approach. In J. M. Suls & R. L. Miller (Eds.), *Social comparison processes* (pp. 259-278). Washington, DC: Hemisphere.
- Goethals, G. R., & Darley, J. M. (1987). Social comparison theory: Self-evaluation and group life. In B. Mullen & G. R. Goethals (Eds.), *Theories of group behavior* (pp. 21-47). New York: Springer-Verlag.
- Griffin, D., & Buehler, R. (1993). Role of construal processes in con-

- formity and dissent. *Journal of Personality and Social Psychology*, 65, 657-669.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Hogg, M. A., & Turner, J. C. (1987). Social identity and conformity: A theory of referent information influence. In W. Doise & S. Moscovici (Eds.), *Current issues in European social psychology* (Vol. 2, pp. 139-182). Cambridge, England: Cambridge University Press.
- Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and persuasion*. New Haven, CT: Yale University Press.
- Johnson, B. T., & Eagly, A. H. (1989). Effects of involvement on persuasion: A meta-analysis. *Psychological Bulletin*, 106, 290-311.
- Katz, I. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly*, 24, 163-204.
- Kelley, H. H. (1955). Saliency of membership and resistance to change of group-anchored attitudes. *Human Relations*, 8, 275-289.
- Kelley, H. H., & Volkart, E. H. (1952). The resistance to change of group-anchored attitudes. *American Sociological Review*, 17, 453-465.
- Kruglanski, A. W. (1990). Motivations for judging and knowing: Implications for causal attribution. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 333-368). New York: Guilford Press.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108, 480-498.
- Mackie, D. M., & Skelly, J. J. (1994). The social cognition analysis of social influence: Contributions to the understanding of persuasion and conformity. In D. Hamilton, T. Ostrom, & P. Devine (Eds.), *Social cognition: Impact on social psychology* (pp. 259-289). New York: Academic Press.
- McGarty, C., Turner, J. C., Oakes, P. J., & Haslam, S. A. (1993). The creation of uncertainty in the influence process: The roles of stimulus information and disagreement with similar others. *European Journal of Social Psychology*, 23, 17-38.
- McGuire, W. J., & McGuire, C. V. (1992). Cognitive-versus-affective positivity asymmetries in thought systems. *European Journal of Social Psychology*, 22, 571-591.
- Moscovici, S. (1976). *Social influence and social change*. New York: Academic Press.
- Moscovici, S. (1985a). Innovation and minority influence. In S. Moscovici, G. Mugny, & E. Van Avermaet (Eds.), *Perspectives on minority influence* (pp. 9-52). Cambridge, England: Cambridge University Press.
- Moscovici, S. (1985b). Social influence and conformity. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (Vol. 2, 3rd ed., pp. 347-412). New York: Random House.
- Moscovici, S. (1994). Three concepts: Minority, conflict, and behavioral style. In S. Moscovici, A. Mucchi-Faina, & A. Maass (Eds.), *Minority influence* (pp. 233-251). Chicago: Nelson-Hall.
- Nemeth, C. (1986). Differential contributions of majority and minority influence. *Psychological Review*, 93, 23-32.
- Nemeth, C. (1994). The value of dissent. In S. Moscovici, A. Mucchi-Faina, & A. Maass (Eds.), *Minority influence* (pp. 3-15). Chicago: Nelson-Hall.
- Nemeth, C., & Chiles, C. (1988). Modelling courage: The role of dissent in fostering independence. *European Journal of Social Psychology*, 18, 275-280.
- Newcomb, T. M. (1950). *Social psychology*. New York: Dryden Press.
- Sherif, M., & Hovland, C. I. (1961). *Social judgment: Assimilation and contrast effects in communication and attitude change*. New Haven, CT: Yale University Press.
- Swann, W. B., Jr. (1990). To be adored or to be known? The interplay of enhancement and self-verification. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 408-448). New York: Guilford Press.
- Tajfel, H. (1978). *Differentiation between groups: Studies in the social psychology of intergroup relations*. London: Academic Press.
- Tajfel, H. (1982). *Social identity and intergroup relations*. Cambridge, England: Cambridge University Press.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 181-227). New York: Academic Press.
- Turner, J. C. (1991). *Social influence*. Pacific Grove, CA: Brooks/Cole.
- Vallone, R. P., Ross, L., & Lepper, M. R. (1985). The hostile media phenomenon: Biased perception and perceptions of bias in television coverage of the Beirut massacre. *Journal of Personality and Social Psychology*, 49, 577-585.
- Wood, W., Lundgren, S., Ouellette, J. A., Busceme, S., & Blackstone, T. (1994). Minority influence: A meta-analytic review of social influence processes. *Psychological Bulletin*, 115, 323-345.

Received August 17, 1995

Revision received July 7, 1996

Accepted July 30, 1996 ■