

The Self-Esteem Motive in Social Influence: Agreement With Valued Majorities and Disagreement With Derogated Minorities

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This research provides evidence for the role of self-esteem in social influence; it demonstrates that the positions taken by self-relevant social groups can threaten people's self-esteem. Participants who wished to align themselves with a majority group and who learned that the group held a counterattitudinal position suffered a reduction in self-esteem. Similarly, participants who wished to differentiate themselves from a derogated minority group and who learned that the group held attitudes similar to theirs experienced reduced self-esteem. Group attitudes, however, did not affect the self-esteem of participants who were indifferent to the group. In addition, this study demonstrates that self-relevant motivations direct the way people process influence appeals. Participants adopted interpretations of the issues that allowed them to align themselves with valued majorities and differentiate themselves from derogated minorities.

Social psychologists have long recognized that people's attitudes and interpretations of events are influenced by important reference groups. According to classic theories of social influence, people adopt the attitudes of valued groups in order to obtain valid information and to achieve a broad set of normative, or social, goals (Deutsch & Gerard, 1955; Kelley, 1952; Kelman, 1958). Normatively based influence occurs when people conform with the expectations of a group, another person, or themselves (e.g., Insko, Drenan, Solomon, Smith, & Wade, 1983). Influence that fulfills one's own or others' expectations supposedly generates positive feelings of self-esteem and approval and avoids negative feelings of anxiety, guilt, and alienation.

Self-Esteem and Influence

A number of specific influence theories have drawn on the idea that people adopt attitudes of social groups in order to achieve or maintain a positive self-view. In early social judgment research, membership in a social group was sometimes used as a proxy for ego-involvement in an issue closely related to group identity (Hovland, Harvey, & Sherif, 1957). According to more recent social identity and self-categorization theories, people align themselves with positively valued reference groups and differentiate themselves from negatively valued groups in order

to achieve a favorable self-identity (Tajfel, 1981; Turner, 1991). Supposedly, when people categorize themselves as members of a valued group, they adopt the salient attributes of that group as their own, and these include the attitudes and beliefs of typical group members. In general, the self-evaluation motives that direct attitude change in these theories can be considered manifestations of a defensive orientation, reflecting recipients' desire to achieve a valued, coherent self-identity (Chaiken, Wood, & Eagly, 1996; Wood, in press). Despite the central role of self-evaluation in these analyses, however, research has not directly documented the effects of group judgments on recipients' self-esteem.

Related research paradigms suggest the usefulness of investigating self-evaluation effects. In intergroup relations research, adopting a group identity and discriminating against out-groups in favor of the in-group has been found to increase participants' self-esteem (e.g., Lemyre & Smith, 1985; Oakes & Turner, 1980). Similarly, Whites' prejudiced responses toward ethnic group members has been found to bolster their self-esteem against negative feedback (Fein & Spencer, 1997). In addition, self-affirmation interpretations of cognitive dissonance assume that many dissonance-provoking experiences (e.g., lying to a seemingly naive research participant) pose threats to self-integrity (Aronson, Blanton, & Cooper, 1995; Steele, Spencer, & Lynch, 1993; Stone, Wiegand, Cooper, & Aronson, 1997). People reduce dissonance in such contexts by reestablishing their integrity, which, for high self-esteem people, may involve little more than bringing to mind their favorable self-views (Steele et al., 1993). In this work, self-esteem has served as a moderator of dissonance-related phenomena, and the effect of self-image threats on self-esteem has not been assessed directly.

Normative Influence and Interpretation of Attitude Issues

What are the mechanisms by which people change their attitudes in response to self-esteem concerns? Deutsch and Gerard

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(1955) did not identify any particular processes involved in normatively motivated attitude change, perhaps because of the broad variety of potentially relevant reasoning and affective responses. Self-categorization theory (Turner, 1991) has suggested that agreement with groups follows a heuristic-like process in which the group endorsement serves as a simple cue for the validity of a judgment (i.e., "we agree, it must be true"). When people's attitudes correspond to those of other group members, the shared judgment appears valid, and it enhances their confidence that the position is correct. When similar others disagree, people experience uncertainty because their position cannot be unambiguously attributed to reality, and the result might be mutual influence or recategorization of the self into another group (Turner, 1991).

We suggest that group identity can also establish an interpretive framework from which to understand issues relevant to the group. This idea echoes Asch's (1940, 1948) Gestalt analysis, in which source groups do not directly impact recipients' attitudes but instead alter recipients' understanding of the object or issue under discussion. For example, when participants were informed that Karl Marx authored the statement "Those who hold and those who are without property have ever formed two distinct classes," they were relatively unfavorable toward it (Asch, 1948), presumably because it was interpreted as communist rhetoric, inciting rebellion and revolution. However, when respondents learned the true author was John Adams, they were more favorable, presumably because the statement then appeared to be part of capitalist ideology. Thus, "positions imputed to congenial groups produce changes in the meaning of the objects of judgment" (Asch, 1940, p. 462). Comparable predictions, although in slightly different form, can be derived from other theoretical analyses within the Gestalt tradition (Festinger, 1957; Heider, 1958).

Additional evidence of shifts in interpretation to align with valued groups was provided by Allen and Wilder (1980). In this research, participants exposed to a majority of others who held a position divergent from their own modified their interpretation of the issue in a way that made sense of the others' position and, as a result, changed their attitudes to agree with the others. Interpretation and attitude shifts can be instigated, however, by derogated groups as well as by positively valued ones. Groups to which individuals do not want to belong represent negative referent groups, and they establish normative pressure to hold attitudes divergent from the group position (Newcomb, Turner, & Converse, 1965). This kind of negative pressure has been found with opinion minority groups (Wood, Lundgren, Ouellette, Busceme, & Blackstone, 1994). When exposed to appeals from opinion minorities, recipients seem loathe to align themselves with the minority and they show attenuated agreement on attitude measures directly related to the minority appeal.

Wood, Pool, Leck, and Purvis (1996) conducted a series of studies to demonstrate the effects of positive and negative group pressures in social influence. Participants were informed that a valued majority group of students at their university had expressed a position on an attitude topic that differed from the participants' own positions or were informed that a derogated minority group, such as the Ku Klux Klan, had expressed a position consistent with participants' own. Some participants

reported that the source group was highly relevant to their personal identity, whereas others indicated that it was not important to their identity. As anticipated, participants who rated the majority group (positively) self-relevant changed their attitudes to be consistent with the group position and those who rated the minority group (negatively) self-relevant changed away from the minority group position. Furthermore, this attitude change was based on shifts in participants' interpretations of the attitude issue. Participants who defined themselves in terms of the majority group adopted interpretations of the attitude issue that rendered the group position acceptable. Participants who defined themselves as not members of the minority group adopted interpretations that allowed them to reject the group position.

The Present Research

The present research was designed to demonstrate that the attitudes of important reference groups can affect recipients' self-esteem. Specifically, we examined whether disagreement with a self-relevant majority and agreement with a self-relevant minority pose a threat to the favorability of recipients' self-images and reduce their self-esteem.

In the experiment, participants indicated their attitudes on an issue, learned the attitudes supposedly held by a social group, and then rated their self-esteem and their interpretation of the issue. For some participants, the social group represented a majority, either students at their university or residents of the state of Texas, and the attitudes held by the group differed from participants' own. For other participants, the social group was a minority, either the Gay, Lesbian, and Bisexual Aggies (a student group) or the Radical Lesbian Feminists, and the position advocated was similar to participants' own. In general, we anticipated that the disagreeing majority and the agreeing minority groups would threaten the self-concepts and lower the self-esteem of participants who defined themselves in terms of the groups.

A secondary focus of the study was to assess whether reinterpretations of the meaning of attitude statements can mitigate threats to self-esteem. We anticipated that people who have an initial opportunity to reinterpret the issue in a way that supports their own attitude will not feel threatened by the source group position and will not experience a reduction in self-esteem. To test this hypothesis, we asked some participants to complete the self-esteem measure first and some to complete the interpretation measure first. The analysis on self-esteem was expected to reveal an interaction between order of assessment and the self-relevance of the source group. Participants rating the group highly relevant who did not reinterpret the issue should show a reduction in self-esteem, whereas self-esteem should not be affected for those who had the opportunity to reinterpret the issue or for those rating the group low in self-relevance.

The predictions for rated interpretation essentially replicate those of prior research (Wood et al., 1996). When participants judge the source group highly self-relevant, they should shift their interpretation and align themselves with valued majorities and differentiate themselves from derogated minorities. This suggests that the analysis on participants' rated interpretation should yield a main effect for self-relevance. In addition, however, it seemed possible that the order in which participants

completed the self-esteem and interpretation measures might affect rated interpretation. Participants who complete the (lengthy) set of questionnaires that included the self-esteem measure before rating their interpretations may no longer experience strong normative pressure; their defensive motivation may simply dissipate over time (see Elkin & Leippe, 1986). It is also possible that completing the self-esteem measure would allow participants to reaffirm a favorable self-concept and thus would provide an alternate route for defensive pressure reduction (Aronson, Blanton, & Cooper, 1995). If so, the analysis on interpretation should yield an interaction between self-relevance of group and order of measures, such that high-relevance participants who complete the self-esteem measures first would demonstrate minimal interpretation shift whereas those who complete the interpretation measures first would demonstrate a greater shift. Low-relevance participants would be unlikely to show shifts in interpretation under any conditions.

To provide additional evidence that source group advocacy affects recipients' personal self-evaluations and not some other component of the self-concept (e.g., public embarrassment), we manipulated whether participants gave their attitudes publicly or privately. Because personal threats to self-esteem are likely to be comparable in both public and private contexts, this aspect of attitude expression should have minimal effect on participants' judgments.

Participants' attitudes toward the opinion issue were measured at two time points, prior to and after the threatening appeal. Because participants gave their initial opinions on the issue prior to the threat, and their initial opinions were shown to them

again as part of the experimental procedure (see below), we expected attitudes to remain stable across conditions.

Finally, given that both majority and minority sources can exert normative pressures, we did not expect any difference between these types of sources except for the direction of impact. Valued majority groups should yield positive pressures to align and derogated minorities should yield negative pressures to differentiate.

Preliminary Experiment

Two of the social groups and attitude issues for the present research were adapted from Wood et al. (1996), and, to ensure the generality of our findings, two new groups and issues were developed. Because the experimental design of the main study did not allow us to examine attitude change, a preliminary experiment was necessary to demonstrate that participants were motivated to agree with the new majority group and to disagree with the new minority. Wood et al. already demonstrated group influence for the other two groups and issues. The source groups and attitude issues used in the main experiment are given in Table 1.

In the preliminary experiment, 85 participants read and gave their interpretations of the ostensible results of an earlier survey. Approximately half were told that Texas residents (majority group) endorsed the statement "Economic prosperity in Texas is dependent on Mexico," and the other half were informed that the Gay, Lesbian, and Bisexual Aggies (minority group) endorsed the statement "All Americans should be accorded ba-

Table 1
Group Identity, Attitude Issues, Interpretations of Issues, and Advocated Positions

Group	Issue	Interpretations supporting participants' attitudes	Interpretations opposing participants' attitudes	Participants' initial attitudes		
				<i>M</i>	<i>SD</i>	<i>n</i>
Majority groups						
Texas A&M students	I would not approve of a friend who took illegal drugs. (9)	Would continue to interact with the person but personally not condone the habit. (1)	Would take extreme measures such as ending the friendship or turning the person in to the authorities. (9)	5.42	2.41	76
Residents of Texas	Economic prosperity in Texas is dependent on Mexico. (9)	Exploiting illegal immigrants and migrant workers from Mexico. (1)	Trade agreements between Mexico and the US, such as NAFTA. (9)	5.01	1.84	69
Minority groups						
Gay, Lesbian, and Bisexual Aggies	All Americans should be accorded basic rights and privileges. (3)	Citizens are guaranteed a set of basic freedoms that allow them to live their lives as they see fit. (1)	Although people have a basic set of rights, control of some personal freedoms may be necessary to protect society. (9)	2.16	1.46	67
Radical Lesbian Feminists	Sex of employees should be considered in job promotion decisions. (3)	Discriminate against women (1)	Sex of employee is only relevant for jobs that require physical skills such as strength. (9)	3.33	2.25	71

Note. Numbers in parentheses in the issue column represent the position advocated by the source group on the 11-point attitude scale, on which participants' initial positions were discrepant from the majority and congruent with the minority. Numbers in parentheses under the interpretation columns represent scale anchors on the 9-point interpretation scales. Participants' initial attitudes were assessed on an 11-point agreement scale.

sic rights and privileges." The majority group's position opposed the attitude of most students (identified through separate pretesting), and the minority position was similar to that of most students. Participants gave their reactions to the survey and, at the end of the study, rated the self-relevance of the source group by indicating how important it was for them to be similar to the majority source and how important it was to be different from the minority source (see self-relevance questionnaire below).

A median split on the source relevance ratings categorized participants as those who rated the group highly self-relevant versus those who rated it not relevant. The data were analyzed with a Source Relevance (high vs. low) \times Group-Position (majority advocating counterattitudinal position vs. minority advocating proattitudinal position) analysis of variance (ANOVA) design.

Interpretation of the Attitude Statements

After reading the source group position on the attitude issue, participants rated their own interpretation of the issue on 9-point scales, which were constructed (on the basis of separate pretesting) such that lower numbers represented interpretations supportive of participants' initial opinions and higher numbers represented interpretations that supported an opposing position. For the majority group, the phrase "dependent on Mexico" was rated on a scale ranging from 1 (*exploiting illegal immigrants and migrant workers from Mexico*) to 9 (*trade agreements between Mexico and the US, such as NAFTA*). For the minority, the phrase "basic rights and privileges" was rated on a scale ranging from 1 (*citizens are guaranteed a set of basic freedoms that allow them to live their lives as they see fit*) to 9 (*although people have a basic set of rights, control of some personal freedoms may be necessary to protect society*). Thus, higher numbers reflect an interpretation that is congenial to the majority's counterattitudinal position and that is incongruent with the minority's proattitudinal position.

As predicted, analyses on the interpretation ratings yielded a main effect for source relevance, $F(1, 81) = 22.81, p < .001$. Participants who rated the source as highly self-relevant were more likely to adopt an interpretation of the attitude statement that supported a counterattitudinal position ($M = 6.95$) than were participants who rated the source low in self-relevance ($M = 4.58$).

Participants' Attitudes

After rating interpretations, participants indicated their own attitudes on an 11-point scale, with anchors ranging from *strongly agree* to *strongly disagree*. They also rated the attitude statement on three 9-point semantic differential items with scale labels of *fair-unfair*, *good-bad*, and *positive-negative*. The 9-point scales were converted to 11 points, and responses to all scales were combined into an attitude index ($\alpha s = .78$ and $.82$, for majority and minority issues, respectively).

As predicted, analyses on attitudes revealed that participants rating the source high in self-relevance changed their attitudes toward the majority and away from the minority ($M = 5.98$) more than participants who rated the source low in self-rele-

vance ($M = 5.00$), $F(1, 81) = 4.56, p < .05$. In sum, then, the preliminary experiment replicated earlier research by Wood et al. (1996) and demonstrated that participants adopt interpretations of issues that allow them to align their attitudes with valued majority source groups and to differentiate their attitudes from derogated minorities.

Main Experiment

Method

Participants

Three hundred ten Texas A&M University students participated as part of a requirement for their introductory psychology class. Because 27 of these students did not attend to the information about the source group or message position (see the description of the recall measure given below), they were not included in the reported analyses. Approximately equal numbers were deleted from each condition, yielding a final sample of 283 participants.

Procedure

During a mass prescreening, participants completed the self-esteem scale (described below). Several weeks later, participants were recruited in groups of approximately 5 for an ostensibly unrelated experiment. They were seated individually at microcomputer terminals linked to a main server. All information and measures were presented using the computer. The experimental condition at each terminal was selected randomly, with the exception that each session was designated either public or private in order to maintain the cover story (described below).

Before receiving the group opinion, participants rated, by clicking the appropriate number on the scale displayed on the screen, the self-relevance of a number of social groups including Greenpeace, the Supreme Court, and all of the groups used in the study (see Table 1). They also rated their initial attitudes on the message topic (see the description of the attitude scale below).

Participants believed that they were to help the experimenters interpret the findings of an earlier attitude survey. Group identity was manipulated by means of the respondents in the earlier survey, who were described as Texas A&M students; residents of the state of Texas; members of the Gay, Lesbian, and Bisexual Aggies; or members of the Radical Lesbian Feminists (see Table 1). Participants next were informed of the group attitudes. Majority group attitudes were on the opposite side of the scale midpoint from the mean attitudes of pretest participants, and minority group attitudes were comparable to those of pretest participants (see Table 1).

To ensure that participants attended to the information, the attitude issue was then displayed on the screen and participants were asked to recall the group's position by clicking the appropriate number on a rating scale. Next, they typed the group's name into an empty box. For each question, participants could click an icon labeled, "I don't remember," which cued the program to re-present the group position or the group identity. As noted above, the 27 participants who failed to complete these checks appropriately were deleted from the analysis.

In the public condition, participants expected to see the attitudes of the other participants in the room, supposedly to get an idea of how people other than the survey group felt about the issue. Each public attitude participant believed that he or she had been randomly selected to be the first person in the room to give his or her attitude. We conveyed the attitude position information as follows. The surveyed group's name and position were displayed at the top of the screen, and then the participant's name and attitude rating were added, next to "No. 1." After a brief delay, the computer reported that the ratings of the first person

(i.e., the participant) were being distributed to the other machines on the network, and the cursor began to spin as if the computer were processing. At this point, the computer reported that Person No. 2's information was being received from the network. For approximately 15 s, the cursor spun as if the computer were working, then the cursor suddenly stopped, the screen locked up, the computer beeped twice, and a large error message appeared. The computer had supposedly experienced a "network error," and no other participants' responses were displayed. The experimenter noted the problem, commented aloud that only the first participant's rating had been displayed, and on failing to restart the program, suggested that participants continue the rating portion of the program without actually viewing the remaining participants' attitudes.

In the private condition, participants' attitudes on the message topic were displayed with those of the surveyed group. This was supposedly done in order to summarize the material presented. No space was provided for any other opinions, and no mention was made of sharing rating information with other participants. The computer then relayed the error message as in the public condition, and the participants continued with the rating portion of the program.

All participants then completed the self-esteem and interpretation scales. The order of these measures was varied so that half of the participants completed the self-esteem measures first and half completed the interpretation scales and rated their attitudes first. Finally, participants responded to a check on the success of the public versus private manipulation and then were debriefed.

Questionnaire Measures

Self-relevance of source. For majority groups, participants rated on 11-point scales (a) whether they usually agreed with the attitudes and values of most members of the group (with scale anchors *almost always agree* and *almost always disagree*), (b) how important it was that they personify the values and attitudes of the group (with scale anchors *extremely important* and *extremely unimportant*), and (c) the extent to which being similar to the members of the group was an important part of who they are (with scale anchors *extremely important* and *extremely unimportant*). A mean score was calculated across the three items ($\alpha = .73$ and $.71$ for the groups, Texas A&M students and Texas residents, respectively). Median splits on the distributions of scores yielded an upper portion representing participants whose identity was positively tied to the majority group ($M = 8.55$, $SD = 1.01$, $n = 43$, and $M = 8.04$, $SD = .83$, $n = 31$, for A&M students and Texas residents, respectively), and a lower portion of participants who were relatively indifferent to the group ($M = 5.56$, $SD = 1.50$, $n = 33$, and $M = 5.08$, $SD = 1.34$, $n = 38$, for A&M students and Texas residents, respectively).

The self-relevance scale for minority groups was designed to mirror that used with majorities. Participants rated their agreement or disagreement with the attitudes and values of most group members, how important it was that they reject the values and attitudes of the group, and the extent to which being dissimilar to the members of the group was an important part of who they are. A mean score was calculated across the three items ($\alpha = .82$ and $.79$ for Radical Lesbian Feminists and Gay, Lesbian, and Bisexual Aggies, respectively). The median split on each group rating yielded an upper portion representing participants who rejected the minority group ($M = 7.49$, $SD = 1.50$, $n = 37$, and $M = 9.05$, $SD = 1.39$, $n = 36$, for the groups, Gay, Lesbian, and Bisexual Aggies and Radical Lesbian Feminists, respectively), and a lower portion who were relatively indifferent to the group ($M = 3.78$, $SD = 1.28$, $n = 30$, and $M = 4.65$, $SD = 1.45$, $n = 35$, for Gay, Lesbian, and Bisexual Aggies and Radical Lesbian Feminists, respectively).

Interpretations. On a 9-point scale, participants rated their personal interpretations of the attitude issue. The scale anchors represented the two opposing interpretations that had been identified for each issue in

pretesting (see Table 1). For each set of interpretations, lower numbers reflect a common interpretation supporting an attitude position congruent with participants' initial opinions. Higher numbers represent a plausible, but infrequently generated interpretation supporting a position opposed to participants' initial attitudes.

Rosenberg (1965) Self-Esteem Scale. This 10-item scale measures global self-esteem. Participants marked the number on the questionnaire scale (prescreening session) or clicked the number on the scale displayed on the computer screen (experimental session) that best represented how they felt. Scale anchors ranged from 0 (*strongly disagree*) to 9 (*strongly agree*), and scale reliabilities were acceptable ($\alpha = .89$ for both prescreening and experimental sessions).

Attitudes. On an 11-point scale ranging from *strongly disagree* to *strongly agree*, 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*, which we then converted to 11-point scales. Responses to these four scales proved to be related and, for each issue, were combined into an aggregate attitude index (across the four issues, coefficient alphas ranged from $.73$ to $.92$ for preappeal and from $.83$ to $.92$ for postappeal assessments). Attitude scales were oriented so that higher numbers represent movement toward the majority source or movement away from the minority source.

Check on public versus private manipulation. On a 5-point scale, participants rated whether other students in the room saw their opinion (with scale anchors of *definitely no* and *definitely yes*).

Results

Preliminary analyses revealed that initial levels of self-esteem were uncorrelated with attitudes (mean r across issues = $-.08$) and with the continuous measures of self-relevance (mean r across issues = $.06$). Self-relevance of the source group also proved to be uncorrelated with attitudes (mean $r = .11$).¹

The data were analyzed with a Self-Relevance of Group (high vs. low) \times Question Order (interpretation and attitude scale administered first vs. self-esteem measure first) \times Group-Position (majority advocating counterattitudinal position vs. minority advocating proattitudinal position) \times Attitude Statement (public vs. private) ANOVA design.²

Manipulation Check

As anticipated, participants in the public condition believed that it was more likely that other students saw their opinion on

¹ The mean correlations reported were first computed separately for each group-issue, converted to z scores, aggregated, and then converted back into correlations. The disaggregated correlations between initial self-esteem and self-relevance of the source were $.23$, $.001$, $-.02$, and $-.11$ for the two majority groups and the two minorities, respectively. Correlations between initial self-esteem and attitude were $-.06$, $-.13$, $.04$, and $-.17$ for the majorities and minorities, respectively. Correlations between self-relevance of the source and attitude were $-.05$, $-.11$, $.14$, and $.42$ for the majorities and minorities, respectively.

² Our predictions applied primarily to participants rating the source group high in self-relevance, and we had no clear predictions for the heterogeneous category of participants who rated the source group as not relevant. Because we did not necessarily expect self-relevance to be linearly related to our dependent measures, it served as a categorical rather than continuous predictor in the analysis. Indeed, in regression models using self-relevance as a continuous variable, the prediction of self-esteem was identical to that reported in the text, although in the prediction of interpretation, self-relevance was not significant.

Table 2
Mean Personal Interpretations and Mean Final Self-Esteem on the Rosenberg (1965) Scale Adjusted for Initial Self-Esteem

Questionnaire order	Source judged not self-relevant			Source judged self-relevant		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Self-esteem						
Interpretation measure first	7.11	0.74	63	7.26	0.74	78
Self-esteem measure first	7.30	0.74	73	7.05	0.73	69
Personal interpretations						
Interpretation measure first	4.40	2.70	63	5.44	2.60	78
Self-esteem measure first	5.15	2.72	73	4.74	2.47	69

Note. For self-esteem, higher numbers represent higher final self-esteem, adjusted on the basis of an analysis of covariance with initial self-esteem as the covariate. Self-esteem was measured on a 10-point scale (0 = *strongly disagree*, 9 = *strongly agree*). For personal interpretations, higher numbers represent greater endorsement of an interpretation that supports a position different from the participant's original position (i.e., movement toward the majority and movement away from the minority source groups). Interpretations were given on a 9-point scale on which higher numbers reflect a shift toward an interpretation opposing participants' initial attitude positions.

the attitude issue ($M = 2.87$) than did participants in the private condition ($M = 1.34$), $F(1, 267) = 96.89$, $p < .001$.³ The unexpected interaction between questionnaire order and source relevance did not compromise interpretation of the predicted effect, $F(1, 267) = 7.87$, $p < .05$ ($M_s = 2.17, 2.12, 2.03$, and 2.23 , for low self-relevance/interpretation first, low relevance/self-esteem first, high relevance/interpretation first, and high relevance/self-esteem first, respectively).

Self-Esteem

Analyses were conducted on participants' self-esteem ratings during the experiment, using initial self-esteem as a covariate. The anticipated interaction between self-relevance of the group and questionnaire order was significant, $F(1, 266) = 4.98$, $p < .05$ (see Table 2). As we expected, participants whose self-identity was closely tied to the source group experienced lowered self-esteem, except when they were able to reinterpret the meaning of the attitude statement. Specifically, simple effects decomposition of the interaction revealed that when self-esteem was assessed prior to providing participants with a structured opportunity to reinterpret the attitude statement, high self-relevance participants felt significantly worse than low self-relevance participants, $F(1, 266) = 4.03$, $p < .05$. However, when participants' interpretation was assessed prior to self-esteem, those who rated the group highly self-relevant did not differ from those who rated the group low in self-relevance, $F(1, 266) = 1.43$, *ns*.

Interpretation of Attitude Statements

Interpretation shifts emerged when participants who rated the group self-relevant were given the opportunity to reinterpret the attitude statement prior to indicating self-esteem. The interaction between self-relevance of the group and questionnaire order was significant, $F(1, 267) = 6.23$, $p < .05$ (see Table 2). Simple

effects decomposition revealed that, when able to reinterpret the attitude issue prior to rating self-esteem, participants for whom the group was highly self-relevant shifted their interpretation more than participants for whom the group was low in self-relevance, $F(1, 267) = 5.49$, $p < .05$. When participants' self-esteem was assessed prior to interpretation, however, no difference between high and low self-relevance participants was found ($F < 1$). The ANOVA also yielded an unexpected interaction between source relevance and group-position, $F(1, 267) = 6.97$, $p < .01$, which was not especially interpretable and did not modify the predicted effect.

Effects of Initial Self-Esteem

To evaluate whether our findings held for participants high as well as low in initial self-esteem, we performed a median split on initial self-esteem ratings ($M_s = 6.03$ and 8.15 , for low and high groups, respectively), and the ANOVA was recomputed including this factor. The dependent measure was self-esteem change scores, formed by subtracting the raw scores of final self-esteem from initial self-esteem. A significant effect emerged for initial self-esteem that corresponded to regression toward the mean, $F(1, 251) = 37.05$, $p < .001$. Thus, participants initially

³ Unfortunately, the manipulation check was not obtained until after participants had completed almost 20 min of questionnaires. Some participants appear to have become confused about which attitude judgment was referenced in the manipulation check. All final attitudes were given privately, and some participants in the "public" condition indicated that they had given their attitudes privately. In order to test more definitively the effects of the public versus private manipulation, we removed the 55 participants who, according to their answers on the manipulation check item, either did not believe that their attitudes were public in the public condition ($n = 54$) or did not believe that their attitudes were private in the private condition ($n = 1$). Reanalysis of this more limited sample revealed almost identical results to those reported in the text.

low in self-esteem showed positive change ($M = .35$), and those high in self-esteem showed a slight negative change ($M = -.19$). It is important to note that initial self-esteem did not interact with any of the factors in our design, and the interaction between questionnaire order and self-relevance remained significant, $F(1, 251) = 7.07, p < .01$.

To examine whether initial self-esteem affected rated interpretation, we included the categorical factor of initial self-esteem in the analysis on interpretation. Again, initial self-esteem did not interact with the other experimental variations and the expected interaction between questionnaire order and self-relevance remained significant, $F(1, 251) = 5.09, p < .05$. Thus, the findings hold for both high and low self-esteem participants.

Attitudes

Because participants rated their attitudes at the beginning of the experimental session and these ratings were shown to them again as part of the experimental procedure, attitudes were expected to be stable across conditions. Indeed, analyses on attitude change yielded only a marginal effect for the public versus private manipulation, reflecting that participants in the public condition became marginally more favorable in their attitude ratings ($M_{\text{change}} = .47$) than participants whose ratings were private ($M_{\text{change}} = .24$), $F(1, 233) = 2.97, p = .09$.⁴

Discussion

This study provides insight into the self-related motivations that are involved in social influence. Specifically, it demonstrates that the attitude positions of groups that are important to people's self-definitions can threaten their self-esteem. Although ego protection and enhancement have been central components of motivational accounts of group influence since the 1950s (e.g., Deutsch & Gerard, 1955; Kelman, 1958), the present research provides some of the first direct evidence that recipients' self-esteem fluctuates in social influence contexts as a function of the positions endorsed by social groups.

Participants in the study learned that a valued majority group advocated a position on an attitude topic that conflicted with their own, or that a derogated minority group held a position that was congenial with their own. When participants rated their self-esteem immediately after learning the group position, their self-evaluation was lowered. The threat from the group's attitude was evident, however, only among participants for whom the group was highly self-relevant. Participants who were relatively indifferent to the majority or minority group were minimally affected by the group's attitude. It thus appears that groups establish self-esteem linked motivations to the extent that people identify with the group.

Additional evidence that the groups' attitude positions established motivations related to self-esteem was provided by the continuity of findings across the manipulation of public versus private attitude expression. In the public condition, participants believed that their attitudes, which were divergent from the majority group or congenial with the minority group, were displayed along with the group's position on the computer monitors of all participants in their session. In the private condition, participants saw the display of their attitude and the group's attitude

on the computer monitor, but no mention was made of other participants seeing this information. Because self-esteem and interpretation effects were comparable across public and private attitude expression, it appears that participants experienced a personal desire to differentiate themselves from or to align themselves with self-defining groups, rather than a concern with public self-presentation associated with the surveillance of others.

Defensively Based Reinterpretation

In addition to demonstrating that group attitudes can threaten recipients' self-esteem, the study suggests that self-relevant motivations direct information processing. Participants demonstrated interpretation shifts that would enable them to align themselves with valued majorities and differentiate themselves from derogated minorities. For example, in one condition of the study, participants who valued the majority group, Texas residents, learned that, unlike themselves, the group believed that "economic prosperity in Texas is dependent on Mexico." These participants shifted their interpretation of the phrase *dependent on Mexico*, so that instead of meaning exploitation of immigrants and migrant workers it meant reliance on trade agreements. By shifting their interpretations of the issue, participants who rated the majority group highly self-relevant were able to align themselves with the group's perspective.

Participants who received the minority group position also demonstrated interpretation shifts when the source group was self-relevant. For example, when participants who rated Gay, Lesbian, and Bisexual Aggies highly self-relevant learned that they and the group held similar attitudes on the issue "all Americans should be accorded basic rights and privileges," participants shifted their interpretation of the phrase *basic rights and privileges* from one of unrestricted freedom and self-determination to an interpretation that allowed for control over some behaviors in order to protect society. By shifting their interpretations, participants for whom not being a member of the minority group was an important part of their self-definitions could distance themselves from the group.

The present research also demonstrated that meaning shifts are motivated by self-definitional pressures. Specifically, by successfully reinterpreting the issue, participants relieved the threat to their self-esteem posed by the group's attitude, and they did not report a lowered self-evaluation when completing the self-esteem scales. Thus, the analysis on self-esteem revealed an interaction between self-relevance of the source group and the order in which participants completed the interpretation and self-esteem scales: High self-relevance participants who completed the interpretation scale before the self-esteem measures did not show a significant reduction in self-esteem. The shift in interpretation appeared to be sufficient to realign participants' identities to be similar to valued majorities and different from

⁴ To ensure that participants' attitudes were initially comparable across experimental conditions, we conducted analyses on initial opinions. The only significant finding to emerge was a main effect for group-issue, suggesting that participants were more favorable initially to the majority groups-issues ($M = 5.23$) than to minority groups-issues ($M = 2.76$), $F(1, 267) = 100.98, p < .001$.

derogated minorities. Only participants who judged the group self-relevant but did not reinterpret the issue before completing the self-esteem measure experienced reduced self-esteem.

Because of the design of the main experiment, in which participants' attitudes were solicited several times and participants were reminded of their initial positions, minimal attitude change occurred. The preliminary experiment was important, then, in demonstrating that interpretation shifts are integral to attitude change (see also Allen & Wilder, 1980; Wood et al., 1996). That is, reinterpretations allowed recipients to accept otherwise objectionable positions and to reject otherwise congenial ones.

Interpretation ratings suggest that several alternate reactions were available to participants to alleviate the normative pressures instigated by self-relevant groups. Participants who judged the source group self-relevant and completed the self-esteem measure prior to rating their interpretations evidenced relatively little reinterpretation, suggesting that they were no longer experiencing self-evaluative pressures. One explanation is that the group-induced defensive pressure simply dissipated after the approximately 15 min required to complete the series of questionnaires in which the self-esteem measure was embedded. Indeed, for other types of arousal, such as the dissonance generated in counterattitudinal advocacy paradigms, this dissipation has been documented over periods of as little as 4 min, returning to baseline levels in as little as 7 min (Elkin & Leippe, 1986). Alternatively, the act of completing the self-esteem measure itself might have reduced interpretation shifts. If participants responded to the self-esteem measure in a way that affirmed a favorable self-evaluation, they would have reestablished their self-integrity, rendering a shift in interpretation unnecessary (Aronson, Blanton, & Cooper, 1995; Steele et al., 1993). This self-affirmation-type explanation seems unlikely, however, given that high-relevance participants who completed the self-esteem measure first experienced a decrease in self-evaluation, rather than the increase that would be expected if the self-esteem scale bolstered and reaffirmed their self-concepts.

In everyday life, reinterpretation of attitude issues is likely to be a relatively low-effort way to reduce normative pressures instigated by groups. For issues that are linked to particular group identities, groups actively proselytize their favored interpretations (e.g., does abortion represent murder or a woman's right to choose?). The ready availability of the interpretations favored by specific groups should make it relatively easy for people to adopt interpretations that yield a desired social identity. Other simple strategies to reduce self-definitional threat involve simply misrecalling the position taken by the group, distorting it to be more congenial than it actually is (Pool, Wood, & Leck, 1997).

Finally, we note that participants judging the source groups to be of low self-relevance generated few interpretable responses. It was central to our predictions that high self-relevance participants would experience greater threat from source group advocacy than would low self-relevance participants, and we had not expected any systematic response from low self-relevance participants to the source group positions. Low self-relevance participants are a heterogeneous set, most of whom expressed indifference to their source group, but some disliked the majority or liked the minority, and others may just have been uncertain about their reactions to the group. It is to be

expected, then, that such a heterogeneous classification would yield variable self-esteem and interpretation ratings.

Group Identity and Normative Pressure

The present research followed the basic paradigm of social influence experiments and used majority source groups that were favorably evaluated by participants and minority groups that were viewed negatively (see Wood et al., 1994). Although this may often be the case when recipients are majority group members who wish to maintain a favorable self-image by espousing consensually supported positions, our analysis can also explain attitude shifts of minority group members who value their social group and experience normative pressure to adopt the (for them) positively valued minority positions. They should function much like participants in the majority group conditions in the present research.

Considering the positive and negative normative pressures exerted by source groups thus allows researchers to account for the impact of minorities and majorities within a single theoretical framework. Indeed, the central predictions for self-esteem and interpretation held across all of the sources and issues in the experiment; group type did not interact with self-relevance of source or with order of completing the self-esteem and interpretation questionnaires. It thus appears that the motive to align oneself with valued majorities is the mirror image of the motive to differentiate oneself from derogated minorities. As we have speculated elsewhere (Wood et al., 1996), however, self-definition in terms of who one is (e.g., "I am a majority group member") will not always have the same significance as definition in terms of who one is not ("I am not a minority group member"). Knowledge of the attributes one does possess may often be more important to the self-concept than attributes one lacks (McGuire & McGuire, 1996). Thus, positive reference groups may be more important to people's identity and may instigate stronger normative pressures directing interpretations and attitudes than negative reference groups.

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