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Suzanne Swan and Robert S. Wyer, Jr.
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What is This?
Gender Stereotypes and Social Identity: How Being in the Minority Affects Judgments of Self and Others

Suzanne Swan
Yale University

Robert S. Wyer Jr.
University of Illinois at Urbana–Champaign

Men and women participated in groups in which they were either the only member of their sex or in the majority. Participants rated themselves along gender-stereotypic traits and then made judgments of a gender-ambiguous target person. Results for both measures supported social-identity theory, suggesting that men's consciousness of their sex made them aware of their high social status in relation to women and activated concepts about themselves that confirmed their membership in this high-status category. In contrast, women's consciousness of their sex made them aware of their low social status relative to men and motivated them to view themselves in terms of concepts that distinguished them from other members of this low-status category.

The effects of minority status on social perceptions are of both theoretical and practical importance. This is particularly true in the workplace (Yoder, 1991). For example, Kanter (1977) found that in a male-dominated sales company, coworkers and clients paid more attention to female employees' stereotypically feminine, job-irrelevant attributes (e.g., dress and appearance) than to their performance-related behavior. Kanter's observations suggest that when individuals are in the minority in a social situation, their sex is particularly salient. Consequently, their behavior is more likely to be interpreted in terms of gender stereotypes than it otherwise would.

However, people's status in a social group\(^1\) can affect not only how they are perceived by others but also how they perceive themselves and the behavior they actually manifest. The sex distribution of a group has demonstrably influenced the content and style of communications among group members (Aries, 1976; Piliavin & Martin, 1978). It can also influence persons' spontaneous de-

scriptions of themselves as male or female (Abrams, Thomas, & Hogg, 1990; McGuire, McGuire, & Winton, 1979), self-perceptions along other dimensions (Crocker & McGraw, 1984), and sex-role-related behavior (Johnson & Schulman, 1989). Even when group members do not interact, the sex composition of a group can influence members' awareness of their sex-role identity (Cota & Dion, 1986), their use of sex-stereotypic traits to describe themselves (Higgins & King, 1981; Ruble & Higgins, 1976), and their endorsement of traditional sex-role attitudes (Abrams et al., 1990; Shomer & Centers, 1970).

The cognitive processes that underlie self-descriptions can have other, more pervasive influences. Whether they endorse them or not, people are aware of the traits that are stereotypically associated with men and women (Bem, 1981). Therefore, if being in the numerical minority with respect to sex increases an individual's consciousness of his or her sex, it might activate attributes that are stereotypically associated with sex-role categories, and these attributes could then be used as a basis.

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for self-judgments. However, once the concepts associated with these attributes have been made accessible in memory, they could also affect the interpretation of other persons' behavior and, therefore, judgments of these persons as well (Higgins & King, 1981; Wyer & Srull, 1989).

The present research investigated these possibilities. Participants took part in an experiment in a group composed either of (a) one man and several women, (b) one woman and several men, or (c) an equal number of men and women. They first made judgments of a hypothetical target person whose sex was unspecified on the basis of behavior descriptions that were gender ambiguous. Then, they judged themselves with respect to these same attributes. We expected the distribution of men and women in a group to affect participants' consciousness of their identity as male or female and that concepts activated by this consciousness would influence not only their self-judgments but also their reactions to information about the target person. Three alternative hypotheses concerning the nature of these effects are elaborated below.

THEORETICAL BACKGROUND

According to McGuire's (1984; McGuire & McGuire, 1981) distinctiveness theory, people tend to notice characteristics that distinguish themselves from others in a social setting. Thus, in responding to an open-ended request to "tell me about yourself," they are more likely to mention a characteristic (sex, age, race, etc.) when they differ from the majority of others with respect to this characteristic than when they are similar. This is true regardless of whether the distinctiveness occurs in the home or school environment (McGuire & McGuire, 1981; McGuire, McGuire, Child, & Fujioka, 1978; McGuire et al., 1979; McGuire & Padawer-Singer, 1976) or in the immediate social situation in which persons find themselves (Abrams et al., 1990; Cota & Dion, 1986). In the present research, we were concerned with the latter, situation-specific distinctiveness.2

Based on distinctiveness theory, we assumed that participants would be more conscious of their identity as a man or woman when they were in the numerical minority in the experimental situation than when they were not. Therefore, attributes that participants associated with being male or female were predicted to have a greater influence on their judgments in the former case. However, the processes that give rise to this influence, and thus the effects that occur, could be of three different types.

1. Self-categorization hypothesis. Self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) suggests that individuals tend to classify themselves and others in terms of in-groups and out-groups (e.g., men vs. women, different racial categories, different schools, etc.; see also Hogg & Abrams, 1988, for a derivation of this prediction from social-identity theory). Self-categorization leads to viewing the self (or another person) less as a unique individual and more as a prototypical group member. Thus, when persons' sex-category membership is salient to them, the attributes generally associated with their gender may become more salient to their self-image. Consistent with this possibility, Hogg and Turner (1987) found that persons rated themselves as more stereotypic of their sex when they interacted in mixed-sex groups (in which gender was relatively salient) than when they interacted in same-sex groups (in which gender was not salient). Evidence that persons whose sex-category membership is salient to them report greater acceptance of traditional sex-role attitudes (Abrams et al., 1990) also provides indirect support for this hypothesis.

2. Stereotype-avoidance hypothesis. This hypothesis also assumes that consciousness of one's sex activates attributes that are stereotypically associated with it. However, it further assumes that people consider it socially undesirable to present themselves in a stereotypic fashion and, therefore, are less likely to assign themselves gender-stereotypic attributes than they might if their sex were not salient to them. Evidence that persons who become conscious of possible sex bias overcompensate for this bias in judging others was obtained by Sherman and Gorkin (1980). Making persons conscious of their identity as males or females could increase subjects' awareness of the possibility of bias and, therefore, could have similar effects. An unpublished study by Higgins and Smith (cited in Higgins & King, 1981) suggests this possibility. In this study, participants tended to describe themselves using attributes that were less gender stereotypic when their sex was in the minority in a group than when it was in the majority.

3. Social-identity hypothesis. Social-identity theory states that membership in a social category (e.g., male/female, Black/White, etc.) comprises an important element of the self-concept (Tajfel & Turner, 1986; for elaboration and refinements, see Ellemers, 1993; Hogg, 1996a, 1996b; Hogg & Abrams, 1988). People have a repertoire of group memberships that vary in terms of their salience the self-concept (Hogg, 1996b). A critical difference between social-identity theory and self-categorization theory (on which the first hypothesis was based) is that social-identity theory focuses more on status differences between groups and the implications of these status differences for the self-concept. Social-identity theory also emphasizes subjective belief structures that people have regarding the stability and
legitimacy of status differences between their in-group and out-groups and the possibility of social mobility—that is, leaving a low-status group and joining a high-status one (Ellemers, 1993; Hogg, 1996b; Tajfel & Turner, 1986). One implication of social-identity theory is that if members of a low-status group perceive themselves to be upwardly mobile, they may describe themselves in terms of attributes that are consistent with those of a higher status group to which they aspire rather than attributes associated with groups to which they presently belong.

In American culture (indeed, in virtually all cultures), men are of relatively higher status than women (Bem, 1994; Williams & Giles, 1978). Thus, men whose sex is made salient to them are likely to identify with their own sex-defined social group, and this identification will be reflected in descriptions of themselves as having masculine attributes. On the other hand, women whose sex is made salient to them may perceive themselves to be of low status. If, however, college women perceive that this status can potentially be improved (i.e., that they are upwardly mobile), they may reject characteristics associated with their present (low-status) membership group and describe themselves as having attributes of a group with the status to which they aspire. These considerations suggest that both men and women will describe themselves as more stereotypically masculine and less stereotypically feminine when their sex-category membership is made salient (and, therefore, social identity concerns are activated) than when it is not.

Some evidence consistent with this possibility was obtained by Hogg (1985), who found that men in mixed-sex groups accentuated their possession of masculine attributes by speaking in a more masculine style than did men in same-sex dyads. On the other hand, women in mixed-sex groups (members of the low-status category) disengaged from their social category by also speaking in a more masculine manner in mixed-sex groups as compared with women in same-sex dyads (see also Piliavin & Martin, 1978). Therefore, the social-identity hypothesis predicts that in a situation in which participants’ sex is called to their attention, men should accentuate their possession of masculine traits that differentiate them from the subordinate out-group (women). However, women should also accentuate their possession of masculine traits, thus psychologically exiting from their membership in the subordinate in-group and achieving a more favorable social identity.

In summary, the self-categorization hypothesis predicts that men will describe themselves as more masculine and women will describe themselves as more feminine when their sex is in the minority than when it is in the majority. The stereotype-avoidance hypothesis predicts precisely the opposite effects of minority and majority status. The social-identity hypothesis predicts that both men and women will describe themselves as more masculine when they are in the numerical minority than when they are in the majority. These hypotheses are not mutually exclusive, however. That is, the motivational and cognitive factors postulated by these hypotheses could co-occur and could contribute independently to judgments. It is worth noting in this context that the effects of minority status on judgments and behavior are stronger and more consistent over studies for females than for males (Hogg, 1985; Martin & Shanahan, 1983; Piliavin & Martin, 1978; Raynor, 1975, cited in Ruble & Higgins, 1976). For females, however, the effects of group composition predicted by the stereotype-avoidance and social-identity hypotheses are similar in direction, whereas for males, the predicted effects are in opposite directions. Thus, if the factors implied by the two hypotheses both contribute to the overall influence of group composition, the relatively stronger effects obtained for females than for males are not surprising.

Effects of Self-Concept Activation on Reactions to Others

The possibility that consciousness of one’s identity as male or female activates concepts associated with this identity has additional implications. Many investigations of the effects of trait concept accessibility on the interpretation of behavioral information (for reviews, see Bargh, 1984, 1994; Higgins & King, 1981; Wyer & Srull, 1989) show that once concepts have been activated for use in attaining one objective, they become more accessible in memory. Therefore, they are more likely to be used to interpret information conveyed in other, ostensibly unrelated situations. In the present context, suppose participants’ consciousness of their sex spontaneously activates gender-related trait concepts. Then, these concepts should affect not only participants’ self-descriptions but also their interpretation of behavioral information about others. The present study examined this possibility.

In this regard, our conceptualization assumes that participants spontaneously activate gender-relevant thoughts and concepts when they first become conscious of their identity as male or female and that their self-descriptions reflect the implications of these concepts. An alternative possibility, however, is that participants’ self-judgments reflect their attempts to describe themselves to others in a manner that they consider to be socially desirable under the conditions in which they find themselves. These public self-presentation strategies are less likely to affect judgments of another person, however. This is particularly true if the latter judgments are made before self-ratings are reported. Therefore, the extent to
METHOD

Overview
Participants were randomly assigned to one of three types of groups. Female-majority groups were composed of a single man and several women; male-majority groups were composed of a single woman and several men; and equal-distribution groups contained an equal number of men and women. Ostensibly as part of a study of impression formation, participants read a stimulus paragraph, written by a person whose sex was unspecified, that described ambiguous enactments of several stereotypically masculine and stereotypically feminine traits. They then rated the target person with respect to these traits. In addition, they rated themselves, the “average man,” and the “average woman” with respect to the same traits and completed the Bem Sex Role Inventory (BSRI; Bem, 1974). Indexes of masculinity and femininity based on these ratings were evaluated as a function of both the sex of participants and their status within the group (minority, equal, or majority).

Participants and Group Composition
Participants were 46 male and 57 female introductory psychology students who participated to fulfill a course requirement. They were run in one of three different types of groups. These groups were constructed such that the sex of both the participants and the experimenter were taken into account. Eight male-majority groups consisted of one female and either two or three male subjects and were run by a male experimenter. Eleven female-majority groups consisted of one male and three females and were run by a female experimenter. Seven equal-distribution groups were composed of either (a) three female participants, two male participants, and a male experimenter or (b) three male participants, two female participants, and a female experimenter. Thus, the total number of males and females in the session was equal.3

Stimulus Materials
Selection of stimulus traits. The paragraph that participants read described ambiguous behaviors that were relevant to stereotypically masculine or stereotypically feminine traits. To select these traits, 20 masculine and 20 feminine attributes were selected from the BSRI, and 40 pilot participants were asked to indicate which of the traits best fit the stereotype of women and men in American society. Participants rated the feminine traits in terms of how well they “fit the stereotype of women in our society” on a scale from 1 (not at all) to 5 (very much). Participants rated the masculine traits on a comparable scale pertaining to men.

which group sex composition had similar effects on both self-judgments and judgments of others was expected to permit these alternative possibilities to be evaluated.

Assessment of Dependent Variables

Two issues surround an assessment of the effects of minority status on self-descriptions and judgments of others. First, stereotypically masculine and stereotypically feminine traits are not mutually exclusive (Bem, 1974). In many cases, masculinity and femininity can be viewed as independent dimensions, and any given individual can score high or low on both. In practice, however, the characteristics are negatively correlated; most individuals score high along one dimension and low along the other (Bem, 1974). For simplicity in the present research, therefore, we computed indexes of relative masculinity (i.e., the difference between judgments reflecting masculinity and judgments reflecting femininity) and determined whether the magnitude of this relative index depended on group composition.

The second issue of concern surrounds the different possible indexes of masculinity one might consider. It may be important to distinguish between persons’ endorsement of cultural gender stereotypes and their personal beliefs about the attributes that are typical of men and women in their peer group. Although college students might have similar perceptions of the traits that are stereotypic of men and women, they might disagree in their beliefs that college men and women actually conform to these stereotypes. Thus, if a female student believes that most other female college students are either feminist or sympathetic to feminism and wishes to describe herself as typical, she might report herself as similar to her conception of the average college female. This description, however, would be dissimilar to the feminine stereotype (Bem, 1974).

The hypotheses in the present study are most obviously applicable to persons’ attempts to describe themselves in ways that are consistent with their personal stereotypes of men and women. Personal gender stereotypic beliefs may well differ from more general cultural stereotypes of femininity and masculinity. Thus, participants were asked to rate both themselves and the target person with respect to attributes that reflect cultural gender stereotypes (as defined by the Bem Sex Role Inventory [Bem, 1974]) and to rate the average man and average woman with respect to these same traits to assess personal gender stereotypes. If personal and cultural gender stereotypes do indeed differ, we could evaluate the effects of minority status on both (a) the similarity of participants’ self-ratings (and target judgments) to cultural gender stereotypes and (b) the similarity of these ratings to participants’ personal stereotypes.
The four masculine and three feminine traits that best fit the stereotype of women and men, respectively, were included in the paragraph. (The fourth best fitting feminine trait was not used because it was redundant with one of the other feminine traits, and its inclusion would unduly weight the trait dimension to which it was relevant.) The masculine traits were competitive, assertive, dominant, and athletic, and the feminine traits were affectionate, loves children, and compassionate.

Construction of stimulus paragraphs. Two different stimulus paragraphs were constructed. Each paragraph was ostensibly written by an introductory psychology student who had participated in an earlier experiment and had been asked to describe his or her activities on the previous day. Each paragraph described behaviors that represented each of the seven traits identified previously. For example, one paragraph was as follows (the trait represented by each behavior is indicated in brackets):

Yesterday, I got the highest grade in the class on my biology exam. I am really happy about it, especially since my neighbor, Brad, who is always bragging about his high school grade point average is in that class [competitive]. When I got home, I was relaxing in front of the television when someone knocked on my door and asked for a donation for a homeless shelter. I gave ten dollars [compassionate]. Later, I went to the drive-through at McDonald’s, and they gave me this cold hamburger and burnt french fries. The meal was so bad I couldn’t eat it. I drove back to the restaurant and demanded my money back [assertive]. When I got home, I called my friend Mike and asked him to go to the mall with me to get some running shoes. He didn’t want to go because he was studying, but I insisted [dominant]. While we were at the mall, I ran into my old friend, Jennifer. It had been a while since we had seen each other. She has been really busy trying to finish school and take care of her son, Greg, at the same time. I was really glad to see her, so I hugged her [affectionate]. Then Jennifer and Mike and I had some coffee, and I got Greg some ice cream. I really like Greg a lot. He’s a good kid [loves children]. We agreed to get together this weekend, and then Mike and I left the mall. When I got home, I went running with my new shoes [athletic].

Procedure

All participants were seated around a circular table. On the pretense of needing some more questionnaires, the experimenter left the female-majority and male-majority groups alone for 2 min at the beginning of the session to let the group composition become salient. The equal-distribution groups were not left alone, as the experimenter’s presence was necessary to create an equal number of both sexes.

Participants were told that the experiment was part of a larger program of research that was concerned with how people form impressions of actual persons on the basis of things these persons write about themselves. The experimenter indicated that during the previous semester, several introductory psychology students had been asked to write a paragraph describing what they had done on the previous day and that we would like participants in the present experiment to read one of these paragraphs and to form a clear impression of what the writer was like, based on what the person had written.

Participants were then given one of the two stimulus paragraphs. When they had finished reading it, the paragraph was collected, and a questionnaire booklet was passed out. On the first page of the booklet, participants were asked to write four to five sentences describing in their own words what they thought the target person was like. Then, they judged the extent to which the target possessed each of 12 traits along a scale from 0 (not at all) to 10 (extremely). Of these traits, six were stereotypically masculine as defined by the BSRI (competitive, dominant, athletic, assertive, aggressive, and independent), whereas four others were stereotypically feminine (affectionate, compassionate, gentle, and loves children). The remaining two traits, masculine and feminine, referred to more general characteristics of the target’s sex-role identity.

After completing the target ratings, participants were told that we were also interested in characteristics of college students in general and, on this pretext, asked them to rate themselves, “the average man,” and “the average woman” along the same 12 scales they had used to make target ratings. Finally, participants completed the BSRI. Ratings of the 20 feminine attributes composing this scale and ratings of the 20 masculine attributes (reported along a 7-point scale) were each averaged to yield a separate score for each dimension. After completing these measures, participants were debriefed and dismissed.

Scoring

Self-ratings. The masculinity and femininity of participants’ self-ratings were based on four criteria, summarized in Table 1.
TABLE 1: Indexes of Relative Masculinity

<table>
<thead>
<tr>
<th>Index</th>
<th>Self-Ratings</th>
<th>Target Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Direct ratings</td>
<td>Difference between self-rating of masculinity and self-rating of femininity</td>
<td>Difference between rating of target’s masculinity and rating of target’s femininity</td>
</tr>
<tr>
<td>2. Similarity to personal stereotype</td>
<td>Difference between (a) correlation of self-ratings with ratings of average man and (b) correlation of self-ratings and ratings of average woman</td>
<td>Difference between (a) correlation of target ratings with ratings of average man and (b) correlation of target ratings with ratings of average woman</td>
</tr>
<tr>
<td>3. Similarity to cultural stereotype</td>
<td>Difference between mean self-rating on stereotypically masculine traits and mean self-rating on stereotypically feminine traits</td>
<td>Difference between mean target rating on stereotypically masculine traits and mean target rating on stereotypically feminine traits</td>
</tr>
<tr>
<td>4. Bern Sex Role Inventory (BSRI)</td>
<td>Difference between self-rating of masculinity and self-rating of femininity, as defined by the BSRI</td>
<td>Difference between number of masculine traits used to describe target and number of feminine traits used to describe target</td>
</tr>
</tbody>
</table>

1. Participants’ direct ratings of themselves as masculine and feminine.
2. The correlation between participants’ self-ratings and their ratings of both (a) the average man and (b) the average woman along the 12 attribute scales to which the ratings pertained. These correlations, computed separately for each participant, provided an index of the extent to which their self-descriptions corresponded to their personal gender stereotypes. (These correlations were converted to Fisher’s z prior to analyses.)
3. Participants’ ratings of themselves along the same scales used to make target ratings (specifically, their average self-rating with respect to the six stereotypically masculine traits and their average self-rating with respect to the four stereotypically feminine traits). These composite judgments provided an index of the conformity of participants’ self-descriptions to cultural stereotypes of men and women, respectively.
4. Participants’ masculinity and femininity, as defined by the BSRI.

Note that the first two measures described above reflect the consistency of participants’ self-ratings with their personal definitions of masculinity and femininity. In contrast, the second two measures reflect the conformity of participants’ self-ratings of culturally defined gender stereotypes.

**Target ratings.** The gender stereotype of participants’ ratings of the target were inferred on the basis of four variables. Three of these were directly analogous to the first three indexes of self-reported masculinity and femininity described above (see Table 1). The last variable was a measure of the masculinity and femininity of participants’ open-ended trait descriptions of the target. To compute this measure, each trait mentioned in the trait descriptions was coded by two independent judges as either masculine, feminine, or neutral, based on their similarity to traits identified as exemplifying these characteristics in the BSRI and also the Sex-Role Questionnaire developed by Broverman, Vogel, Broverman, Clarkson, and Rosenkrantz (1972). Judges’ estimates of the number of masculine traits and the number of feminine traits contained in participants’ self-descriptions were correlated .81 and .77, respectively. These ratings were averaged to provide a single estimate of each frequency.

**RESULTS**

**Preliminary Analyses**

Two indexes were obtained for each dependent variable, one pertaining to masculinity and the other pertaining to femininity. For reasons noted earlier and because preliminary analyses revealed that participant sex generally related in opposite ways to masculinity and femininity indexes, the difference between each participants’ masculinity rating and his or her femininity rating was computed for each dependent variable and used as an indication of relative masculinity.

Four indexes of self-reported relative masculinity were obtained (see Table 1). Correlational analyses, performed separately for males and females, indicated that all four indexes of relative masculinity were significantly interrelated (p < .05). However, participants’ direct ratings of their relative masculinity were correlated much more highly with their personal stereotypes (rs = .74 and .69 for males and females, respectively) than with either of the cultural-stereotype-based indexes of masculinity (the similarity to cultural stereotype or the BSRI index; r < .40 in all cases). These correlations suggest that participants’ personal gender stereotypes did indeed differ from more general cultural gender stereotypes, as we predicted.

Two aspects of the analyses to be reported require discussion. First, in the event that participants’ judg-
ments were systematically affected by idiosyncratic characteristics of the group in which they participated, we used groups rather than individuals as the unit of analysis. Therefore, a single (mean) score for male participants and a single score for female participants was computed for each experimental group along each judgment dimension. This procedure was applied in analyzing both self-ratings and target ratings.

Second, an overall analysis of judgments as a function of group status (majority vs. minority vs. equal) and participant sex would confound between-group and within-group variation. Therefore, the effects of status on each dependent variable were evaluated in two sets of orthogonal comparisons. The first set determined the extent to which membership in a group that was unequally distributed with respect to sex would be sufficient to make participants aware of their identity as male or female and, therefore, would affect their judgments of themselves and others. The second set tested hypothesized differences between minority-status and majority-status members. These comparisons are described in more detail below.

Self-Ratings

General effects of group composition. The study by McGuire and Padawer-Singer (1976), as well as other research cited earlier in this article, suggests that awareness of one’s membership in a social category is determined in part by one’s distinctiveness with respect to this category. It nevertheless seemed possible that when the distribution of men and women in a group is unequal, both groups of participants might be sensitive to this inequality, and, therefore, both men and women might become more conscious of their sex than they would if the distribution were equal. The first set of comparisons explored this possibility.

Figure 1 shows the relative masculinity of participants’ self-judgments, defined by each of the four indexes we considered, as a function of subject sex and group status. (In each case, higher scores indicate greater relative masculinity.) Data relevant to the first set of analyses were obtained by comparing judgments under equal-distribution conditions with judgments of the two unequal-distribution conditions combined. An ANOVA was performed on each dependent variable as a function of group composition (equal distribution vs. unequal distribution) and participant sex, treating the latter as a within-groups variable. Not surprisingly, men reported themselves as generally more masculine than did women on each of the four measures—in each case, \( F(1, 25) > 4.78, p < .05 \). However, no effects of group composition were significant in any analysis \( (p > .10) \). Thus, participating in an unequal-distribution group did not itself have a systematic effect on self-judgments.

![Figure 1](image_url)

**Figure 1** Relative masculinity of self-judgments as a function of participant sex and group status.

Test of hypotheses. The second set of analyses provided direct tests of the three hypotheses concerning the effects of sex composition on self-judgments. To reiterate, all three hypotheses assume that participants who are in the numerical minority with respect to sex will be more conscious of their sex than those who are in the majority. However, the hypotheses differ with respect to the effects of this awareness. According to the social-categorization hypothesis, men should report themselves as relatively more masculine when they are in the minority, whereas women should report themselves as less so. According to the stereotype-avoidance hypothesis, minority status should have precisely the opposite effect on both men’s and women’s judgments. According to the social-identity hypothesis, minority participants should report themselves as relatively more masculine than majority participants regardless of sex.

Data relevant to these hypotheses, shown in Figure 1, are obviously most consistent with the social-identity hypothesis. That is, men and women both reported themselves as relatively more masculine when they were
in the minority than when they were in the majority, and this was true of all four indexes of relative masculinity we considered. However, in line with our speculations, the difference was most apparent when our indexes of masculinity and femininity were based on participants’ personal gender stereotypes than when they were based on more general cultural gender stereotypes. To evaluate these effects statistically, each index was analyzed separately as a function of whether participants were in the minority or in the majority and participant sex. The first two indexes shown in Figure 1 are assessments of the similarity of participants’ self-ratings to personal gender stereotypes (i.e., direct estimates of relatively masculinity and the similarity of participants’ self-ratings to their ratings of the average man and woman). There was a significant effect of status on these ratings—in each case, $F(1, 15) > 5.71$, $p < .05$. In contrast, the effect of status on the similarity of participants’ self-ratings to cultural stereotypes was only marginally reliable, $F(1, 15) = 3.87$, $p < .07$, and its effect on the BSRI index, although in the same direction as its effects on other indexes, was not significant ($p > .10$). None of these effects was significantly contingent on sex of participant, however ($p > .10$). Moreover, the difference in judgments by minority and majority participants was in the direction implied by the social-identity hypothesis at all eight combinations of participant sex and type of measure.

Although these results are consistent with the social-identity hypothesis, some aspects of the data appear to qualify certain assumptions on which it was based. The relative masculinity reported by participants under equal-distribution conditions was typically in between that reported by minority-status participants and that reported by majority-status participants, as one might expect. Nevertheless, the ratings of minority-status participants were often very similar to those made by participants in equal-distribution groups, whereas majority-status persons’ ratings were often substantially less masculine than those of persons in equal-distribution groups. These findings suggest that being in the minority did not always increase social-identity concerns relative to being in a group composed of equal numbers of men and women. Rather, being in the majority often decreased these concerns. The implications of these results are discussed in more detail presently.

Target Ratings

If persons’ consciousness of their minority status spontaneously activates concepts associated with masculinity and femininity at the time they become aware of this status, these concepts are likely to affect their interpretation of the information they receive about others (Higgins & King, 1981; Wyer & Srull, 1989). Therefore, the concepts should influence participants’ target judgments in much the same way they affect self-judgments. It is also possible, however, that the effect of participants’ group status on their self-judgments simply reflects a self-presentation strategy that is only used when describing themselves to another (e.g., the experimenter). Then, the effects of minority status on target ratings, which were reported before self-ratings were made, should be minimal.

The various indexes of participants’ ratings of the target’s relative masculinity were all significantly intercorrelated. Two aspects of these correlational data are noteworthy. First, direct ratings of the target’s masculinity were more highly correlated with perceptions of the target’s similarity to participants’ personal stereotypes of masculinity than with the cultural stereotype of masculinity (.81 vs. .32, and .76 vs. .21, for males and females, respectively). Thus, we again found substantial differences between personal and more general gender stereotypes. Second, indexes of the target’s relative masculinity were not significantly correlated with corresponding indexes of the relative masculinity of self-ratings ($p > .10$). Thus, participants did not exhibit a false consensus bias (Ross, Greene, & House, 1977)—that is, they did not base their ratings of the target on their perceptions of themselves. Nonetheless, these low correlations do not preclude the possibility that participants’ self-ratings and their ratings of the target were affected by similar variables (e.g., their minority or majority status). In fact, this appears to be the case.

General effects of group composition. Ratings of the target’s relative masculinity are shown in Figure 2 as a function of group status and participant sex. These data, like data pertaining to self-ratings, were analyzed in two sets of orthogonal comparisons. A comparison of the ratings under equal-distribution conditions with those made under the two unequal-distribution conditions yielded no significant effects of either group composition or participant sex ($p > .10$). Thus, simply being in a group that was unequally distributed with respect to sex had no effect on target ratings.

Test of hypotheses. If concepts activated by social-identity considerations affect the interpretation of information about the target, the effects of minority or majority status on target ratings should parallel its effects on self-ratings. Data relevant to this possibility are shown in Figure 2. The effects of being in the minority on the first two measures of the target’s relative masculinity, which are based on participants’ personal criteria for defining this characteristic, are very similar to corresponding effects on self-ratings. That is, both men and women judged the target to be more masculine when they found themselves in the minority with respect to sex than when they were in the majority. This difference was significant in analyses
males' ratings were in line with this hypothesis only when their personal criteria for masculinity were involved.

Supplementary Data

Effects of gender-role identification. To examine the possibility that participants' a priori gender-role identification might interact with group status, participants were classified as either masculine, feminine, androgynous, or undifferentiated, as defined by the BSRI, and target ratings were analyzed as a function of this variable as well as sex of participant and group status. No significant interactions involving BSRI-defined masculinity were significant ($p > .10$). In other words, there is no evidence that minority-status participants' ratings of the target were influenced by their own conformity to normative sex-role stereotypes.

Effects of homogeneous groups on ratings of self and others. A question arises as to the effects of membership in a group that consists of only members of one's own sex. Perhaps people who find themselves in such a group are similar to those observed under majority-status conditions; their gender is not salient, and so they would see themselves as less masculine than those whose sex is in the minority or in equal proportions (Cota & Dion, 1986; McGuire & Padawer-Singer, 1976). To examine this possibility, a supplementary experiment was run using procedures identical to those employed in the main experiment, except that the groups were all male or all female. Experimental sessions were conducted by an experimenter of the same sex as participants. A total of 18 men and 19 women were drawn from the same student population as participants in the first study.

Only a small number of experimental groups were run in this study (four male groups and four female groups), precluding meaningful statistical analyses. Moreover, these groups were run during a different semester than those in the main study. Consequently, a comparison with the main study must be interpreted with caution. However, the results of such a comparison are generally consistent with hypotheses. Pooled over sex of participant, these self-ratings averaged $-.37$, $-.43$, $-.89$, and $-.27$ for the four indexes shown in Figure 1, respectively. These ratings were all less masculine than were comparable ratings under both minority-status and equal-distribution conditions of the main experiment but were, in fact, quite close to those under majority-status conditions ($-.97$, $-.58$, $-.92$, and $-.22$, respectively; see Table 2). Analyses of target ratings yielded no significant differences between men and women ($p > .10$). Pooled over participant sex, target ratings on the four indexes shown in Figure 2 were $.01$, $.13$, $.67$, and $.35$ respectively. These ratings were in each case less masculine than corresponding ratings under minority-status conditions of the main experiment (see Table 2). Al-

![Figure 2: Relative masculinity of target judgments as a function of participant sex and group status.](chart)
TABLE 2: Relative Masculinity of Self- and Target Judgments Pooled Over Sex of Participant

<table>
<thead>
<tr>
<th>Type of Group</th>
<th>Majority Status</th>
<th>Equal Distribution</th>
<th>Minority Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-judgments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct rating</td>
<td>-.37</td>
<td>-.97</td>
<td>.85</td>
</tr>
<tr>
<td>Similarity to personal stereotype</td>
<td>-.43</td>
<td>-.58</td>
<td>.00</td>
</tr>
<tr>
<td>Similarity to cultural stereotype</td>
<td>-.89</td>
<td>-.92</td>
<td>-.53</td>
</tr>
<tr>
<td>Bem Sex Role Inventory</td>
<td>-.27</td>
<td>-.22</td>
<td>.03</td>
</tr>
<tr>
<td>Target judgments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct rating</td>
<td>.01</td>
<td>-.73</td>
<td>.32</td>
</tr>
<tr>
<td>Similarity to personal stereotype</td>
<td>.13</td>
<td>.02</td>
<td>.31</td>
</tr>
<tr>
<td>Similarity to cultural stereotype</td>
<td>.67</td>
<td>.84</td>
<td>.55</td>
</tr>
<tr>
<td>Open-ended description</td>
<td>.35</td>
<td>1.24</td>
<td>1.20</td>
</tr>
<tr>
<td>Group n</td>
<td>8</td>
<td>19</td>
<td>7</td>
</tr>
</tbody>
</table>

NOTE: Unless otherwise noted, numbers in the table are means.

though these results must be interpreted with caution given the supplementary nature of the homogenous-group data, they suggest that being in a group composed only of members of one’s sex is similar to being in a group in which one’s sex comprises the majority. Consistent with the social-identity hypothesis, in both situations, participants see themselves as less masculine than those in the minority.

DISCUSSION

An assumption underlying the research reported is that when people encounter a social situation in which they are in the minority with respect to sex, they become conscious of their identity as male or female. Because this assumption was not directly evaluated in the present study, some caution should perhaps be taken in interpreting these results. However, the validity of the assumption has been well established in a number of other studies pertaining not only to sex (e.g., McGuire et al., 1978; see also Abrams et al., 1990) but to other attributes as well (Deshpande & Stayman, 1994; McGuire & Padawer-Singer, 1976; for a summary of relevant research, see McGuire & McGuire, 1981). In any event, the results of the present research are consistent with this assumption and provide additional insight into the effects that consciousness of one’s sex can have.

Two of the three hypotheses we considered concerning the nature of these effects were rejected by the data. That is, there was no evidence that minority status generally increases persons’ tendency to describe themselves and others in a manner that is consistent with the gender stereotypes held for members of their sex. Although minority status increased the masculinity of men’s self-ratings and target ratings, it did not increase the femininity of women’s ratings. By the same token, there was no evidence that persons who become conscious of their sex generally avoid describing themselves and others in stereotypic ways. Although this hypothesis could account for the effects of group status of women’s ratings, its effects on men’s judgments were opposite in direction to that implied by the hypothesis.

Results are, therefore, most consistent with the social-identity hypothesis. That is, men whose group status made them aware of their identity as males were motivated to acknowledge their membership in this high-status social category and to think of themselves in ways that affirmed it. In contrast, women who were made aware of their identity as females typically avoided thinking of themselves in terms of attributes associated with this low-status social category. As a consequence, both men and women judged themselves to be more masculine when they were in the minority than when they were in the majority. Moreover, the concepts that were spontaneously activated by these social-identity motives affected their interpretation of information about the target person and, consequently, influenced judgments of this person as well.

A qualification on the generality of this conclusion is suggested by the finding that minority status did not always increase self-identity motivation relative to conditions in which an equal number of men and women participated (see Figure 1). On the other hand, being in the majority often decreased this motivation. This decrease was more characteristic of male participants than of females. Moreover, it was only evident in participants’ direct ratings of their masculinity and the similarity of their self-descriptions to their personal stereotypes. Nevertheless, these data raise the possibility that distinctiveness per se was not the sole activator of self-identity motives in this study. Perhaps participants were conscious of their sex under all conditions, and self-identity motives were activated even when equal numbers of men and women were present. When participants were in the numerical majority with respect to sex, however, their concerns about their social identity were alleviated. The supplementary data we obtained for subjects in groups that were homogenous with respect to sex are consistent with this interpretation. That is, these persons’ self-judgments were typically more similar to those of majority-status participants in unequal-distribution groups than to those of either minority-status or equal-distribution group participants. This suggests that being in the majority or in same-sex groups decreases the self-presentation motives that are likely to exist under other conditions.

It is important to note that the concepts that mediate the effects obtained in the present study were spontaneously activated simply by participants’ awareness of their
status per se, even in the absence of expectations to interact with other group members. Moreover, the effects do not appear to be solely a result of conscious self-presentation strategies that occurred at the time participants were asked to describe themselves. Rather, these self-presentation motives, and the concepts associated with them, were activated spontaneously by the social context in which persons found themselves. This is suggested by the fact that group composition affected not only self-judgments but also the interpretation of information about a target person who was not involved in the situation at hand. These effects were not always significant and were more apparent among females than among males (see Figure 2). Some caution must, therefore, be taken in drawing conclusions from these data pending replication. Nevertheless, the pattern of results we obtained is provocative. In this regard, it is important to note that participants made target ratings in the present study before they were asked to evaluate themselves. Therefore, the effects of group status on target ratings were not an artifact of requiring participants to describe themselves before making these ratings.

Although our results are consistent with social-identity theory, a somewhat different interpretation of these findings should be noted. Persons who become aware that they are in the minority in the social situations in which they find themselves may generally perceive themselves to be in a subordinate position and, therefore, may be motivated to compensate through dominance or assertiveness. This could be true regardless of whether these persons are in the minority in the general population. The previously mentioned effects of minority status on speech style (Hogg, 1985; Piliavin & Martin, 1978) are consistent with this speculation. Once such dominance motives are aroused, concepts activated by them could affect both self-descriptions and the interpretation of information about others. It is important to note that concepts associated with dominance and assertiveness are stereotypically masculine, whereas those associated with warmth and supportiveness are stereotypically feminine (Bem, 1981; Spence & Helmreich, 1981). Therefore, these motives could produce effects similar to those reported in this study. The relative merits of these alternative interpretations warrant further investigation, perhaps using more direct indexes of social identity to validate the assumptions underlying them.

In evaluating the generalizability of our results, it is important to note that the effects of group status on both self-perceptions and target ratings were more evident when these judgments were defined on the basis of participants' personal gender stereotypes, and thus their own perceptions of the typical man and woman, than when they were based on general cultural definitions of these attributes. Indeed, our participants' personal gender stereotypes differed from the gender stereotypes of the larger culture. These results suggest that individuals have different gender stereotypes, and, consequently, their social-identity motivations may lead them to emphasize different traits. Thus, for example, two upwardly mobile women might be equally motivated to describe themselves as relatively masculine, but their self-descriptions might nonetheless differ because their criteria for defining this attribute differ.

This difference could account for the fact that the effects we observed were not contingent on participants' gender-role identification as inferred from the BSRI. That is, one might expect that persons whose self-perceptions conform to normative gender-role stereotypes on a priori grounds would be inclined to consider these stereotype-related attributes to be socially desirable and that making them aware of their gender would increase their conformity to these stereotypes. In contrast, persons whose self-perceptions do not conform to normative stereotypes would be more likely to consider stereotype-based attributes to be undesirable and to avoid the use of these attributes to describe themselves when their sex is called to their attention. This line of reasoning suggests that the social-identity hypothesis would be more applicable to masculine (sex-typed) men, as defined by the BSRI, and also to masculine (cross-sex-typed) women. This, however, was not the case. Perhaps differences in gender-role identification as measured by the BSRI do not reflect different motives to appear masculine or feminine but simply differences in the way people happen to perceive themselves, independently of self-presentation motives.

NOTES

1. Here and throughout this article, we use the terms majority and minority to refer to the relative incidence of males and females in the immediate social situation in which subjects find themselves and not their incidence in the population at large. Thus, a woman may have minority status in a particular social group if she is the only female despite the fact that females are slightly more preponderant than males in the general population.

2. The assumption that numerical distinctiveness in a group influences one's consciousness of having the distinctive attribute does not preclude the possibility that other factors can have a similar effect. For example, situational factors that call attention to another person's attributes may make one conscious of differences with respect to these attributes regardless of whether or not one is in the minority. A person who introduces himself as a member of the American Nazi Party, for example, is likely to make Jewish individuals conscious of their Jewish identity regardless of how many other members of this ethnic group are present. In the conditions of concern in this study, however, factors other than distinctiveness that might influence the salience of group identity were controlled.

3. The sex of the experimenter had no effect on the dependent measures for the equal-distribution groups.

4. Before making these ratings, subjects were asked to recall the behaviors described in the stimulus paragraph they had read. These data are peripheral to the issues of primary concern in this study, and analyses yielded no significant effects of either subject sex or group.
composition on the amount and type of behaviors recalled. Therefore, these data will not be discussed further.

5. The negative relation between masculinity and femininity in the present study is evident from classifications of subjects on the BSRQ (Bem, 1974). Specifically, 66% of the males and 64% of the women were classified as above the median in one characteristic and below the median in the other.

6. In fact, analyses using individuals as the unit of analyses yielded identical statistical conclusions.

7. It might be noted that information theory (e.g., Atteanve, 1959) suggests that an attribute is more distinct (i.e., it has higher information value) when the distribution of attributes in the sample is equal. This possibility was also considered.

8. The actual variables involved in this analysis were sex of subject and group type (female majority vs. male majority), treating the first as a within-group variable and the second as a between-group variable. In this analysis, the interaction of the two variables can be interpreted as equivalent to the main effect of subject status (minority vs. majority), whereas the main effect of group type is equivalent to the interaction of status and subject sex. The results reported here and in analyses of target ratings are based on these interpretations.

9. The results of ANOVA tests comparing homogenous groups with majority, equal-distribution, and minority groups, conducted separately for males and females, are available from the authors.

REFERENCES


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