ASYMMETRIC REACTIONS TO WORK GROUP SEX DIVERSITY AMONG MEN AND WOMEN

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Attitudes among 178 professional men and women working for a clothing manufacturer and retailer depended on their work groups’ sex composition. Findings were consistent with status considerations: women expressed a greater likelihood of leaving homogeneous groups than did men, even though women expressed greater commitment, positive affect, and perceptions of cooperation when they worked in all-female groups. These results suggest that similarity-attraction may be inadequate as the primary theoretical foundation for understanding how work group sex composition influences men and women.

Though scholars have amassed a significant body of research on how demographic diversity influences organizations and their members and how sex diversity influences various work processes and outcomes, conclusions remain somewhat equivocal and, in some cases, contradictory. For example, it is unclear whether greater sex diversity promotes or constrains individual and group effectiveness or influences women differently than men. One option for increasing understanding of how sex diversity influences working men and women is to follow the lead of past research and rely on the similarity-attraction paradigm (e.g., Byrne, 1971). Rigorously supported in psychology, the similarity-attraction hypothesis suggests that people are attracted to and prefer to spend time with others who hold attitudes that are similar to their own (e.g., Condon & Crano, 1988). Drawing on this logic, organizational demographers have suggested that people who have demographic similarities presume that their attitudes are also similar and are, therefore, likely to be more attracted to one another than to people who are demographically different from them (e.g., Pfieffer, 1983; Tsui & O’Reilly, 1989). Thus, all else being equal, the similarity-attraction hypothesis leads us to expect that men will be attracted to work groups with more men, while women will be attracted to groups with more women.

Research appears to support this general logic for a variety of demographic characteristics. For example, Glaman, Jones, and Rozelle (1996) found that demographically similar coworkers liked and preferred to work with each other more than with coworkers who were demographically different. Further, increased interpersonal attraction predicated on demographic similarity has been linked to more frequent communication (Zenger & Lawrence, 1989), higher levels of social integration (O’Reilly, Caldwell & Barnett, 1989), better group functioning (Chatman, Polzer, Barsade & Neale, 1998; Jehn, Northcraft, & Neale, 1999), more positive affect and commitment (Riordan & Shore, 1997), and lower turnover (Jackson, Brett, Sessa, Cooper, Julin, & Peyronnin, 1991).

Despite the widespread reliance on the similarity-attraction hypothesis, however, it may be too simple to fully capture the influence of sex diversity in organizations. In particular, the similarity-attraction assumption is that different groups of people are sufficiently alike, that men and women, the old and the young, and whites and blacks should all respond in the same way to being similar to or different from others. But members of different demographic groups may respond differently to being dissimilar or similar to others. Researchers have often seen these asymmetries when examining the effects of sex composition on individual and work group outcomes (e.g., Karakowsky & Siegel, 1999). For example, Tsui, Egan, and O’Reilly (1992) found that men responded more negatively than did women to being in the numerical minority in their work groups, by being absent more often, less committed, and more likely to leave. In a study of stereotyping, Konrad, Winter, and Gutek (1992) found that men in male-dominated groups were
more likely to engage in sexist stereotyping, while women maintained more egalitarian attitudes, regardless of their groups’ sex composition. While not definitive, demography studies demonstrating such asymmetric effects violate similarity-attraction theory predictions.

We begin by examining why variations in work group sex composition might affect men and women differently. We suggest that men and women are likely to react differently depending on whether their work groups consist exclusively of members of their own sex, primarily of members of their own sex, primarily of members of the other sex, or of balanced numbers of men and women. These differences may emerge from society-level status expectations for men and women at work (e.g., Berger, Rosenholtz, & Zelditch, 1980). Further, past studies’ findings may only seem to fit similarity-attraction predictions because the studies drew on samples in organizations with relatively few women and relatively few variations in work group sex composition. With these limited samples, there was no way of knowing whether women’s reactions matched men’s, or even whether men’s reactions to the array of possible variations in their work groups’ sex diversity were fully understood. Similarity-attraction predictions may accurately depict some aspects of both men’s and women’s reactions to work group sex composition, particularly those attitudes pertaining to their affective experiences at work. Our goal, therefore, was to provide a variegated picture of men and women’s reactions to variously composed groups by augmenting similarity-attraction predictions with considerations of social status.

THEORETICAL BACKGROUND AND HYPOTHESES

Men’s and Women’s Asymmetric Reactions to Work Group Sex Diversity

In her classic study, Kanter (1977) focused on the specific advantages afforded to women in a male-dominated corporation, though she proposed a general theory of proportional representation in which both men and women reacted in the same way to being tokens or to being parts of work groups with balanced numbers of men and women. She argued that when members of either sex comprised less than some critical proportion of a group, other group members’ perceptions of them would be distorted, resulting in increased visibility, polarization, and convergence with the stereotype of the minority. Kanter (1977) and others have thus implicitly assumed that men and women will be similarly affected by being underrepresented (e.g., Spangler, Gordon, & Pipkin, 1978).

When research has been conducted in organizations and occupations in which women were more prevalent, however, men and women have experienced different consequences, depending on their proportional representation in a job or an occupation (e.g., Heikes, 1991). Although one of the more robust findings from the relational demography literature is that people who are more dissimilar to a group are more likely to express lower commitment and affect and are more likely to leave (Williams & O’Reilly, 1998), men appear to be more sensitive to being different than women. For example, in leaderless groups comprised of all men or all women, leadership behaviors were equally likely to develop in both sexes. But in mixed-sex groups, men were five times more likely to exercise opinion leadership than were women (Walker, Ilardi, McMahon, & Fennell, 1996). Wharton and Baron (1987) found that men responded with more negative work attitudes to increased group heterogeneity than did women. And men who were outnumbered by women were less satisfied and less committed than when they were less outnumbered, while women’s satisfaction and commitment were unaffected by the sex composition of their work groups (Tsui et al., 1992).

What Explains Asymmetric Reactions to Work Group Sex Diversity?

Status expectations states theory. One explanation for men and women’s different reactions lies in differences in their status in society and how these differences play out at work. Sex has been correlated with prestige and accompanied by differing expectations for men and women’s social power (Pugh & Wahrman, 1983). Berger and colleagues (1980) described characteristics that give rise to differing expectations, such as sex or race, as “diffuse status characteristics.” These perceived differences in the amounts of respect, influence, and prominence a group member enjoys—based not on his or her actual expertise, but on his or her ascriptive attributes—can affect individual and group functioning (e.g., Ridgeway & Smith-Lovin, 1999).

Status stimulates skill expectations, so that high-status individuals are generally assumed to be more competent and intelligent than are low-status individuals (e.g., Carli & Eagly, 1999; Driskell & Mullen, 1990). Being a woman can, for example, lead to expectations of lower performance in male-typed activities or jobs (e.g., Steele, 1997). Studies of men and women in stereotypical (sex-typed) and atypical jobs have also reported asymmetric effects that
might only make sense if status and proportional representation explanations are combined (e.g., Carli, 1999). For instance, Fairhurst and Snavely’s (1983) study of nurses yielded no evidence that men, who are likely to be numerical minorities in that occupation, were more socially isolated when they were tokens. In contrast, O’Farrell and Harlan (1982) reported that women who were in the minority in traditionally male occupations were subject to harassment. Ott (1989) reported that male nurses enjoyed advantages as minorities, while female police officers, members of a predominately male occupation, experienced difficulties.

Further, Cassirer and Reskin (2000) investigated sex differences in preferences for promotion and concluded that men attached greater importance to promotions than did women—not because they were inherently more ambitious than women—but because men were likely to be located in organizational positions that encouraged them to hope for promotions. Similarly, the men in Tsui and coauthors’ (1992) study may have been more sensitive than the women in the study to being in the minority because men have historically been in the majority and enjoyed higher status in work organizations. As a result, the men may have perceived being in the minority as a loss of power. In contrast, the women, with more experience as low-status organization members, or as high-status numerical minorities, did not. Researchers have provided ample evidence that women’s work and roles as managers are often perceived to be of lower status than men’s, even when the objective work to be done is equivalent (e.g., Dimitrovsky, Singer, & Yinon, 1989; Eagly, Karau, & Makhijani, 1995). These studies have shown that jobs and occupations dominated by women are perceived to have less power and influence and receive lower compensation. In view of the stereotypical lower status of groups that are numerically dominated by women, we would expect that women will be more willing to move out of these groups, even if they are comfortable within them. Stated differently, being in a male-dominated group would likely offer women higher status, but at a social cost. Thus, in contrast to stating a similarity-attraction theory hypothesis, we hypothesize that sex will moderate the relationship between sex composition and career advancement concerns. Because men typically have higher status in managerial roles in organizations, they will prefer to remain in groups with more men, but women will desire to leave groups with more women because of their historically lower status in work organizations. Specifically, we predict that:

Hypothesis 1. Men and women will prefer membership in higher-status work groups; women in female-dominated groups will be more likely than men in male-dominated groups to express intentions to transfer to another group in the same job within their organization.

Similarity-attraction theory. Men and women may also display certain work attitudes and behaviors that adhere to similarity-attraction predictions. Ibarra (1992) differentiated between preference for “homophily” and preference for status—that is, between seeking out similar others and seeking out high-status others—as explanations for differences in how men and women constructed their social networks. She found that women were more likely than men to differentiate their networks, choosing women as friends but choosing men to gain access to instrumental rewards. Men evidenced no such distinction in their relationships, preferring relationships with men for both their instrumental and social support needs.

Following this logic, we suggest that men’s and women’s attitudes and intentions with regard to their work groups and employing organizations may differ depending on whether they are focused on instrumental career objectives or social support. Whereas a focus on career objectives may be associated with intentions to transfer, a focus on social support may be associated with normative commitment, defined as the extent to which a person internalizes or accepts organizational norms and values (Caldwell, Chatman, & O’Reilly, 1990). Such a focus may also be linked with positive affect and perceived cooperation in groups. Specifically, following similarity-attraction predictions, men and women may express greater normative commitment, affect, and cooperation in groups composed of members of their own sex.

Normative commitment has been shown to affect performance and “prosocial” behavior (O’Reilly & Chatman, 1986). Despite women’s status-based preference for male-dominated groups in pursuing instrumental resources, men and women may both perceive that their values are more similar to those of other members of their own sex than they are to the values of the other sex. Research has shown that men’s and women’s values differ systematically (e.g., Feingold, 1994; Rudman & Glick, 1999) and that similarity in values is associated with increased attraction and liking (Harrison, Price, & Bell, 1998; Tsui & O’Reilly, 1989), suggesting that groups with more members of one sex may be more attractive to members of that sex. Since normative commitment is based on perceived value similarity
(O’Reilly, Chatman, & Caldwell, 1991), it follows
that members of work groups that are numerically
dominated by their own sex should be more nor-
matively committed to their organizations.

Similarly, men and women may feel most com-
fortable in groups dominated by members of their
own sex. Wharton, Rotolo, and Bird (2000) found
that faculty members were less satisfied in mixed-
sex university departments and more satisfied in
departments in which sex distributions were more
homogeneous. Wharton and Baron (1987) found
that members of mixed-sex groups were less satis-
fied than were members of either predominantly
male or female groups, again suggesting that people
have more positive attitudes in more homogeneous
work groups in which their sex is numerically
dominant. These and similar studies of positive
affect (e.g., Barsade, Ward, Turner, & Sonnenfeld,
2000) suggest that people are generally happier
when they are demographically similar to others in
their work groups.

Finally, a work group’s sex composition may also
influence how cooperative members are within the
group. Demographic features that are visible, or
otherwise easily accessible, are primary sources for
categorizing others as in-group or out-group mem-
bers (Stangor, Lynch, Duan, & Glass, 1992). Re-
search on the robust in-group/out-group effect has
shown that people are more likely to trust others
whom they view as within their in-groups, as de-
defined by a social category like sex (Brewer, 1979). A
person who is more, rather than less, demographi-
cally similar to his or her colleagues will view them
as being more closely associated with one another
in sharing common objectives, information, and
success. Trust engendered by similarity leads to
increased willingness to share credit, vision, and
resources within work groups (e.g., Chatman &
Flynn, 2001). We therefore predict that both men
and women will perceive groups that are numeri-
cally dominated by their own, rather than the other,
sex as more cooperative. Taking these arguments
together, we hypothesize that:

Hypothesis 2a. Men and women working in
groups that are dominated by members of their
own sex will be more normatively committed to
their organizations than will men and women
working in groups that are not dominated by
members of their own sex.

Hypothesis 2b. Men and women working in
groups that are dominated by members of their
own sex will express higher positive affect
than will men and women working in groups
that are not dominated by members of their
own sex.

Hypothesis 2c. Men and women working in
groups that are dominated by members of their
own sex will perceive those groups as more
cooperative than will men and women working
in groups that are not dominated by members
of their own sex.

The extent of heterogeneity in a work group
and the psychological experience of different
amounts1 of diversity have been identified as im-
portant (e.g., Lau & Murningham, 1999) but have
rarely been examined empirically (see Allmendinger
and Hackman [1995] and Taylor, Fiske, Close,
Anderson, and Ruderman [1978] for notable excep-
tions). We therefore conducted a field study to in-
vestigate whether men and women reacted differ-
ently to being members of homogeneous, majority
male/female, minority male/female, and balanced
work groups.

METHODS

Research Site and Sample

We surveyed 189 professionals (85 percent of 222
individuals managing core organization processes
in three randomly chosen divisions of a large cloth-
ing manufacturer and retailer. The company had
sales of $5.8 billion and five operating divisions.
The firm grouped divisions according to a combi-
nation of brand, region, product price, and age and
sex of target customers. Each division performed its
central functions separately and did similar types of
work (such as design, manufacturing, and
marketing).

Employees were formally assigned to work in
project teams. Each team consisted of profession-
als, rather than production workers, from multiple
functional backgrounds. Employees were dedi-
cated to only one project team and did most of their
work in that team. We matched each respondent’s
survey to his or her project team membership using
company records. Project teams ranged in size from
3 to 14 members ($\bar{x} = 6$, s.d. = 2). Teams had to
have a minimum of three members to be included
in the study. We assured respondents that their
participation in the research was voluntary and
that their data would be confidential; respondents
returned their completed surveys directly to us.

We only included respondents from project
teams in which at least 3 group members com-

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1 Being the only minority member, being one of a few
minority members, and being the member of a 50-50
group (50 percent men and 50 percent women, for in-
stance) each represents a different amount of diversity.
completed the survey. We dropped 4 respondents who were on two teams from the analyses because fewer than three responses were available, and another 7 individuals because their data were incomplete. The effective sample size was thus 178 respondents and 32 project teams. Respondents’ average age, organizational tenure, and project team tenure were 36.9, 7.6, and 2.3 years, respectively. Twenty percent were racial minorities, over two-thirds had some college education, and all were white-collar professionals.

**Independent Variables**

**Sex.** Respondents indicated their sex on the survey, and we created a categorical variable in which men were assigned a 1 (36%) and women were assigned a 2 (64%).

**Work group sex composition.** We categorized the 32 work groups into four types based on sex composition, which we ascertained from company records. Homogeneous groups (14, containing 66 respondents) contained either all men (3 groups, average group size = 7, s.d. = 3) or all women (11 groups, average group size = 5, s.d. = 1). Male-dominated groups contained one or more men than women (4 groups, 27 respondents, average group size = 7, s.d. = 1). Female-dominated groups contained one or more women than men (12 groups, 69 respondents, average group size = 7, s.d. = 3). Finally, balanced groups contained equal numbers of men and women (2 groups, 16 respondents, average group size = 9, s.d. = 2). Each respondent was assigned a code indicating the sex composition of her or his work group (1 = homogeneous group member, 2 = male-dominated-group member, 3 = female-dominated-group member, and 4 = balanced group member.

**Dependent Variables**

**Likelihood of transferring from current work group.** Respondents indicated the extent to which they would be likely to “transfer to the same job within [company name] which offered the same pay, and the same work” (that is, to essentially work in a different group in the same job; 1 = “extremely unlikely to transfer,” 7 = “extremely likely to transfer”). This is a useful way of isolating how likely each respondent thought he or she would be to move to a different group without eliciting social desirability biases, since keeping the same job and same pay would preclude staying with the same group. We intentionally asked respondents a hypothetical question so that we could capture their preferences and distinguish these from their views of the feasibility of making such a move. The mean response was 3.90 (s.d. = 2.16).

**Normative commitment to the organization.** We used Caldwell, Chatman, and O’Reilly’s (1990) eight-item scale to assess normative commitment predicated on value congruence. Respondents were asked to circle the number that indicated the extent to which they agreed with each statement (example: “The reason I prefer this organization to others is because of what it stands for, that is, its values”; 1 = “strongly disagree,” 5 = “strongly agree”). We averaged the eight items to form this scale ($\bar{x} = 3.93, \text{s.d.} = 0.59, \alpha = .82$).

**Positive affect.** We assessed respondents’ positive affect using the ten-item positive affect scale from the PANAS (Watson, Clark, & Tellegen, 1988). Positive affect is measured as an independent dimension using items such as “interested,” “proud,” and “enthusiastic.” We asked respondents to indicate the extent to which they generally “felt this way” (1 = “very slightly or not at all,” 5 = “extremely”; $\alpha = .85, \bar{x} = 3.77, \text{s.d.} = 0.55$).

**Work group cooperation.** We constructed a five-item scale to assess the extent to which a respondent viewed her or his work group as cooperative, adapting a validated scale from Johnson, Johnson, and Mesch (1988). As their scale assessed the extent to which team members share ideas, objectives, and materials, our items included respondent’s ratings of the degree to which their team: (1) “shared a vision about what they were trying to accomplish,” (2) “openly shared information with one another,” (3) “shared credit for success with one another,” (4) “pulled together for a common goal,” and (5) “tried to reach a consensus on important decisions” (1 = “not descriptive at all,” 7 = “very descriptive”; $\alpha = .80$, average scale score = 4.94, s.d. = 1.16).

**Control variables.** To control for the possibility that formal status, rather than sex (diffuse status) affected individual responses to team sex composition, we created a dummy variable indicating whether a person was a team leader or not. Twenty percent of the male respondents and 17 percent of the female respondents were team leaders. For similar reasons, we also controlled for respondents’ age ($\bar{x} = 36.35, \text{s.d.} = 9.39$) and their educational attainment, finding that 19.9 percent had high school degrees only, 24.2 percent had some college, 34.4 percent had college degrees, and 19.9 percent had graduate degrees. In addition, since tenure influences knowledge of a team and of an organization and its culture and that knowledge may in turn affect attitudes and intentions, we controlled for each respondent’s work team tenure ($\bar{x} = 2.34$ years, s.d. = 2.22 years). To distinguish our results from attitudes stemming from perceptions of ade-
quate or inadequate compensation, we included a control variable in which respondents indicated the extent to which a statement was descriptive of how they felt (“My compensation gives me the full amount I deserve,” 1 = “not at all,” 7 = “very”; $\bar{x} = 4.48$, s.d. = 1.46). We also controlled for respondent’s age ($\bar{x} = 36.35$ years, s.d. = 9.39) and race by creating a variable indicating if the respondent was white (79.6%), Asian (12.9%), Hispanic (2.7%), black (2.2%), or of another race (2.7%).

Since group-level variables beyond sex composition could influence members’ intentions and attitudes, we further checked the influence of being a member of a specific work group. We calculated the intraclass correlation using the formula for unequal groups for each dependent variable (Kenny & LaVoie, 1985: 348) and found that they were insignificant (range = .00–.08). This result suggested that individual data could be interpreted. We also ran analyses with a dummy variable indicating which group a participant was a member of but dropped it since it did not change our results. Nonetheless, because group size has been shown to directly affect cooperation and commitment, we controlled for group size, indicated by the number of total members per group ($\bar{x} = 7$, s.d. = 3). We also created a dummy variable indicating which of the three divisions a group operated in to account for any variance in our dependent variables owing to membership in a particular division.

**Analysis**

The values of the correlations among the four dependent variables ($r$'s = .06–.39) suggested that the variables were distinct and should be examined separately. We conducted analysis of covariance, with each equation including the covariates, the two categorical variables, and the interaction between sex and group sex composition. We conducted simple-effects tests to compare men’s and women’s responses across the four types of groups.

**RESULTS**

We found a significant interaction between sex and group sex composition ($F = 3.48$, $p < .01$) indicating that men and women differed in their reports of the likelihood that they would transfer out of work groups with varying sex composition. Table 1 and Figure 1 show that women reported a significantly higher likelihood of transferring out of homogeneous same-sex groups ($\bar{x} = 4.93$) than did men ($\bar{x} = 2.69$; mean difference = 2.24, $p < .01$). This pattern of findings supports Hypothesis 1; Table 1 presents standard deviations for all cell means and values for Cohen’s $d$, indicating effect sizes (Cohen, 1988).

Women also indicated a higher likelihood overall of leaving their work groups than did men, indicated by the “main effect” for sex ($F = 3.48$, $p < .05$). Supporting the general proposition that men and women react differently to differently composed groups, we found that men working in homogeneous groups were less likely to want to transfer ($\bar{x} = 2.69$) than were men working in female-dominated groups ($\bar{x} = 4.12$, mean difference = 1.44, $p < .05$). Though not all differences were significant, Figure 1 shows a linear trend for men, who indicated a greater likelihood of transferring as the proportion of women in a group increased (homogeneous male = 2.69, male-dominated = 3.20, balanced = 3.83, female-dominated = 4.12), consistent with Hypothesis 1.

The pattern for women was quite different and also consistent with our prediction for homogeneous groups. Women working in homogeneous groups rated their likelihood of leaving higher ($\bar{x} = 4.93$) than did those in female-dominated groups ($\bar{x} = 3.39$; mean difference = 1.54, $p < .01$) and also rated it higher—though not significantly so—than women in male-dominated groups ($\bar{x} = 3.62$; mean difference = 1.31, $p < .10$). Interestingly, women working in balanced groups indicated a greater likelihood of leaving ($\bar{x} = 4.97$) than did those in female-dominated groups ($\bar{x} = 3.39$; mean difference = 1.58, $p < .05$). Thus, although women did not express a greater likelihood of transferring as the proportion of women in a group increased, a pattern that would have shown complete support for Hypothesis 1, women did express a greater likelihood of their moving out of homogeneous and balanced groups than of their moving out of male- or female-dominated groups.

Hypothesis 2a was partially supported, since women in groups with more women expressed higher normative commitment. As shown in Figure 2, compared to women working in male-dominated groups ($\bar{x} = 3.66$), women in all three of the other types of groups were more normatively committed (homogeneous: $\bar{x} = 4.04$, mean difference = 0.38, $p < .05$; female-dominated: $\bar{x} = 3.94$, mean difference = 0.32, $p < .10$; balanced: $\bar{x} = 4.11$, mean difference = 0.45, $p < .05$). However, contrary to Hypothesis 2a, men who worked in homogeneous groups were less normatively committed to the organization ($\bar{x} = 3.57$) than were those working in either male-dominated ($\bar{x} = 4.08$, mean difference = .51, $p < .01$) or balanced work groups ($\bar{x} = 3.96$; mean difference = 0.39, $p < .05$).

Women experienced higher positive affect than did men overall ($F = 4.27$, $p < .05$). In testing
<table>
<thead>
<tr>
<th>Dependents</th>
<th>Overall Mean</th>
<th>Homogeneous Model 1 (n = 18)</th>
<th>Same Sex Dominates Model 2 (n = 17)</th>
<th>Balanced: Other Sex Dominates Model 3 (n = 8)</th>
<th>Other Sex Dominates Model 4 (n = 21)</th>
<th>Homogeneous Model 5 (n = 48)</th>
<th>Same Sex Dominates Model 6 (n = 48)</th>
<th>Balanced: Other Sex Dominates Model 7 (n = 8)</th>
<th>Other Sex Dominates Model 8 (n = 10)</th>
<th>$F$ for Group Sex</th>
<th>$F$ for Sex Composition</th>
<th>$F$ for Interaction</th>
<th>Model $R^2$</th>
<th>Comparison of Means of Significant Effects (Cohen's $d$)</th>
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<tbody>
<tr>
<td>Likelihood of leaving work group</td>
<td>3.90 (2.16)</td>
<td>2.69 (2.03)</td>
<td>3.20 (1.85)</td>
<td>3.83 (1.83)</td>
<td>4.12 (1.90)</td>
<td>4.93 (2.26)</td>
<td>3.39 (1.67)</td>
<td>4.97 (2.19)</td>
<td>3.62 (2.19)</td>
<td>3.48*</td>
<td>0.69</td>
<td>3.48**</td>
<td>.21</td>
<td>Model 1 vs. 5** (1.14)</td>
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<tr>
<td>Normative commitment</td>
<td>3.93 (0.59)</td>
<td>3.57 (0.57)</td>
<td>4.08 (0.57)</td>
<td>3.96 (0.59)</td>
<td>3.79 (0.59)</td>
<td>4.04 (0.44)</td>
<td>3.94 (0.47)</td>
<td>4.11 (0.45)</td>
<td>3.66 (0.45)</td>
<td>0.68</td>
<td>0.51</td>
<td>3.13*</td>
<td>.18</td>
<td>1 vs. 5* (1.08)</td>
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<tr>
<td>Positive affect</td>
<td>3.77 (0.55)</td>
<td>3.31 (0.62)</td>
<td>3.81 (0.53)</td>
<td>3.68 (0.85)</td>
<td>3.67 (0.50)</td>
<td>4.01 (0.44)</td>
<td>3.93 (0.56)</td>
<td>3.73 (0.45)</td>
<td>3.67 (0.31)</td>
<td>4.27*</td>
<td>0.75</td>
<td>2.85*</td>
<td>.20</td>
<td>1 vs. 5** (1.56)</td>
</tr>
<tr>
<td>Group cooperativeness</td>
<td>4.94 (1.16)</td>
<td>3.97 (1.05)</td>
<td>5.06 (1.00)</td>
<td>4.71 (1.05)</td>
<td>4.71 (1.14)</td>
<td>5.18 (1.24)</td>
<td>5.03 (0.86)</td>
<td>4.67 (0.59)</td>
<td>4.99 (0.59)</td>
<td>2.73*</td>
<td>0.95</td>
<td>1.97*</td>
<td>.23</td>
<td>1 vs. 5** (1.15)</td>
</tr>
</tbody>
</table>

*a For the models, adjusted means are reported, with standard deviations in parentheses. Control variables for all models were team leader status, tenure, satisfaction with compensation, education, division, age, and group size.

b Degrees of freedom for $F$ were 15 and 163.

c Bold type indicates result is as predicted.

* $p < .10$

** $p < .01$
FIGURE 1
Test of Hypothesis 1: Men's and Women's Likelihood of Transferring to Another Work Group as a Function of Variations in Group Sex Composition

Hypothesis 2b, we found that women working in male-dominated groups expressed significantly lower positive affect ($\bar{x} = 3.67$) than did those in homogeneous groups ($\bar{x} = 4.01$; mean difference = 0.33, $p < .05$; see Figure 3). And, though not all differences were significant, women's positive affect declined as the proportion of men in a group increased (homogeneous = 4.01, female-dominated = 3.93, balanced = 3.73, male-dominated = 3.67; see Figure 3), supporting the similarity-attraction prediction. Men, again, showed a different pattern than women, with those in male-dominated groups expressing the highest levels of positive affect ($\bar{x} = 3.81$), followed by, but not significantly different from, those working in balanced groups ($\bar{x} = 3.68$) and female-dominated groups ($\bar{x} = 3.67$).

Contrary to our prediction, men in homogeneous groups expressed the lowest levels of positive affect ($\bar{x} = 3.31$), significantly lower than those in male-dominated (mean difference = 0.50, $p < .01$) groups.

Finally, we predicted in Hypothesis 2c that men and women working in groups that were dominated by members of their own sex would perceive those groups as more cooperative. Women viewed their female-dominated work groups as more cooperative than men viewed their male-dominated work groups as being ($F = 2.73, p < .05$; see Figure 4). But men working in male-dominated groups saw more cooperation ($\bar{x} = 5.06$) than men working in homogeneous groups saw ($\bar{x} = 3.97$; mean difference = 1.09, $p < .01$). Men in homogeneous groups also saw their groups as less cooperative than did men in female-dominated groups ($\bar{x} = 4.71$, mean difference = 0.75, $p < .05$).

Additional Analyses
One of the unique features of this study is that we collected data from intact work groups that varied substantially in sex composition. It is important to consider the extent to which our sex composition categories were appropriate, however. Allmendinger and Hackman (1995) observed a “tipping point” phenomenon, in which it took more than 1 person over an equal distribution of men and women for
members to think of a group as unbalanced or unequal. We therefore recategorized the groups that were in the male- or female-dominated category because of only one extra man or one woman (for instance, a group of three men and two women) into our balanced group category. This procedure resulted in 14 homogeneous groups, 4 male-dominated groups, 6 female-dominated groups, and 8 balanced groups. We reran our analyses and found that the results were virtually identical to those we reported above. At the other end of the spectrum, we also recategorized the groups containing a majority of members of one sex and only one member of the other sex into our homogeneous group category and reran our analyses. The logic is that people might not differentiate between having no person of the other sex in a group and having just one. In this case, our results were significantly diminished. Taken together, these two tests indicate that members may be insensitive to the difference in already mixed groups of nearly equal versus exactly equal distributions of men and women, but highly sensitive to the difference between being homogeneous in one sex versus having a single member of the other sex. We concluded that our categorization scheme was appropriate given our theory and data and that homogeneity was substantially different from all other combinations.

**DISCUSSION**

Our results showed that sex composition affected men and women differently. Similarity-attraction theory, the primary theoretical foundation for much demography research, may, therefore, be inadequate to explain such asymmetric reactions. Instead, when women are confronted with status conflicts that might jeopardize their career advancement, similarity-attraction tendencies appear to be secondary to status concerns.

**Asymmetric and Symmetric Effects of Work Group Sex Composition on Men and Women**

*Men's and women's expressions of the likelihood of leaving their work groups.* We considered people's statements of how likely it was that they would leave their work groups as an indication of
the value they placed on being members of those groups. Men were most eager to remain members of homogeneous or male-dominated groups and also most eager to leave balanced and female-dominated groups—that is, they were more eager to leave their work groups as the proportions of women in their work groups increased. If we had only assessed men's reactions to work groups with differing sex composition, we would have concluded that similarity-attraction theory was an appropriate and complete explanation. However, by including a fuller range of work groups with different sex compositions and, most importantly, all-female groups, we were able to identify limits to typical similarity-attraction predictions.

First, our findings for women directly contradict similarity-attraction theory, in that women expressed a significantly higher likelihood of leaving homogeneous groups than did men. Because of historical status differences between men and women at work, women may have expressed a greater likelihood of transferring out of all-female groups (even through they expressed higher levels of value-based commitment to them) because these were not the groups that would afford them the advantages generated from being part of potentially higher-status groups—that is, those that included men. Given the long history of men's domination of high-status roles in organizations, this explanation seems plausible and more complete than that offered by similarity-attraction theory. Nonetheless, it would be useful to assess respondents' actual perceptions of work group status within their organization directly. In assessing status directly, however, it is difficult to avoid increasing the salience of sex as a social category, potentially influencing people's responses to various outcomes such as their desire to stay in a particular group. Thus, subsequent research might identify nonobtrusive ways of assessing status differences among
differently composed groups, such as taking independent measures of the centrality of a group within an organization, or treating a portion of a sample as informants and a portion as respondents to identify shared perceptions of status.

Second, women indicated the greatest likelihood of leaving homogeneous groups and balanced groups, and the lowest likelihood of leaving male- or female-dominated groups. This nonlinear pattern suggests that contextual factors other than similarity shape preferences. Again, historical status differences between men and women may be one such factor. Though we expected women to show preferences that were the inverse of men’s, women still expressed a significantly lower likelihood of transferring out of female-dominated groups (defined as those containing more women than men by at least one individual) than out of homogeneous or balanced groups. What explains the female respondents’ relative preference for female-dominated groups? In contrast both to homogeneous female groups, which members might view as “female ghettos” that might constrain their chances for advancement (Ridgeway & Smith-Lovin, 1999), and to balanced groups, in which women may be neither more distinct nor more powerful than men, female-dominated groups have enough men to increase the groups’ overall status. Women may prefer female-dominated groups because they offer them two different benefits—both personal power within the groups and an external perception of the groups as powerful. Thus, women’s “tipping point” is not symmetrical (Allmendinger & Hackman, 1995), and the basis for their preference for male-dominated over balanced groups in particular is worthy of further investigation.

Both men and women indicated a relatively strong preference for moving out of balanced
groups if given the chance. Further, women were not as likely to express a preference for leaving male-dominated groups as men were to express a preference for leaving female-dominated groups, corroborating prior research (e.g., Tsui et al., 1992). Given that previous research has shown that sex is a more salient social category among women than men (Pichelin & Hurtwig, 1996), the results here suggest that women, who are more likely to have experience as minority members of work groups, may also have more nuanced perceptions of being minorities. That is, they are acutely aware of both the potential benefits and costs of being in a male-dominated group versus a group that is dominated by women because they have had fewer opportunities to achieve high-level positions within organizations. Men, on the other hand, are less likely to have minority experience and may respond more negatively than women to being in this position, possibly hurting their own promotion potential as a result. In this sense, the numerical distribution of men and women in a group acts as a contextual cue for the interpretation of the meaning of demographic differences.

**Organizational commitment, positive affect, and group cooperation.** We also found that certain affective aspects of work were based on similarity-attraction forces. Men and women reported different levels of normative commitment to their organization depending on the sex composition of their work groups. Women working in homogeneous groups reported the highest levels of normative organizational commitment, overall positive affect, and cooperation within the groups, suggesting that they were the most comfortable in such groups. Women also revealed a general decline in these attitudes as the proportion of men in their groups increased (though, again, not all differences were significant), suggesting that the similarity-attraction prediction appropriately describes women’s reactions with respect to attitudes that are less instrumental and more expressive in nature. Taken together with women’s greater expressed likelihood of leaving homogeneous groups, these results suggest that women experience ambivalence around career-related and expressive motives; this is notably consistent with research showing a similar pattern for women’s motives and the networks they develop in organizations (Fong & Tiedens, 2002; Ibarra, 1992).

Men were most normatively committed to their organization, showed the highest levels of positive affect, and viewed their groups as most cooperative when working in male-dominated groups. Not upholding similarity-attraction theory predictions, however, men in all-male groups reported the low-
est levels of these attitudes. Several possible explanations exist for this unexpected result. First, previous research has documented that men are more competitive with one another than are women, reducing the likelihood that high levels of cooperation would emerge in all-male groups (e.g., Cassirer & Reskin, 2000). In a series of experiments, Gneezy and his colleagues (e.g., Gneezy, Niederle, & Ruscichini, 2001) demonstrated that, compared to men, women were less competitive and performed less well when competing in mixed-sex environments than in homogeneous groups. Men’s strong “agentic,” or task, orientation may reduce their attention to group process considerations in such a way that all-male work groups become harder to manage and less pleasant than other groups, particularly in the context of an organization that expects members to conduct the bulk of its work in teams. Given women’s historically expressive (versus agentic) roles in society, the presence of women in the male-dominated groups studied here may have either moderated some of the competitiveness or enhanced focus on work group processes. Consistent with this interpretation, relational demography research has shown that sex diversity may enhance group effectiveness (e.g., Martins, Milliken, Wiesenfeld, & Salgado, 1999). For instance, Rior dan and Holliday-Wayne (1998) found that men in groups numerically dominated by women reported more positive perceptions of performance appraisals, advancement opportunities, and recognition. Thus, men in all-male groups may recognize the benefits of some diversity.

Finally, the unexpected results for all-male groups may have reflected normative pressures from the culture of the company from which we drew our sample. Since this organization is recognized as a minority-friendly employer, the organizational culture may simply have signaled the importance of diverse groups, leading respondents in all-male groups to express a preference for somewhat diverse settings. They preferred settings in which men still dominated but in which they might also reap the advantage of both diffuse status and group process benefits from diversity. While speculative, these interpretations are consistent with our empirical results, in that, despite any similarity-attraction effects, it appears the men felt better about working in their groups when they were in the presence of women. Given that the low levels of normative commitment and positive affect are mirrored in this study by similar reports of less cooperation in all-male groups, future research might investigate the functioning of all-male groups.
Limitations

The organization we studied is somewhat atypical in the proportion of women and minorities it has in managerial positions. The composition of the firm, however, allowed us the rare opportunity to sample intact work groups that varied in sex composition. Unlike previous studies in which women, regardless of their number, were in the organizational minority (e.g., Ely, 1994; Konrad & Canning, 1997), our sample is from an organization in which numerous women work in technical, managerial, and professional groups. However, this organizational makeup is also a limitation in that this organization and its culture may create an environment in which people interpret demographic differences differently than do members of other organizations. Future research should explore the extent to which these findings generalize to organizations whose cultures order the status of various demographic characteristics differently (e.g., Spataro, 2002). For the same reasons, our findings may be unique to the apparel manufacturing and retail industry, which may be more associated with women than other industries. Organizations in other industries might be examined in future research to see if similar patterns emerge.

Further, in spite of the large number of women in our sample, the number of groups studied, and especially the number with a balanced sex composition, was comparatively small, limiting our ability to generalize the results. And, since people have multiple ascribed characteristics and identities that pertain to their status, it would be useful to examine whether other status-related demographic characteristics, such as race, nationality, and age, affect different category members' attitudes and behaviors differently. Since no single characteristic exists in isolation, and an individual's demographic characteristics may exert competing effects—for instance, being male might elicit high status expectations at the same time that being young elicits low status expectations—researchers should attempt to capture the combined effects of all of a person's demographic characteristics on instrumental and affective outcomes.

Although the current study provided evidence linking an individuals' attitudes and group processes to their work groups' sex composition, we did not examine actual performance and the performance differences among individuals and groups that arise from differences in sex composition. Following the logic of our hypotheses, we might predict that men's performance would be more negatively influenced by being numerically dominated by women than would that of women who are numerically dominated by men. Finally, information about men's and women's career aspirations, marital status, and attraction to members of the other sex would be a useful basis for understanding a broader array of motives underlying their work group preferences.

Practical Implications

Our study showed that men and women face different challenges at work, implying that managers must provide them with different solutions. Managers should seek ways of easing the tension women face in choosing between the comfort of homogeneous groups and the status derived from membership in largely male-dominated groups. Such efforts might include providing women in male-dominated groups, in particular, with social support so that they do not have to trade off comfort for mobility (e.g., Flynn, Chatman, & Spataro, 2001). Developing networking and mentoring programs to bolster women's career-based accomplishments (e.g., Ibarra, 1992) might also help them reach the status they desire. These practical steps become even more critical as organizations increase the proportions of women in high-status roles, since only under these conditions will women confront instrumental versus expressive trade-offs.

Managers might develop ways for men to better understand the dilemma women face, enabling them to offer the kind of support to women that they offer to fellow men. For example, men could be assigned to work groups in which they are the minority sex to get a better understanding of the challenges women face. Further, the lower levels of commitment, positive affect, and cooperation among men in homogeneous groups suggests that men may benefit more than women from group process training so that they can function more effectively. Thus, scarce training resources can be differentially invested to accommodate men's and women's distinct challenges.

Finally, for both men and women, managers could take steps to reduce the negative effects of unconscious stereotyping and increase the salience of group goals in heterogeneous groups. Group members could, as a result, more effectively focus on their common objectives rather than on demographic differences that are potentially irrelevant to accomplishing those objectives (e.g., Chatman et al., 1998). These interventions would be particularly useful early in a group's interactions and, more generally, particularly useful early in the socialization of new employees, when they might preclude people's establishing status criteria that
are based on demographic characteristics rather than on accomplishments and task-related expertise (e.g., Chatman & Flynn, 2001). Managers and those charged with career development should avoid inadvertently relying on status differences in placing men and women in groups and, of course, strive to develop objective and unbiased ways of assessing performance so that readily observable characteristics such as sex are not used as an inaccurate proxy for anticipating or evaluating performance (e.g., Eagly et al., 1995).

Conclusions and Implications for Future Research

Two originally proposed benefits of organizational demography research were parsimony and a focus on objective characteristics (Pfeffer, 1983). Demographic attributes such as age, sex, and race may well be objective, but their interpretation and meaning are essentially cognitive. That is, individuals see and make sense of demographic diversity in terms of cognitive processes such as stereotyping and societal status orderings. The role of societal status expectations in making differences salient is one way that sex differences are socially constructed in organizations.

Finally, our results suggest one possible explanation for the confusing and often contradictory relationship between demography and work outcomes found in prior research. Diversity is sometimes beneficial and sometimes detrimental because people from different social categories, such as men and women, experience various levels of diversity differently. Further, men’s and women’s variegated reactions diverge over different outcomes. Aggregating findings across sexes—that is, failing to consider how men’s and women’s responses diverge as a function of their group’s sex composition—can mask important differences and lead to contradictory findings. For example, women may perceive being in the numerical minority as beneficial, but men may see it as detrimental.

We believe that it is time for demography researchers to explore how being different affects people and organizations in finer-grained ways. We found evidence supporting the conclusion that similarity-attraction theory, the foundation of much recent demography research, does not fully capture the complex meanings of demographic attributes to people from different demographic categories. There may be similar ramifications for social categorization theory, the other primary theory used in demography research. Though we did not explore ideas associated with social categorization in the current study, we would expect that numerical distinctiveness would affect category salience in ways that would lead to asymmetric effects for men and women. For example, women may view sex as a less salient category in male-dominated groups than they do in female-dominated groups because of the relative scarcity of the latter. In contrast, men might view sex as a social category as more salient when working in groups in which they are less numerous. Given the impact of category salience on behavior in groups, it would be useful to sort out these potential effects.

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