

**Rational Ambivalence: Asymmetric Effects of Work Group Demography on Men and Women's  
Responses to Being in the Minority**

**Jennifer A. Chatman**

Until June 1, 2002:

Harvard Business School

Soldiers Field

Harvard University

Boston, MA 02163

617-495-6148

[jchatman@hbs.edu](mailto:jchatman@hbs.edu)

after June 1, 2002

Haas School of Business

University of California

Berkeley, CA 94720-1900

510-642-4723

[chatman@haas.berkeley.edu](mailto:chatman@haas.berkeley.edu)

**and**

**Charles A. O'Reilly**

Graduate School of Business

Stanford University

Stanford, CA 94530

650-725-2110

[oreilly\\_charles@gsb.stanford.edu](mailto:oreilly_charles@gsb.stanford.edu)

## **Rational Ambivalence: Asymmetric Effects of Work Group Demography on Men and Women's Responses to Being in the Minority**

### **Abstract**

We examined the extent to which members of different demographic categories will react symmetrically to variations in work group demography. Using data from a field study of a large clothing manufacturer and retailer we found that men and women's preferences and attitudes about their work group differed depending on its sex composition. Both men and women wanted to remain in, and were instrumentally committed to, groups dominated by males but were normatively committed to groups dominated by their own sex.

It is almost cliché to say that a major challenge facing organizations in the coming decades will be the problems involved in managing an increasingly diverse work force (Offerman & Gowing, 1990; Lyness & Thompson, 1997). The trend toward an increasingly heterogeneous work force is unambiguous. What is less clear is how these macro changes will affect individuals and organizations. In the face of this challenge, scholars have undertaken a significant body of research to understand how diversity and demography influence organizations and their members (e.g., Milliken & Martins, 1996; Riordan, 2001; Williams & O'Reilly, 1998).

Overall, the picture that emerges is that diversity, while important, is a complex phenomenon whose effects may vary substantially depending on a variety of contextual and personal characteristics. For example, peoples' work attitudes and behaviors are influenced by how salient a given social category, such as sex or race, is in a particular situation (Cota & Dion, 1986; Randel, 2000). While category salience is closely related to which demographic characteristic is being used to define majority or minority status (Garza & Santos, 1991; Yoder, 1991), people's attitudes and behaviors in demographically diverse groups are also influenced by the proportional representation of relevant demographic characteristics (Abrams, Thomas & Hogg, 1990; Ely, 1994; Karakowsky & Siegel, 1999; Lau & Murnighan, 1998).

Despite a recent flurry of relevant demography research, conclusions remain somewhat abstract and, in some cases, contradictory. Demographic heterogeneity clearly influences various work processes and outcomes, but it is unclear whether it promotes or constrains group effectiveness. On the one hand, a "value in diversity" hypothesis has been supported. Compared to homogeneous groups, members of demographically heterogeneous groups behaved more

cooperatively (Cox, Lobel, & McLeod, 1991), were more innovative (O'Reilly, Williams, & Barsade, 1997; Jehn, Northcraft, & Neale, 1999), and derived higher quality solutions (Kirchmeyer & Cohen, 1992). On the other hand, after a comprehensive review Williams and O'Reilly (1998) concluded that increased diversity typically negatively influenced individual and group behavior. Indeed, a variety of studies showed that *homogeneous*, not heterogeneous, groups were more cooperative (e.g., Chatman & Flynn, 2001), more innovative (e.g., O'Reilly & Flatt, 1989), performed better (e.g., Watson, Kumar, & Michaelsen, 1993), and experienced less turnover, alienation, and dissatisfaction among members (e.g., Pelled, 1996; O'Reilly, Caldwell, & Barnett, 1989; Tsui, Egan, & O'Reilly, 1992). This variability in how demography influences groups and organizations complicates both the research challenges and the derivation of practical lessons from the research.

### **Similarity, Status, and the Effects of Work Group Sex Composition**

The similarity-attraction paradigm (Byrne, 1971) is a common theoretical basis for studies of organizational demography. Demography researchers typically use this theory to predict that people will be more attracted to and prefer to work in groups of more demographically similar others. For example, Glaman, Jones, and Rozelle (1996) found that demographically similar co-workers liked and preferred to work with each other more than with co-workers who were demographically different. The consequences of increased interpersonal attraction predicated on demographic similarity have included 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 et al., 1999), more positive affect and commitment (Riordan & Shore, 1997), lower levels of turnover

(Jackson, Brett, Sessa, Cooper, Julin & Peyronnin, 1991), and an increased desire to maintain group affiliation (Tsui, et al., 1992).

Although theoretically useful and widespread, the similarity-attraction hypothesis may be too simple to fully capture the dynamics of diversity in organizations. For example, as originally proposed, the similarity-attraction paradigm assumes a level of symmetry between different groups of people; that is, men and women, old and young, or whites and blacks will respond symmetrically to being similar to or different from others. But research has shown that members of different demographic groups respond differently to being dissimilar or similar to others. These asymmetries are often seen when examining the effects of sex composition on individual and group outcomes (e.g., Heikes, 1991; Inzlicht & Ben-Feuv, 2000; Karakowsky & Siegel, 1999; Ott, 1989). In one field study, men responded more negatively than women to being in the numerical minority in work groups by being absent more often, less committed, and less likely to intend to stay (Tsui, et al., 1992). 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 than were women; women maintained more egalitarian attitudes regardless of the group's sex composition.

While not definitive, demography studies demonstrating asymmetrical effects violate simple similarity-attraction theory predictions and suggest that contextual variables, such as societal status or the historical nature of the task, may influence how members of different demographic groups respond to variations in work group composition (e.g., Ely & Meyerson, 2000; Martin & Shanahan, 1983). Men, who have been historically in the numerical majority and of higher status in work organizations, may perceive a loss of power signified by being in the

numerical minority among women, leading them respond negatively to their minority status (e.g., Tsui et al., 1992). Cassirer and Reskin (2000), for example, investigated differences in men's and women's preferences for promotion and concluded that men attached greater importance to promotion than did women because men were likely to be located in organizational positions that encouraged workers to hope for promotion – sex, by itself, however, was not associated with promotion expectations. Women, in contrast, have more experience as low status members of organizations, or, as high-status numerical minorities and may, therefore, respond differently than men to being in the numerical minority.

The extent of heterogeneity, and the psychological experience of different “amounts” of diversity, such as the difference between being a solo, one of a few minority members, or part of a group that has equivalent numbers of different people (e.g., 50% men and 50% women), have been identified as important (e.g., Kanter, 1977; Lau & Murnighan, 1999) but seldom examined empirically (see Allmendinger & Hackman, 1995 and Taylor, Fiske, Close, Anderson, & Ruderman, 1978 for notable exceptions). We focus on sex, as it is among the most visible, ubiquitous, and relevant demographic categories in organizational settings (Heilman, 1983). Our goal in this paper is to investigate how men and women are differentially affected by variations in work group diversity. We expect that men who find themselves in a female-dominated work unit will have negative reactions to this experience, as would be predicted by similarity attraction theory, while women may have positive responses to being a numerical minority in a male-dominated group insofar as it represents an opportunity for career advancement.

### **Numerical Distinctiveness: Differences for Men and Women**

According to numerical distinctiveness theory, people are most likely to notice their own and others' distinctive characteristics because such characteristics provide greater informational richness and value for discriminating themselves or a focal individual from others (McGuire, 1999). The central prediction of numerical distinctiveness theory is that an individual's unique traits in relation to other people in a given context will be more salient; that is, they will garner more attention and focus and will be viewed as more diagnostic and predictive of behavior, than will more common traits. But, distinctiveness, and the associated salience of the relevant social category, may arise for reasons other than being a numerically rare representative of that category in a specific setting. In particular, sex has traditionally been correlated with prestige and status differences in society and differential expectations exist concerning men and women's social power (Pugh & Wahrman, 1983). Berger, Rosenholtz, and Zelditch (1980) defined characteristics that give rise to differential status expectations, such as sex or race, as diffuse status characteristics. Status stimulates skill expectations so that high status individuals are assumed to be more competent in general (e.g., to have higher general intelligence) than are low status individuals. Thus, societal stereotypes may influence how men and women respond to compositional differences in specific work groups.

Men and women may experience different consequences depending on their proportional representation in a job or particular occupation (e.g., Hutson-Comeaux & Kelly, 1996; Randel, 2000; Wharton & Baron, 1987). For example, Walker, Ilardi, McMahon and Fennell (1996) showed that, in leaderless groups comprised of all males or females, leadership behaviors were equally likely to develop regardless of sex. However, in mixed sex groups, men were five times more likely to exercise opinion leadership than were women. Pichevin and Hurtig (1996) found

that women in mixed sex groups were more aware of their gender than were men. Thus, a complete theory of group demography at work must recognize that men and women are likely to have asymmetric reactions to compositional differences, based on their differences in status.

Although Kanter (1977) focused on the specific advantages afforded to women in a male-dominated corporation, she proposed a general theory of proportional representation, that is surprisingly similar in its predictions to distinctiveness theory, in which people reacted differently to being a token versus being part of a group with balanced heterogeneity. When members of a sex or ethnic category comprise less than some critical proportion of a group, other group members' perceptions of them will be distorted, resulting in increased visibility, polarization, and assimilation to the stereotype of the minority. This visibility can lead minorities to capture a greater share of others' awareness such that their behavior is scrutinized more closely than majority members' behavior. Polarization leads to exaggerated differences between minority and majority members, resulting in the well-known in-group/out-group effect in which people cooperate with in-group members and compete against out-group members (e.g., Brewer, 1979). Assimilation describes the process by which minority members are stereotyped, that is, their attributes and behavior are distorted or misperceived to confirm existing stereotypes about members of their social category.

Kanter and others have, however, presumed symmetrical effects for men and women (e.g., Kanter, 1977; Karakowsky & Siegel, 1999; Spangler, Gordon & Pipkin, 1978). Even researchers who consider how working in an occupation for which one's demographic profile is atypical commonly presume that men and women's reactions will be symmetrical. For example, men displayed more power-related behavior than women when working on an oil change task



while women displayed more power-related behavior than men when working on a sewing task (e.g., Dovidio, Heltman, Brown, Ellyson, & Keating, 1988), and men emerged as leaders more often than women when the task was masculine while women emerged as leaders more often than men when the task was feminine (Wentworth & Anderson, 1984). We, therefore, investigated whether men and women reacted differently to being a member of majority, minority, or a balanced group.

### **Predicting Men's and Women's Reactions to Gender Diversity**

Some evidence exists for the proposition that men and women will react differently to variations in work group diversity. Wharton and Baron (1987), for example, found that males responded more negatively in their work attitudes to increased group heterogeneity than did females. Tsui, Egan, and O'Reilly (1992) found similar negative reactions among men in mixed gender groups, while females who were more outnumbered by men (in the numerical minority) were neither less satisfied nor less committed than when they were less outnumbered. Other studies of males and females in historically typical or atypical jobs have also reported unexpected asymmetrical effects that might only make sense by combining status and proportional representation explanations (e.g., Carli, 1999). For instance, Fairhurst and Snaveley's (1983) study of nurses found no evidence that men, who are generally likely to be numerically distinct in that occupation, were more socially isolated when in a token status. 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, a predominately male occupation, experienced difficulties.

Therefore, in addition to proposing that men and women will react differently to different amounts of gender diversity, we consider the underlying causes and manifestations of these differences. Consistent with a simple prediction from similarity-attraction theory, we expect that both women and men working in groups with proportionately more of their own sex will view the group as more cooperative and congruent with their values. However, because men have historically had higher status at work, both men and women will be most interested in retaining membership in groups with higher proportions of men, and least interested in retaining membership in groups with higher proportions of women. Men can simultaneously obtain positive affect and career advancement in groups with higher proportions of men. For women, however, the groups in which they are comfortable and those in which their mobility aspirations are met differ; they are likely to fit better in groups with higher proportions of females, but may also understand that they can access greater opportunities by being members of higher status groups -- typically those dominated by men (Konrad & Cannings, 1997).

Based on this logic and contrary to a simple similarity-attraction theory prediction, we hypothesize that sex will moderate the relationship between gender composition and career advancement concerns. Men will be more interested in leaving groups that contain equal or more women than men. In contrast, women will desire to leave groups that are female-dominated since these are not likely to advance their career. Said differently, given that female-dominated groups are often viewed as lower status, both men and women will be less likely to want to remain within them and will be more desirous of remaining in male-dominated groups. Specifically, we hypothesize that:

**Hypothesis 1A:** Men will be more likely to intend to stay in work groups that are numerically dominated by members of their own sex.

**Hypothesis 1B:** Women will be less likely to intend to stay in work groups that are numerically dominated by members of their own sex.

Previous studies have shown that, in addition to similarities in demographic attributes such as sex, similarity in underlying values are also associated with increased attraction and liking (Byrne, Clore & Worchel, 1966; Glaman, Jones & Rozelle, 1996; Harrison, Price, & Bell, 1998; Tsui & O'Reilly, 1989). Further, men's and women's values and preferences may differ systematically (e.g., Feingold, 1994; Kelly & Hutson-Comeaux, 1999; Rudman & Glick, 1999), suggesting that groups with proportionately more of one sex may be more attractive to members of that sex. Since commitment is at least partly based on value-similarity (O'Reilly, Chatman & Caldwell, 1991), it follows that members of the numerically dominant sex should be more affectively committed to the group than those who are in the minority. However, research on organizational commitment has shown that a person's attachment to an organization or work group is multi-dimensional. Normative commitment or attachment is predicated on the extent to which a person internalizes or accepts work group norms and values. Independent of normative commitment is the notion of instrumental attachment or commitment based on the perceived extrinsic benefits (e.g., financial or career mobility) of belonging to the group or organization (Bozeman & Perrewé, 2001; Caldwell, Chatman & O'Reilly, 1990; O'Reilly & Chatman, 1986). We expect men's commitment to follow predictions of similarity-attraction theory. Men will be both normatively and instrumentally committed to male-dominated groups. Women, however, may be "rationally ambivalent" in terms of their commitment; that is, they may be normatively

committed to groups with the highest proportion of women, but instrumentally committed in groups that offer them the greatest opportunity for career advancement, or groups that are numerically dominated by men. We, therefore, again expect that sex will moderate the relationship between the sex composition of the group and instrumental commitment.

**Hypothesis 2A:** Men and women working in groups that are numerically dominated by members of their own sex will be more normatively committed than will men and women working in groups that are not numerically dominated by members of their own sex.

**Hypothesis 2B:** Men and women working in male-dominated groups will be more instrumentally committed than will men and women working in female-dominated groups.

In addition to influencing commitment, a work groups' sex composition may also affect how members perceive group functioning. Research on the robust in-group/out-group effect shows that when people view others as a part of a similar in-group, they are more likely to cooperate (Brewer, 1979; Wheelan, 1996). Demographic features, particularly those that are visible or otherwise easily accessible, like sex, are primary sources for categorizing others as in-group or out-group members (Stangor, Lynch, Duan & Glass, 1992). Based on similarity-attraction theory, we predict that both men and women will view groups that are numerically dominated by their own sex as more attractive and cooperative, and therefore more team oriented.

**Hypothesis 3:** Men and women working in groups that are dominated by members of their own sex will perceive those groups as more team-oriented than will men and women working in groups that are not dominated by members of their own sex.

In sum, the picture that we paint through these hypotheses is more straightforward for men than for women. Men's reactions to gender diversity follows directly from similarity-attraction theory; they prefer to be members of groups numerically dominated by members of their own sex and are likely to respond negatively to being in a minority status. In male-dominated groups, men gain the affective benefits of working with similar others and the instrumental benefits of being in groups that have historically afforded the greatest career opportunities. Women, however, face a more difficult set of tradeoffs, or rational ambivalence, with regard to being in a numerically dominant position. From a similarity-attraction perspective, women, like men, will be most affectively comfortable in groups in which their sex dominates numerically; however, for instrumental reasons they may be forced to trade off the benefits of working with similar others for the prospect of greater career mobility associated with being a member of a male-dominated group. Below we describe a natural field experiment in which the gender composition of a firm's project teams varied in systematic increments, allowing us to test our hypotheses in an externally valid setting.

## **Method**

### **Sample and Research Site**

We conducted this study in three divisions of a large clothing manufacturer and retailer that formally assigned employees to work in project teams. These teams represented all functions within the three divisions sampled (e.g., management, product development, personnel, finance, and marketing). Project teams ranged in size from 3 to 14 members ( $\bar{x}=5.8$ , s.d. = 2.5). All members were dedicated to only one project team, and they conducted the bulk of their work in that team. To be considered a project team in our study a team had to have a minimum of three

members. We collected survey data from 189 employees (85%) of 222 possible, matching their survey responses to their project team membership using company records. In a cover letter, participants were told that their participation in the research was voluntary and assured that their responses would be confidential such that they would only be seen by the researchers and presented in aggregated form. Our surveys were administered by the company and returned via mail directly to the researchers.

We only included project teams in which at least three group members completed the survey; that is, if a group had only two respondents it was not used in the analysis even if its membership exceeded three members. Three teams and four respondents were dropped from the analyses because fewer than three responses were available, and another seven individuals were dropped because their data were incomplete, resulting in an effective sample size of 32 project teams and 178 respondents. Sixty five percent of the respondents were women and twenty percent were ethnic minorities. Respondents' average age and organizational tenure was 36.9 and 7.6 years respectively; their average tenure with their project team was 2.3 years. Over two thirds of the respondents had some college education. All respondents were white-collar professionals. The three organizational divisions sampled here represent the central functions within the larger firm and were considered by corporate management to be representative of the demography and functions of the larger company.

### **Independent Variables**

Sex. Respondents indicated their sex on the survey and we created a categorical variable in which males were assigned a 1 and females were assigned a 2.

Project team gender composition. We categorized the 32 project teams into four types of

groups depending on their gender composition. Homogeneous groups contained either all males (3 groups) or all females (11 groups), for a total of 14 homogeneous groups in which 67 respondents were members (average group size=6.01, s.d.=2.58). Male-dominated groups contained more male than female members (4 groups in which 26 respondents were members, average group size=6.85 members, s.d.=.86). Female-dominated groups contained more female than male members (12 groups in which 69 respondents were members, average group size=7.31, s.d.=3.63). Finally, balanced groups contained an equal number of male and female members (2 groups in which 16 respondents were members, average group size=8.5, s.d.=2). Each respondent was assigned a 1 (homogeneous group), a 2 (male-dominated group), a 3 (female-dominated group), or a 4 (balanced group) depending on the type of project group in which he or she was a member.

### **Dependent Variables**

Desire to leave current project team. Respondents indicated on a seven point Likert-type scale, 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 team in the same job, with 1= “extremely unlikely to transfer” to 7= “extremely likely to transfer.” This is a useful way of isolating how desirable each respondent found it to move to a different team without eliciting social desirability biases, since keeping the same job and same pay would preclude staying with the same team. The mean response was 3.90 (s.d.=2.16).

Normative and instrumental commitment. We used Caldwell, Chatman, & O'Reilly's (1990) 12-item commitment measure to assess normative and instrumental commitment. Respondents were asked to circle the number that indicated the extent to which they agreed with

each statement from 1= “strongly disagree” to 5= “strongly agree.” Eight items pertained to normative commitment (e.g., “The reason I prefer this organization to others is because of what it stands for, that is, its values) while four items pertained to instrumental commitment (e.g., “How hard I work for the organization is directly linked to how much I am rewarded”). We used principal components factor analyses with a varimax rotation and found that, with the exception of one instrumental commitment item that loaded negatively on the normative commitment factor, the items loaded on to two factors replicating prior results (e.g., Caldwell et al., 1990). We removed that item and averaged the eight normative and three remaining instrumental commitment items, respectively, to represent normative ( $\bar{x}$ =3.93, s.d.=.59, Cronbach alpha=.82) and instrumental commitment ( $\bar{x}$ =2.95, s.d.=.70, Cronbach alpha=.41).

Evaluation of group’s teamwork. A number of studies of teamwork and group performance have suggested that effective teams are successful at accomplishing their tasks, meeting the individual expectations of their members, and functioning over long periods of time. In assessing group functioning, Denison, Hart, and Kahn (1996) included measures of the group’s ability to solve problems, implement solutions, learn, communicate openly and effectively, and be satisfying to team members. Others have noted the importance of factors such as social integration (O'Reilly, et al., 1989), common goals (Weldon, Jehn, & Pradhan, 1991), speed and flexibility in decision making (Eisenhardt, 1989), and the ability to adapt over time (Guzzo & Dickson, 1996; Hackman, 1987). To assess these dimensions, we constructed a six-item index consisting of questions about the team's ability to function effectively on these dimensions. Respondents indicated, on a 7-point Likert scale ranging from “not descriptive at all” to “very descriptive” the degree to which each item applied to their team. The items loaded



on to a single factor explaining 60.27% of the variance with an eigenvalue of 3.62 ( $\bar{x}$ =35.17, s.d.=7.75; Cronbach alpha =.87).

Control variables. We included a variety of covariates in testing our hypotheses. First, individuals' tenure influences their knowledge of the organization and its culture and access to informal networks (e.g., Harrison & Carroll, 2001), which may, in turn, affect their perceptions of teamwork, satisfaction, commitment, and projected length of stay. Therefore, we controlled for each respondent's tenure in the organization in all analyses ( $\bar{x}$  = 7.38 years, s.d.=6.52 years).<sup>1</sup> To control for the possibility that formal status affected individuals' responses to their team's demographic composition, we created a dummy variable to indicate whether a person was a team leader or not. Twenty percent of male respondents were team leaders and 17% of female respondents were team leaders. For similar reasons, we also controlled for respondents' educational attainment, with 19.9% attaining high school degrees, 24.2% attending some college, 34.4% attaining a college degree, and 19.9% attaining a graduate degree. To isolate the influence of sex on our dependent variables we controlled for ethnicity by creating a variable indicating if the respondent was Caucasian (79.6%), Asian (12.9%), Hispanic (2.7%), Black (2.2%) or another ethnicity (2.7%).

Finally, since group level variables beyond sex composition could influence members' intentions and attitudes we also controlled for three group level variables: (1) which group a participant was a member of, indicated by a dummy variable containing a coded number for each of the 32 groups that identified the group in which each respondent was a member; (2) group size, indicated by the number of total members per group (e.g., Mullen & Copper, 1994); and (3) division, a dummy variable indicating which of the three divisions the group operated in. None of

---

<sup>1</sup> We also ran all analyses with each participant's tenure in their current team and the results were virtually identical.

the three made a difference in our results so we dropped them from our analyses.

We further checked the influence of being a member of a specific group since data within groups can violate assumptions of independence. According to Kenny and LaVoie (1985), if such non-independence exists it is best to analyze data at the group level. If the data within groups are not correlated individual data can be used and effects interpreted at the individual level. We calculated the intra-class correlation using the formula for unequal groups for each dependent variable (Kenny & LaVoie, 1985: 348) and they were insignificant, suggesting that individual data could be interpreted at the individual level.

### **Analysis**

Correlations among the four dependent variables were modest (range  $r = -.14$  to  $r = .39$ , median  $r = .00$ ), suggesting that they were distinct and should be examined separately (see Table 1). Therefore, we conducted analysis of variance to test whether sex moderated the influence of group gender composition on each respondent's desire to leave their team, normative and instrumental commitment, and evaluations of their group's teamwork. Each equation includes the four covariates, the two categorical variables, and the interaction between sex and group gender composition. We also plotted significant interaction terms to determine their form and conducted pairwise comparisons between men and women's responses across the four types of groups.

-----  
 Insert Table 1 about here  
 -----

### **Results**

We hypothesized that sex would moderate the relationship between individuals' intentions to leave their work group and their group's sex composition such that men would be more likely to

intend to stay in work groups that were numerically dominated by members of their own sex (H1A), while women would be less likely to intend to stay in work groups that were numerically dominated by members of their own sex (H1B). We found a significant interaction between sex and group sex composition ( $F=3.44$ ,  $p<.05$ ; see Table 2) indicating that men and women differed in which groups they most desired to leave. Figure 1 shows the form of this interaction. Women were significantly more eager to leave homogeneous female groups than men were to leave homogeneous male groups (mean difference=1.54,  $p<.05$ ), offering the most direct support for hypothesis 1. Further, men were significantly more interested in leaving groups that were numerically dominated by women while women were most interested in staying in these female-dominated groups (mean difference between men's ( $\bar{x}=4.28$ ) and women's ( $\bar{x}=3.21$ ) desire to leave female-dominated groups was 1.07 ( $p<.05$ )).

-----  
 Insert Table 2 and Figure 1 about here  
 -----

We examined the results within each sex across group composition types and found that men were only modestly more likely to want to leave female-dominated groups ( $\bar{x}=4.28$ ) than to leave either homogeneous male groups ( $\bar{x}=3.18$ ; mean difference=1.10,  $p<.10$ ) or male-dominated groups ( $\bar{x}=3.13$ ; mean difference=1.15,  $p<.10$ ). Women, in contrast, were more likely to want to leave homogeneous female groups ( $\bar{x}=4.72$ ) than groups numerically dominated by females ( $\bar{x}=3.21$ ; mean difference=1.51,  $p<.05$ ), and than male-dominated groups, though the latter, only slightly ( $\bar{x}=3.62$ ; mean difference=1.10,  $p<.10$ ). Women were also more likely to want to leave balanced groups ( $\bar{x}=5.12$ ) than either male-dominated ( $\bar{x}=3.62$ ; mean difference=1.50,  $p<.05$ ) or female-dominated groups ( $\bar{x}=3.21$ ; mean difference=1.90,  $p<.05$ ).

Hypothesis 2A, that men and women would be more normatively committed to work groups that were numerically dominated by members of their own sex, was partially supported since women were more normatively committed to groups containing more female members. As shown in Figure 2A, women who worked in homogeneous female groups reported the highest levels of normative commitment ( $\bar{x}=4.14$ ). Those working in dominant-female and balanced groups reported roughly equivalent levels of normative commitment ( $\bar{x}=3.91$  and  $\bar{x}=4.04$ , respectively; mean difference between dominant female and balanced=.13, n.s.). Women working in male-dominated groups reported the lowest levels of normative commitment ( $\bar{x}=3.71$ ), significantly less than those working in homogeneous groups (mean difference=.436,  $p<.05$ ).

In contrast to hypothesis 2A men who worked in homogeneous groups were the least, rather than the most, normatively committed ( $\bar{x}=3.38$ ), contrary to our prediction. Men's normative commitment was highest in male-dominated ( $\bar{x}=3.98$ ) and female-dominated ( $\bar{x}=3.89$ ) groups and finally significantly lower in homogeneous male groups (mean difference from male-dominated groups=.61,  $p<.01$ ; mean difference from female-dominated groups=.52,  $p<.01$ ). Interestingly, though not predicted, we found a significant main effect for sex ( $F=4.14$ ,  $p<.05$ ) indicating that women were generally more normatively committed than men, and a significant interaction ( $F=5.40$ ,  $p<.01$ ; see Table 2), probably due to the surprisingly low level of normative commitment among men in homogeneous male groups (mean difference between men and women in same sex homogenous groups=.77,  $p<.01$ ).

-----  
 Insert Figures 2A & 2B about here  
 -----

In hypothesis 2B we predicted that sex would moderate the relationship between group sex composition and instrumental commitment such that men would be more instrumentally committed to work groups that were numerically dominated by members of their own sex, while women would be more instrumentally committed to work groups that were numerically dominated by members of the other sex (men). We found only a modestly significant interaction between sex and group gender composition ( $F=1.74$ ,  $p<.10$ ), as shown in Table 2. Figure 2B shows the form of that interaction. First, women working in male-dominated groups were somewhat more instrumentally committed ( $\bar{x}=3.28$ ) than those working in female-dominated groups ( $\bar{x}=2.96$ , mean difference=.32,  $p<.10$ ), homogeneous female groups (2.92, mean difference=.36,  $p<.10$ ), and balanced groups (2.88, mean difference=.40,  $p<.05$ ). Further, women working in groups that were numerically dominated by males were significantly more instrumentally committed than were males working in male-dominated groups ( $\bar{x}=2.72$ , mean difference=.56,  $p<.05$ ). Interestingly, comparing across groups for men, those working in balanced groups reported the highest levels of instrumental commitment ( $\bar{x}=3.25$ ).

Finally, we predicted in hypothesis 3 that men and women working in groups that were dominated by members of their own sex would perceive those groups as more team-oriented. Though we found a modestly significant main effect for group gender composition ( $F=1.74$ ,  $p<.10$ ), a significant interaction emerged between sex and group sex composition ( $F=3.26$ ,  $p<.05$ ). Similar to our findings for normative commitment, women who worked in homogeneous female groups perceived their groups as most team-oriented ( $\bar{x}=37.64$ ), significantly more so than those working in balanced groups ( $\bar{x}=32.29$ , mean difference=5.35,  $p<.05$ ). Results for our test of hypothesis 3 would

have been closer to our prediction if men in homogeneous male groups had not, again, reported the lowest, rather than the highest, levels of teamwork ( $\bar{x}=28.29$ ), significantly lower than men in male-dominated groups ( $\bar{x}=36.81$ , mean difference=8.52,  $p<.01$ ). And, our hypothesis was modestly supported for men in that, excluding those working in homogeneous groups, they perceived that male-dominated groups, in particular, were more team oriented than groups with fewer males (mean difference between men in male-dominated and female-dominated groups=4.57,  $p<.05$ ; mean difference between men in male-dominated and balanced groups=3.76,  $p<.10$ ). We discuss the implications of these findings below.

### **Discussion**

One of the original benefits proposed for organizational demography research was its parsimony and focus on objective characteristics (Pfeffer, 1983). Demographic attributes such as age, sex, or race may well be objective, but their interpretation and meaning is essentially cognitive. That is, individuals see and make sense of demographic diversity in terms of cognitive processes such as perception, social categorization, and stereotyping. Demography's influence in organizational settings stems not so much from objective demographic differences but from the social construction of the differences that are made salient and the informational and normative influence suggesting how people should make sense of these variations. As Phinney (1996) has observed, even one's sense of ethnic identity is subject to informational cues about how to interpret these differences in a particular context.

The role of the context in making differences salient is one important way in which demographic differences are socially constructed. The results of this study show that numerical distinctiveness, based on sex composition within work groups, is one way that the social context

affects members' responses to work group diversity. While previous research has shown that gender identity can be affected by numerical distinctiveness (e.g., Abrams, et al., 1990; Cota & Dion, 1986; Pichevin & Hurtig, 1996; Randel, 2000), these studies did not explore how such differences affected individual attitudes and likely behaviors. The present study extends these earlier findings and illustrates how variations in sex composition within work groups affect men and women differently. Importantly, these results show that simple similarity-attraction paradigm predictions are inadequate to explain the asymmetric reactions among men and women.

This study suggests 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 categories, such as men and women, experience various levels of diversity differently. Further, men and women's variegated reactions diverge across different outcomes. Thus, our findings show that 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, being in the numerical minority may be perceived by women as beneficial but by men as detrimental. Indeed our most consistent finding was a significant interaction across all four of our dependent variables, indicating that men's and women's reports of their desire to leave their group, their normative and instrumental commitment, and their perceptions of how team-oriented their group was differed significantly depending on the sex composition of their work group.

### **Asymmetric Effects of Work Group Demography on Men and Women**

People's desire to leave their project teams provides an indication of the value they place in being a member of that group. As predicted by similarity-attraction theory, men were most eager to remain members of homogeneous or male-dominated groups and most eager to leave female-dominated groups. Their eagerness to stay increased systematically as the number of men in their work group increased. Women in this study, in contrast to the similarity-attraction paradigm, were most eager to leave balanced and homogeneous female groups, and they least wanted to leave male- or female-dominated groups. This is a non-linear pattern in which women preferred male- and female-dominated groups to balanced and homogeneous groups and suggests that other contextual factors beyond similarity are at work in shaping preferences. It may be that women in this study preferred male-dominated groups in particular since these have historically been higher status groups in organizations. In contrast to homogeneous female groups in which the chances for advancement may be constrained by being in a female "ghetto," women may have preferred only those female-dominated groups that had enough men to increase their team's overall status. In contrast to balanced groups, women in majority female groups may have garnered some power in female-dominated groups by being in the majority. Thus, women's "tipping point" is not symmetrical (Allemdinger & Hackman, 1995); the basis for their preference to stay in male-dominated over balanced groups is worthy of further investigation.

Both men and women preferred to maintain membership in groups numerically dominated by their own sex. Both also indicated a reasonably strong preference to move out of balanced groups if given the chance. Further, women were less negatively affected by being in male-dominated groups than men were by being in female-dominated groups, corroborating prior research (e.g., Tsui et al., 1992). Given that previous research has shown that gender salience is more pronounced for



women (Pichevin & Hurtwig, 1996), the results here may suggest that women, who are more likely to have experience as a minority member in work groups, also have more nuanced perceptions of being a minority, appreciating both the potential benefits and costs of being in a male-dominated group. Men, on the other hand, are less likely to have experience as a minority, and respond negatively to being in this position. In this sense, the numerical distribution of men or women in a group acts as a contextual cue for the interpretation of the meaning of demographic differences.

Men and women reported different levels of normative or value-based commitment depending on the sex composition of their project team. For women, normative commitment was highest in homogeneous groups and lowest among women male-dominated groups. Men, in contrast and contrary to similarity–attraction predictions, were most normatively committed to male-dominated groups, but least so to homogeneous groups. Thus, men in homogeneous groups reported the least normative commitment, while women in male-dominated groups reported the least normative commitment. The result for men in homogeneous groups is especially surprising since prior research has suggested that men express higher levels of normative commitment than women (Aranya, Kushnir & Valency, 1986). The organization from which this sample is drawn is widely recognized as a minority-friendly employer making it likely that the normative cues from the organization’s culture signal that all-male groups are less valued. A second possibility is that men are more competitive with one another, precluding a sense that values are shared or that the group is cooperative (Cassirer & Reskin, 2000; Feingold, 1994; Twenge, 1997). Given that the low levels of normative commitment are mirrored in this study by similar reports of less teamwork in all-male groups, this finding is worthy of more research into the functioning of all-male groups.

Our findings for instrumental commitment also revealed substantial differences for men and women based on their groups' sex composition. As predicted, women working in male-dominated groups were most instrumentally committed. Again, because of historical status differences between men and women at work, women likely perceived being a part of a male-dominated group, while not necessarily congruent with their values, to be instrumentally advantageous based on the extrinsic benefits they might acquire in such groups. In contrast to our prediction, men working in balanced groups were most instrumentally committed. When taken together with the finding that men in male-dominated groups reported the highest level of normative commitment, this suggests that men, too, reveal different bases of commitment in groups with different sex composition. Men may also realize instrumental benefits from working in balanced groups, such as gaining the expertise, diversity, or procedural benefits of having women in the group. Indeed, the rank ordering of the groups varied for each type of group across the two types of commitment, for both men and women, suggesting that variations in group demography influence people's basis for commitment.

Finally, women again followed a pattern consistent with a similarity-attraction prediction in their evaluations of their group's team orientation. That is, they perceived their group as more team-oriented and cooperative as the number of similar others (women) increased. This prediction held for men as well, with the significant exception of their evaluations of homogeneous male groups. As we suggested above, this may have been due to stereotyped views of men as competitive, and as a byproduct of being socialized to compete for promotions.

### **Conclusions and Implications for Future Research**

How an increasingly diverse work force influences people and organizations is a significant concern for researchers and practitioners alike. Reflecting the importance of this topic, research in

organizational demography has blossomed over the past decade. Substantial progress has been made in understanding how the demographic composition of groups and organizations can affect individual attitudes and group process and outcomes. Scholars have, however, become increasingly aware that the effects of diversity often do not conform to simple theoretical predictions. The study reported here illustrates one reason why these inconsistencies may occur. To gain a deeper understanding of how diversity influences individuals and groups requires that researchers account for the cognitive effects of contextual cues on people's interpretations of differences. Variations in demographic attributes are important insofar as such differences are salient and, depending on the individual's previous experience, how these differences are interpreted. We found that numerical distinctiveness, or the proportion of males and females in a work group, may be one such contextual cue that can determine the likely salience of demographic differences. Further, we showed how men and women may respond differently to being in a minority or majority position.

It is also important to recognize the strengths and limitations of this study. First, the organization represented here is atypical both in the proportion of women and minorities in managerial positions and in its organizational culture that values and promotes diversity. The configuration of this firm, however, allowed us the somewhat rare opportunity to sample intact work groups with significant variations in sex composition. Unlike previous studies in which women, regardless of their number, are often in the organizational minority (e.g., Cassirer & Reskin, 2000; Ely, 1994; Konrad & Canning, 1997), our sample is from an organization in which women are, according to the firm's rhetoric, not marginalized. This is reflected both in the higher than typical number of women managers and the number of groups in our sample that are female-dominated. However, this is also a limitation in that this organization and its culture may create an environment

in which demographic differences are interpreted in ways different from other firms. Future research should explore the extent to which these findings generalize across other organizations that may have cultures that order the status of various demographic characteristics differently (e.g., Chatman & O'Reilly, 1996). Further, in spite of the large number of women in our sample, there remain a comparatively small number of groups, and especially those with a balanced gender composition. These constraints limit the potential generalizeability of our results and reinforce the need for further research in this domain.

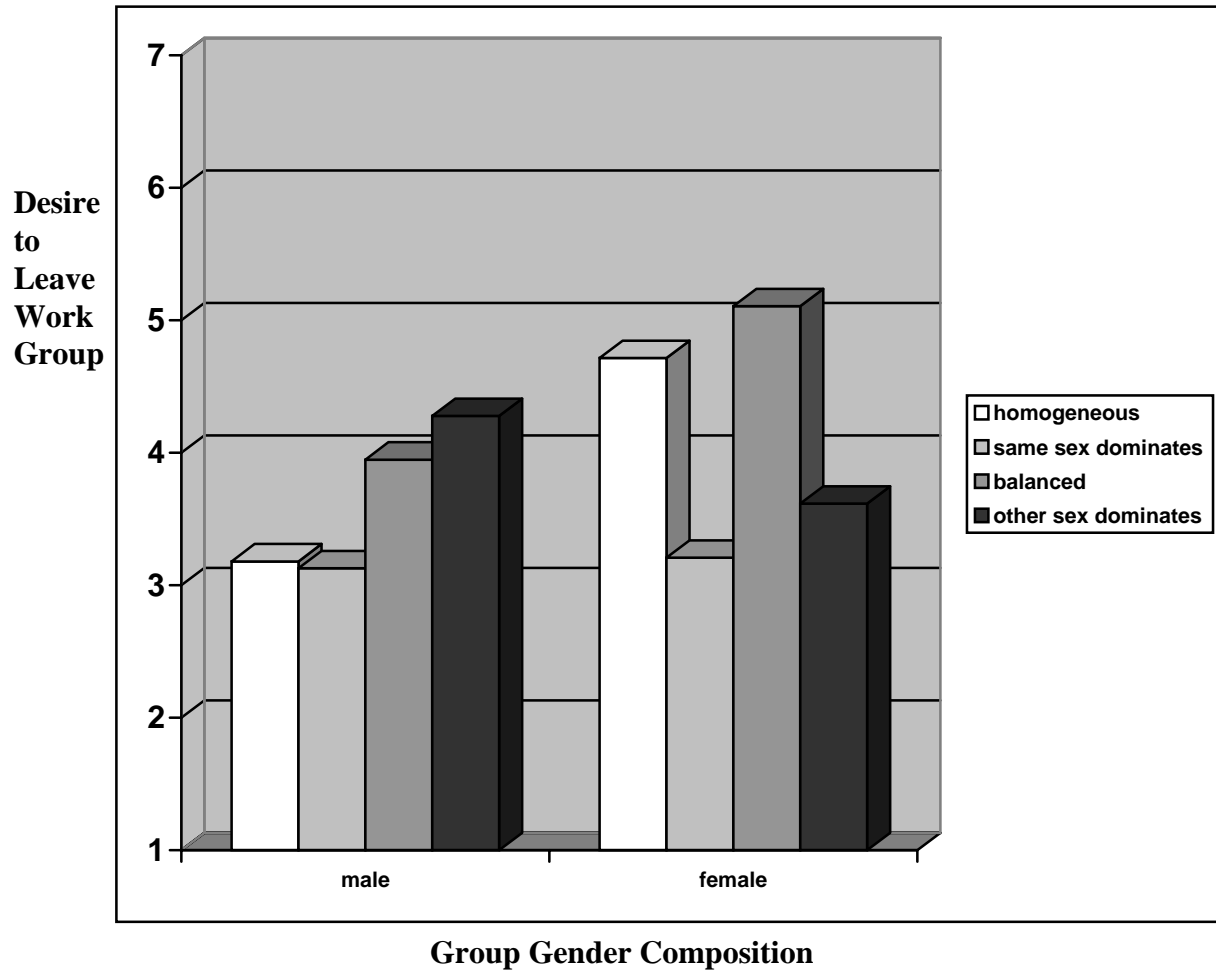
We believe that it is time for demography researchers to explore how being different affects people and organizations in more fine-grained ways (Vecchio & Bullis, 2001). We suggested here that the similarity-attraction theory that serves as the foundation for much of the recent demography research does not fully capture the complexity in the meaning of demographic attributes to members from different categories. There may be similar ramifications for social categorization theory, the other primary foundation used in demography research. Though not explored here, we would expect that numerical distinctiveness would affect category salience in ways that would lead to asymmetric effects for men and women. These asymmetries may differ than the pattern found here, for example, women may view sex as a less salient category in male-dominated than in female-dominated groups because of the relative paucity of these groups. For men, category salience might, however, be higher in groups in which they are less numerous.

Finally, although the current study as well as others (e.g., Riordan & Shore, 1997) provide evidence linking numerical distinctiveness to individual attitudes and group process, we do 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 would predict,

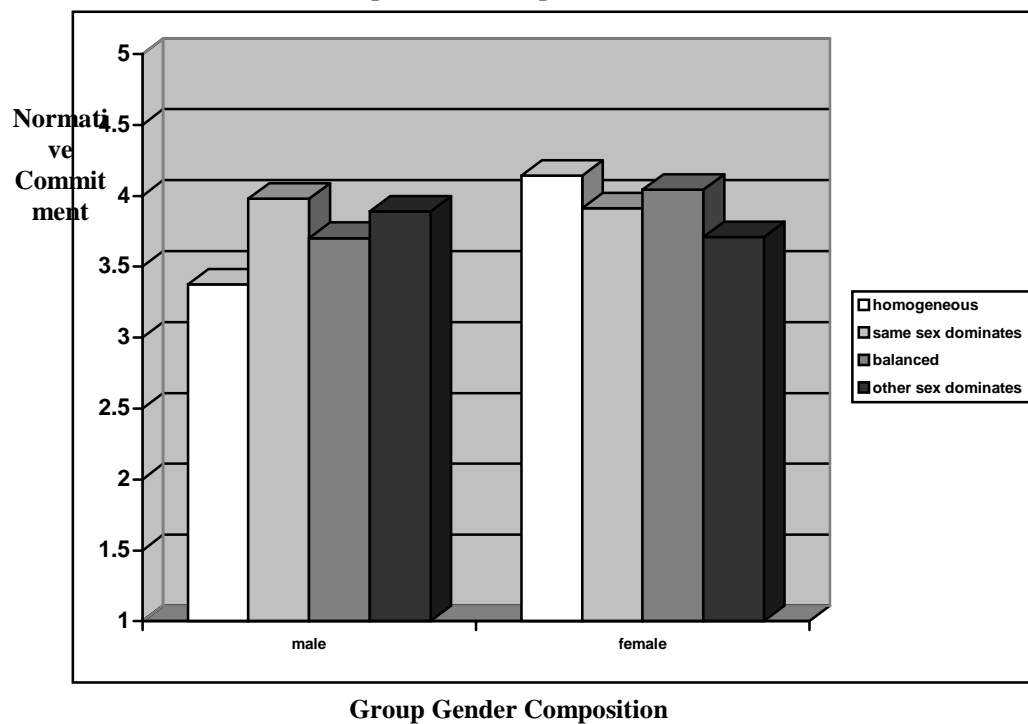
for example, that men's performance would be more negatively influenced by being numerically dominated by women than would women's who are numerically dominated by men. We suggest that researchers need to explore subtle, but important, variations in demographic differences and to take into account how contextual cues and individual experience may shape interpretations. It is the social construction of demographic attributes that affects individuals and groups not the objective attribute itself. Therefore, organizational demography researchers need to be more attentive to the contextual cues that shape these constructions and the possibility that they will mean different things to different people.

**Figure 1**

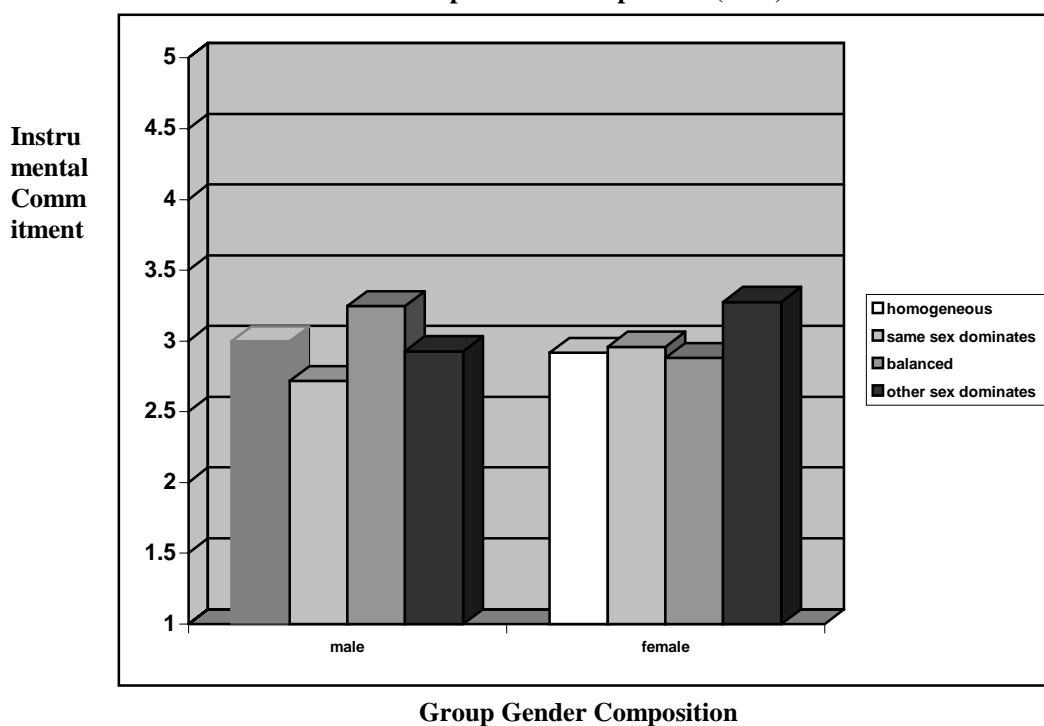
**Pairwise Comparisons of Men's and Women's Desire to Leave their Work Group as a Function of Variations in Group Gender Composition (H1A and H1B)**



**Figure 2A**  
**Pairwise Comparisons of Men and Women's Normative Commitment as a Function of Variations in Group Gender Composition (H2A)**

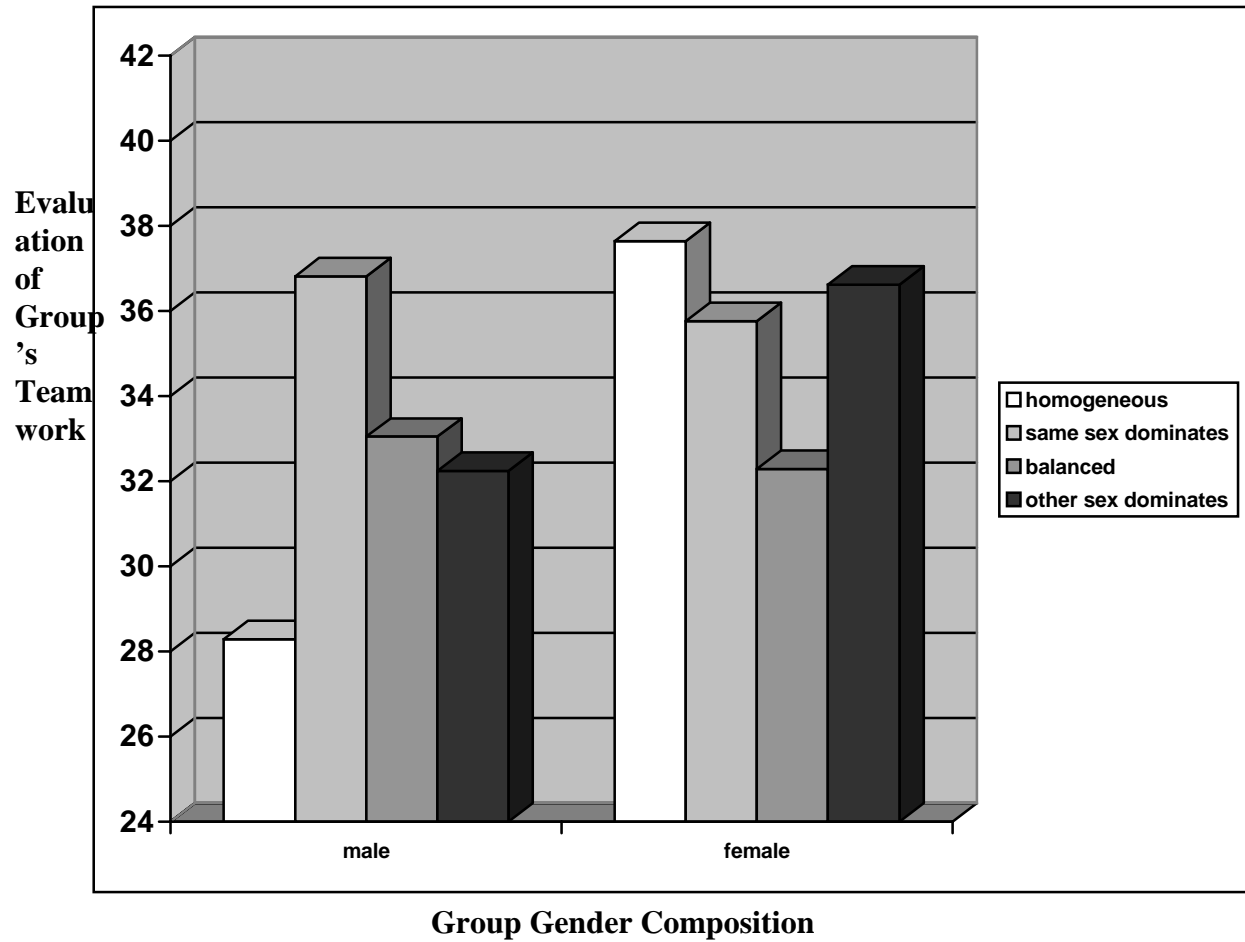


**Figure 2B**  
**Pairwise Comparisons of Men and Women's Instrumental Commitment as a Function of Variations in Group Gender Composition (H2B)**



**Figure 3**

**Pairwise Comparisons of Men's and Women's Evaluations of their Group's Teamwork as a Function of Variations in Group Gender Composition (H3)**





**Table 1****Means, Standard Deviations, and Correlations Among Dependent Variables**

<b>Variables</b>	<b><u>X</u></b>	<b>s.d.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1. Desire to leave group</b>	3.90 <sup>2</sup>	2.16	-			
<b>2. Normative commitment</b>	3.93	.59	.17*	-		
<b>3. Instrumental commitment</b>	2.95	.70	.08	-.08	-	
<b>4. Teamwork</b>	35.17	7.75	-.01	.39**	-.14 <sup>+</sup>	-

---

<sup>2</sup> \*\*p<.01; \*p<.05; +p<.10.

**Table 2**  
**Analysis of Variance Predicting Intention to Move, Commitment and Teamwork From**  
**Interactions Between Sex and Group Gender Composition**

<b>Variables</b>	<b>Desire to Leave Group</b>	<b>Normative commitment</b>	<b>Instrumental commitment</b>	<b>Teamwork</b>
<b>Ethnicity</b>	.20 <sup>3</sup>	.26	1.38	.01
<b>Team leader (0=no, 1=yes)</b>	5.31*	2.08	.44	8.37**
<b>Tenure</b>	.16	.60	2.45	.41
<b>Education</b>	.03	.12	2.55	.12
<b>Sex (1=M, 2=F)</b>	1.87	4.14*	.08	5.03*
<b>Group composition</b>	1.08	.53	.14	1.74 <sup>+</sup>
<b>Sex * group composition</b>	3.44*	5.40**	1.74 <sup>+</sup>	3.26*
<b><i>df</i></b>	<b>11, 166</b>	<b>11, 182</b>	<b>11, 170</b>	<b>11, 170</b>
<b>F</b>	<b>2.80*</b>	<b>2.61**</b>	<b>1.26</b>	<b>3.35**</b>
<b>R<sup>2</sup></b>	<b>.16</b>	<b>.14</b>	<b>.08</b>	<b>.18</b>

<sup>3</sup> Entries represent F-values. \*\*p<.01; \*p<.05; +p<.10.

## References

- Abrams, D., Thomas, J. & Hogg, M. (1990). Numerical distinctiveness, social identity, and gender salience. *British Journal of Social Psychology*, 29, 87-92.
- Allmendinger, J. & Hackman, J.R. (1995). The more the better? A four-nation study of the inclusion of women in symphony orchestras. *Social Forces*, 74, 423-450.
- Aranya, N., Kushnir, T. & Valency, A. (1986). Organizational commitment in a male-dominated profession. *Human Relations*, 39, 433-448.
- Berger, J., Rosenholtz, S. J., & J. Zelditch, Jr. (1980). Status organizing processes. *Annual Review of Sociology*, 6, 479-508.
- Bozeman, D. & Perrewé, P. (2001). The effect of item content overlap on organizational commitment questionnaire-turnover cognitions relationships. *Journal of Applied Psychology*, 86, 161-173.
- Brewer, M. (1979). Ingroup bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, 86, 307-324.
- Byrne, D. (1971). *The attraction paradigm*. New York: Academic Press.
- Byrne, D., Clore, G., & Worchel, P. (1966). The effect of economic similarity-dissimilarity as determinants of attraction. *Journal of Personality and Social Psychology*, 4, 220-224.
- Caldwell, D.F., Chatman, J.A., & O'Reilly, C.A. (1990). Building organizational commitment: A multifirm study. *Journal of Occupational Psychology*, 63, 245-261.
- Carli, L. (1999). Gender, interpersonal power, and social influence. *Journal of Social Issues*, 55, 81-99.
- Cassirer, N. & Reskin, B. (2000). High hopes: Organizational position, employment experiences, and women's and men's promotion aspirations. *Work & Occupations*, 27, 438-463.
- Chatman, J. & Flynn, F. (2001). The influence of demographic heterogeneity on the emergence and consequences of cooperative norms in work teams. *Academy of Management Journal*, 44, 956-974.
- Chatman, J., Polzer, J., Barsade, S., & Neale, M. (1998). Being different yet feeling similar: The influence of demographic composition and organizational culture on work processes and outcomes. *Administrative Science Quarterly*, 43, 749-780.
- Cota, A. & Dion, K. (1986). Salience of gender and sex composition of ad hoc groups: An experimental test of distinctiveness theory. *Journal of Personality and Social Psychology*, 50, 770-776.

- Cox, T., Lobel, S., & McLeod, P. (1991). Effects of ethnic group cultural differences on cooperative and competitive behavior on a group task. *Academy of Management Journal*, 34, 827-847.
- Denison, D. R., Hart, S. L., & Kahn, J. L. (1996). From chimneys to cross-functional teams: Developing and validating a diagnostic model. *Academy of Management Journal*, 39, 1005-1023.
- Dovidio, J., Heltman, K., Brown, C., Ellyson, S. & Keating, C. (1988). Power displays between women and men in discussion of gender-linked tasks: A multi-channel study. *Journal of Personality and Social Psychology*, 55, 580-587.
- Eisenhardt, K. (1989). Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*, 32, 543-576.
- Ely, R. (1994). The effects of organizational demographics and social identity on relationships among professional women. *Administrative Science Quarterly*, 39, 203-238.
- Ely, R. & Meyerson, D. (2000). Theories of gender in organizations: A new approach to organizational analysis and change. *Research in Organizational Behavior*, 22, 105-153.
- Fairhurst, G. & Snavely, B. (1983). A test of the social isolation of male tokens. *Academy of Management Journal*, 26, 353-361.
- Feingold, A. (1994). Gender differences in personality: A meta-analysis. *Psychological Bulletin*, 116, 429-456.
- Garza, R. & Santos, S. (1991). Ingroup/outgroup balance and interdependent interethnic behavior. *Journal of Experimental Social Psychology*, 27, 124-137.
- Glaman, J., Jones, A. & Rozelle, R. (1996). The effects of co-worker similarity on the emergence of affect in work teams. *Group & Organization Management*, 21, 192-215.
- Guzzo, R. & Dickson, M. (1996). Teams in organizations: Recent research on performance and effectiveness. *Annual Review of Psychology*, 47, 307-338.
- Hackman, J. (1987). The design of work teams, in J. Lorsch (Ed.) *Handbook of organizational behavior*. Englewood Cliffs, NJ: Prentice-Hall, 315-342.
- Harrison, J.R. & Carroll G. (2001). Modeling organizational culture: Demography and influence networks. In J. Chatman, T. Cummings, P. Early, N. Holden, P. Sparrow and W. Starbuck (Eds.), *The international handbook of organizational culture and climate*: 185-216. New York: John Wiley.
- Harrison, D., Price, K., & Bell, M. (1998). Beyond relational demography: Time and the effects of surface- and deep-level diversity on work group cohesion. *Academy of Management Journal*, 41, 96-107.

- Heikes, J. (1991). When men are in the minority: The case of men in nursing. *The Sociological Quarterly*, 32, 389-401.
- Heilman, M.E. (1983). Sex bias in work settings: The lack of fit model. *Research in organizational behavior*, 5, 269-298.
- Hutson-Comeaux, S. & Kelly, J. (1996). Sex differences in interaction style and group task performance: The process-performance relationship. *Journal of Social Behavior and Personality*, 11, 255-275.
- Inzlicht, M. & Ben-Zeev, T. (2000). A threatening intellectual environment: Why females are susceptible to experiencing problem-solving deficits in the presence of males. *Psychological Science*, 11, 365-371.
- Jackson, S., Brett, J., Sessa, V., Cooper, D., Julin, J. & Peyronnin, K. (1991). Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions, and turnover. *Journal of Applied Psychology*, 76, 675-689.
- Jehn, K., Northcraft, G. & Neale, M. (1999). Why differences make a difference: A field study of diversity, conflict, and performance in work groups. *Administrative Science Quarterly*, 44, 741-763.
- Kanter, R. (1977). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, 82, 965-990.
- Karakowsky, L. & Siegel, J. (1999). The effects of proportional representation and gender orientation of the task on emergent leadership behavior in mixed-gender work groups. *Journal of Applied Psychology*, 84, 620-631.
- Kelly, J. & Hutson-Comeaux, S. (1999). Gender-emotion stereotypes are context specific. *Sex Roles*, 40, 107-120.
- Kenny, D.A., LaVoie, L. (1985). Separating individual and group level effects. *Journal of Personality and Social Psychology*, 48, 339-348.
- Kirchmeyer, C. & Cohen, A. (1992). Multicultural groups: Their performance and reactions with constructive conflict. *Group & Organization Management*, 17, 153-170.
- Konrad, A. & Cannings, K. (1997). The effects of gender role congruence and statistical discrimination on managerial advancement. *Human Relations*, 50, 1305-1328.
- Konrad, A., Winter, S. & Gutek, B. (1992). Diversity in work group sex composition. *Research in the sociology of organizations*, 10, 115-140.
- Lau, D. & Murnighan, J. (1998). Demographic diversity and faultlines: The compositional dynamics of organizational groups. *Academy of Management Review*, 23, 325-340.

- Lyness, K.S. & Thompson, D.E. (1997). Above the glass ceiling? A comparison of matched samples of female and male executives. *Journal of Applied Psychology*, 82, 359-375.
- Martin, P. & Shanahan, K. (1983). Transcending the effects of sex composition in small groups. *Social Work With Groups*, 6, 19-32
- McGuire, W. J. (1999). *Constructing social psychology: Creative and critical processes*. New York: Cambridge University Press.
- Milliken, F. & Martins, L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, 21, 402-433.
- O'Farrell, B. & Harlan, S. (1982). Craftworkers and clerks: The effect of male coworker hostility on women's satisfaction with nontraditional jobs. *Social Problems*, 29, 252-264.
- Offerman, L. & Gowing, M. (1990). Organizations of the future: Changes and challenges. *American Psychologist*, 45, 95-108.
- O'Reilly, C., Caldwell, D. & Barnett, W. (1989). Work group demography, social integration, and turnover. *Administrative Science Quarterly*, 34, 21-37.
- O'Reilly, C., and Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, 71, 492-499.
- O'Reilly, C., Chatman, J. & Caldwell, D. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, 34, 487-516.
- O'Reilly, C., and Flatt, S. (1989). Executive team demography, organizational innovation, and firm performance. Paper presented at the Forty-ninth Annual Meetings of the Academy of Management, Washington, D.C., 1989.
- O'Reilly, C., Williams, K., & Barsade, S. (1997). Group demography and innovation: Does diversity help? In Mannix, E. and Neale, M. (eds.) *Research in the management of groups and teams*. (Vol. 1) Greenwich, CT: JAI Press, 183-207.
- Ott, E. (1989). Effects of the male/female ratio at work: Policewomen and male nurses. *Psychology of Women Quarterly*, 13, 41-57.
- Pelled, L. (1996). Demographic diversity, conflict, and work group outcomes: An intervening process theory. *Organization Science*, 7, 615-631.
- Pfeffer, J. (1983). Organizational demography. In L. Cummings and B. Staw (Eds.), *Research on organizational behavior*, Vol. 5: 299-357. Greenwich, CT: JAI Press.

- Phinney, J. (1996). When we talk about American ethnic groups, what do we mean? *American Psychologist*, 51, 918-927.
- Pichevin, M. & Hurtig, M. (1996). Describing men, describing women: Sex membership salience and numerical distinctiveness. *European Journal of Social Psychology*, 26, 513-522.
- Pugh, M. & Wahrman, R. (1983). Neutralizing sexism in mixed-sex groups: Do women have to be better than men? *American Journal of Sociology*, 88, 746-762.
- Randel, A. (2000). How do members of groups diverse on multiple dimensions conceptualize one another? Social contextual triggers and work group conflict implications of identity salience. Paper presented at the Academy of Management Meetings, Toronto.
- Riordan, C. (2001). Relational demography within groups: Past developments, contradictions, and new directions. *Research in Personnel and Human Resource Management*, 19, in press.
- Riordan, C. & Shore, L. (1997). Demographic diversity and employee attitudes: Examination of relational demography within work units. *Journal of Applied Psychology*, 82, 342-358.
- Rudman, L. & Glick, P. (1999). Feminized management and backlash toward agentic women: The hidden costs to women of a kinder, gentler image of middle managers. *Journal of Personality and Social Psychology*, 77, 1004-1010.
- Spangler, E., Gordon, M. & Pipkin, R. (1978). Token women: An empirical test of Kanter's hypothesis. *American Journal of Sociology*, 85, 160-170.
- Stangor, C., Lynch, L., Duan C. & Glass, B. (1992). Categorization of individuals on the basis of multiple social features. *Journal of Personality and Social Psychology*, 62, 207-218.
- Taylor, S.E., Fiske, S.T., Close M., Anderson, C., & Ruderman, A. (1978). Solo status as a psychological variable: The power of being distinctive. *Journal of Personality and Social Psychology*, 36: 778-793.
- Tsui, A. & O'Reilly, C. (1989). Beyond simple demographic effects: The importance of relational demography in superior-subordinate dyads. *Academy of Management Journal*, 32, 402-423.
- Tsui, A., Egan, T. & O'Reilly, C. (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, 37, 549-579.
- Twenge, J.M. (1997). Changes in masculine and feminine traits over time. *Sex Roles*, 36, 305-325.
- Vecchio, R. & Bullis, R. (2001). Moderators of the influence of supervisor-subordinate similarity on subordinate outcomes. *Journal of Applied Psychology*, 86, 884-896.
- Walker, H., Ilardi, B., McMahon, A. & Fennell, M. (1996). Gender, interaction, and leadership. *Social Psychology Quarterly*, 59, 255-272.

- Watson, W., Kumar, K. & Michaelsen, L. (1993). Cultural diversity's impact on interaction process and performance: Comparing homogeneous and diverse task groups. *Academy of Management Journal*, 36, 590-602.
- Weldon, E., Jehn, K., & Pradhan, P. (1991). Processes that mediate the relationship between a group goal and improved performance. *Journal of Personality and Social Psychology*, 61, 555-569.
- Wentworth, D. & Anderson, L. (1984). Emergent leadership as a function of sex and task typicality." *Sex Roles*, 11, 513-524.
- Wharton, A. & Baron, J. (1987). So happy together? The impact of gender segregation on men at work. *American Sociological Review*, 52, 574-587.
- Wheelan, S. (1996). Effects of gender composition and group status differences on member perceptions of group development patterns, effectiveness, and productivity. *Sex Roles*, 34, 665-686.
- Williams, K. Y. & O'Reilly, C. A. (1998). "The complexity of diversity: A review of forty years of research." In B. Staw and R. Sutton (Eds.) *Research in organizational behavior*, 21, 77-140. Greenwich, CT: JAI.
- Yoder, J. (1991). Rethinking tokenism: Looking beyond numbers. *Gender & Society*, 5, 178-192.
- Zenger, T. & Lawrence, B. 1989. Organizational demography: The differential effects of age and tenure distributions on technical communications. *Academy of Management Journal*, 32, 353-376.