ASYMMETRICAL DEMOGRAPHY EFFECTS ON PERCEIVED REWARD AND SOCIAL OUTCOMES: 
DIFFERENTIAL EFFECTS OF LEADER GENDER AND WORK UNIT GENDER COMPOSITION

A study of 594 male and 430 female doctors indicated that: (1) women who worked with more men reported more gender harassment, (2) women who had a male supervisor reported less organizational support, and (3) women who worked in an organization with a male head reported more gender discrimination.

Introduction

One of the debates in the relational demography literature is the question of whether members of dominant and subordinate groups have different organizational experiences when they are in the numerical minority (Riordan, 2000). Status characteristics theory suggests that group status should matter such that members of dominant groups have relatively positive experiences in minority situations compared to members of subordinate groups. In contrast, relational demography perspectives have often emphasized the importance of similarity or dissimilarity over the impact of status. In this paper, we draw implications from both perspectives to make predictions regarding the impact of gender composition on perceptions of fairness, discrimination, organizational support, exclusion and harassment. We test our predictions on a large, nationally representative sample of Swedish medical doctors.

Perceptions of fairness, discrimination, organizational support, exclusion, and harassment are important because they have, in turn, been associated with important organizational outcomes. For example, employees who perceive their treatment by the organization to be more fair are exhibit higher job performance and more organizational citizenship behavior (Ball, Trevino, & Sims, 1994). Employees who perceive themselves to receive more organizational support also exhibit better in-role and extra-role performance (Rhoaes & Eisenberger, 2002; Moorman, Blakely, & Niehoff, 1998), less strain, and fewer organizational withdrawal behaviors (Rhoaes & Eisenberger, 2002). Employees who perceive themselves to be discriminated against are more likely to experience mental and physical health problems (James, Lovato, & Khoo, 1994; Klonoff, Landrine, & Campbell, 2000), and exclusion and harassment are associated with reduced life satisfaction and poorer health conditions for employees (Schneider, Hitlan, & Radhakrishnan, 2000).

Our research contributes to the gender composition literature in three ways. First, to our knowledge, the outcome variables of fairness, discrimination, and organizational support have not been examined in this literature. Second, we examine the effects of “deep-level” value similarity simultaneously with the effects of “surface-level” gender composition effects and test whether value
similarity moderates the relationship between gender context and the three outcome variables. In this way, we build upon the work of Harrison, Price and Bell (1998), who argued that in the long run, deep-level similarity is more important than surface-level similarity for predicting social relations in work groups. Third, we assess gender composition at three organizational levels: the gender composition of the medical unit in which the individual works, the gender of the unit supervisor, and the gender of the organization’s head. We propose that different outcome variables are associated with gender composition at different organizational levels. As such, we add to a small but growing literature (e.g., Ely, 1994; Elvira & Cohen, 2001; Martin & Harkreader, 1993) that examines the effects of the growing presence of women in top organizational positions.

**Conceptual Background**

**Relational Demography.**

The relational demography perspective argues that when employees share salient demographic characteristics with coworkers and superiors, they are likely to have more positive work relationships (Tsui, Egan, & O'Reilly, 1992). Shared experiences, shared group interests, and compatible worldviews help demographically similar individuals establish rapport. By comparison, dissimilarity results in more interpersonal difficulties due to misunderstandings, misperceptions, and conflicts of interest (Riordan, 2000).

Relational demography research has linked people’s work attitudes, behavior, and experiences to the extent to which they are demographically similar or dissimilar to the other members of their work groups (Riordan, 2000). Gender similarity has shown mixed effects on outcomes. For example, Riordan and Weatherly (1999) found that perceived gender similarity was positively related to outlook similarity, liking, and job satisfaction. Chattopadhyay (1999), however, found that gender similarity was unrelated to any of the outcomes he examined, including altruism, courtesy, peer relations, and organization-based self-esteem.

Some evidence exists suggesting that gender similarity has a different impact on women and men. For example, Konrad, Winter, and Gutek (1992) found that being in the minority in a work group was associated with more social isolation and more sexism for women but not for men. Both women and men had higher job satisfaction in male-dominated groups, however. The authors attributed this finding to the possibility that better job attributes and opportunities were available in the male-dominated work groups in their sample. Better opportunities in male-dominated groups could also explain why gender dissimilarity had larger negative effects on commitment, frequency of absences, and intention to stay for men than for women in Tsui, Egan, and O’Reilly’s (1992) study. On the other hand, Kirchmeyer (1995) found that gender dissimilarity with the work group increased the probability of promotion for men, while it had no effect on women’s promotions.

Evidence that work group gender composition affects men and women differently suggests the need for a conceptual frame that considers other causal factors in addition to demographic similarity or dissimilarity. Status characteristics theory emphasizes the importance of status differences between groups as a possible mechanism for explaining the observed asymmetries in relational demography effects for women and men.

**Status Characteristics Theory.**

Status characteristics theory (Ridgeway, 2001; Ridgeway & Balkwell, 1997; Webster & Hysom,
1998) argues that in task-focused situations, status-organizing processes can result in ostensibly irrelevant characteristics such as gender affecting people's treatment and outcomes. Research shows that perceivers are more likely to expect members of high status groups to be competent (Fiske, Xu, & Cuddy, 1999). Due to these positive expectations, members of high status groups receive more opportunities to demonstrate their competence in the form of challenging assignments and uninterrupted speaking time (Ridgeway, 2001; Ridgeway & Balkwell, 1997; Webster & Hysom, 1998). As a result of this preferential treatment, members of high status groups perform better and accrue greater rewards from the organization.

Many have argued that gender is a status characteristic (Ridgeway, 2001; Ridgeway & Balkwell, 1997; Webster & Hysom, 1998), and research has shown that people hold especially low expectations for women's performance on tasks traditionally conducted by men. A global body of research demonstrates that women are less likely than men to be viewed as good managers, especially by men (Schein 2001). Undergraduate students working in small groups are more likely to be influenced by men than by women (Propp, 1995; Schneider & Cook, 1995). In a study examining reactions to competent and incompetent job candidates, corporate executives rated competent men as most persuasive and most preferred as a new hire whereas they gave their lowest ratings to competent women (Buttner & McEnally, 1996). In their meta-analysis including both laboratory and field studies, Eagly, Makhijani, and Klonsky (1992) found that female leaders received poorer evaluations than their male counterparts, especially when they exhibited an autocratic leadership style.

Importantly for our arguments, Eagly et al. (1992) found that female leaders were more likely to receive low ratings when they were evaluated by men and when they were in predominantly masculine settings. Similarly, in her review of the literature, Carli (2001) concluded that men are generally more influential than women, especially among men and in traditionally masculine settings. A meta-analysis by Davidson and Burke (2000) demonstrated a pro-male bias in employee selection decisions for jobs traditionally held by men, and a meta-analysis by Swim, Borgida, Maruyama, and Meyers (1989) showed a significant pro-male bias in performance evaluations for traditionally masculine tasks. Heilman (1995; 2001) and Perry (1997) also concluded in literature reviews that performance expectations for women are lowest in traditionally masculine settings.

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Medicine is a traditionally masculine field that has shown a substantial increase in the presence of women in the last four decades. In Sweden, women represented 13% of doctors in 1960, 17% in 1970, 25% in 1980, 34% in 1990, and 39% in 2000. Based on the large body of research demonstrating pro-male bias in traditionally masculine fields outlined above, people may expect women to be less effective doctors and may consider a female doctor’s ideas and actions to be less credible than those of her male counterparts. We argue below that this bias may be especially apparent in medical units that continue to be predominated by men. In the next section, we develop the specific hypotheses tested in this study.

**Hypotheses**

Hospital units vary considerably in the gender composition of their medical staffs. For example, in a nationally representative sample, men comprised over two-thirds of anesthetists, cardiologists, infectious disease specialists, and neurosurgeons, while women comprised over two-thirds of pediatricians, gynecologists, and geriatric specialists. Within a particular hospital or medical practice, gender composition can vary within specialties as well. For example, some hospitals may have a higher percentage of male pediatricians than others. We asked our respondents to report the percentage of male doctors working on their medical units within their own organizations. We also asked them to report the gender of their immediate supervisors and the gender of the top manager in their organizations.
Assuming that gender is a status characteristic such that men are accorded higher status than women, we develop specific arguments below linking women’s experiences as doctors to the extent to which they work primarily with men, are supervised by men, and work in organizations led by men. By comparison, we expect gender composition to have relatively few effects on men, due to the positive effects of people’s generally high expectations for men’s competence (Ridgeway, 2001).

The mixed findings in the relational demography literature point to the need to develop specific logical arguments linking gender composition to different types of outcomes. In this study, we examine three outcomes associated with the level of rewards accruing to the individual and two outcomes associated with the individual’s social experiences. Perceived fairness, organizational support, and gender discrimination all are associated with tangible rewards and resources received by the individual from the organization. Perceived exclusion and gender harassment reflect the individual’s social experiences in the organization. We argue that these two sets of outcome variables will be more proximally related to gender composition at different levels of analysis. Specifically, we expect reward outcomes to be more closely linked to gender composition at the management level whereas social outcomes will be more strongly linked to gender composition among work group peers. Below, we develop the specific logical arguments justifying our predictions.

**Perceived Reward Outcomes.**

Perceived fairness, organizational support, and gender discrimination are factors over which managers much more than peers have direct control. Top managers influence the structure of the organizational allocation process as part of human resource strategy, and immediate supervisors make many of the specific decisions concerning an individual’s salary, workload, and promotion opportunities. Peers may attempt to influence these processes, and the gender composition of the work group might indirectly affect how managers perceive individuals in the numerical minority or majority, but managers are the ultimate decision-makers. Hence, if gender similarity affects perceptions of organizational rewards, then similarity to managers more than similarity to coworkers should show significant associations.

Gender similarity with hospital administrators may affect reward perceptions in two different ways. First, the presence of a female administrator may benefit women due to the enhanced ease of building rapport and understanding with demographically similar others, as theorized in the relational demography literature (Riordan, 2000). The ease of rapport-building may be most relevant when considering the gender of the immediate supervisor because most doctors have relatively little direct contact with their organization’s top administrator. A good rapport may lead to increased feelings of organizational support due to the supervisor expressing more appreciation, listening more effectively to the doctor’s ideas and requests, and demonstrating greater willingness to provide extra resources or flexibility when needed. A good rapport may be linked to perceived fairness through the supervisor treating the employee with more dignity and respect when implementing personnel procedures (Bies & Moag, 1986; Masterson, Lewis, Goldman, & Taylor, 2000) and taking more time to provide explanations for organizational decisions (Shapiro, Buttner, & Barry, 1994; Tata, 1998). In addition, a good rapport with the supervisor may be linked to reduced perceptions of gender discrimination due to the development of greater trust on the doctor’s part.

We expect the positive effects of gender similarity with supervisor to be significantly stronger for women than for men due to status effects. Status characteristics theory argues that members of high status groups, such as men, benefit from initial positive expectations, with the result that supervisors give them more opportunities to perform effectively, and research has demonstrated this effect (Ridgeway & Balkwell, 1997; Webster & Hysom, 1998). This preferential treatment should overcome the need to build a dyadic rapport with the supervisor in order to foster perceptions of fair rewards, organizational support,
and an absence of gender discrimination.

H1: Gender similarity with the supervisor is more strongly positively related to fairness and organizational support and more strongly negatively related to gender discrimination for women than for men.

The second reason that administrators’ gender may be associated with reward perceptions is its impact on the perceived legitimacy of organizational reward systems (Konrad & Linnehan, 1995). In particular, the presence of a female administrator may symbolize that the organization does not discriminate against women. The legitimacy factor may be most important when considering the gender of the top manager because the presence of a woman in the organization’s top spot demonstrates its willingness to reward women by according them the highest level of status, authority, and responsibility. The enhanced legitimacy accruing from the presence of a female top administrator is likely to enhance perceptions of fairness and reduce perceptions of gender discrimination, especially among women. Gender of top administrator may be more weakly related to perceived organizational support than gender of immediate supervisor because supervisors can have more direct impact on doctors’ beliefs that the organization is committed to them and values their contributions.

We anticipate that gender similarity with top administrator will be associated less strongly to reward perceptions for men than for women for a few reasons. First, the preferential treatment men might receive as members of a relatively high status group reduces the need for the organization to demonstrate the legitimacy of its reward allocations. Second, the possibility exists that men as well as women may point to the presence of a female top administrator as proof of their organization’s non-discriminatory stance. Hence, for men, gender dissimilarity with top administrator may represent legitimacy just as much as gender similarity does.

H2: Gender similarity with the top administrator is more strongly positively related to fairness and more strongly negatively related to gender discrimination for women than for men.

Social Outcomes.

Gender harassment (i.e., harassing treatment associated with one’s gender that is not sexual in nature) (Parker & Griffin, 2002) and social exclusion are outcomes over which one’s work group peers have substantially more direct control than they do over organizational rewards. Top managers may indirectly affect harassment and exclusion by peers by developing organizational policies, and supervisors may work to enforce those policies, but peer behavior can be difficult for management to control, particularly in male-dominated workplaces (Gruber, 1992; Fitzgerald, Drasgow, Hulin, Gelfand, & Magley, 1997; Ragins & Scandura, 1995; Yoder & Aniakudo, 1996). Hence, gender similarity with the work group is likely to be associated with perceptions of exclusion and harassment. Of course, administrators control their own behavior and may engage in harassment and exclusion themselves (e.g., “Plaintiff’s Claim,” 2002), so that similarity with administrators may also be linked to these social outcomes.

Gender similarity with other doctors may be associated with reduced perceptions of exclusion and gender harassment. As relational demography theory argues, demographic similarity facilitates rapport-building due to shared experiences, values, and world-views and enhanced empathy (Riordan, 2000). Hence, gender similarity may allow people to find topics of conversation where they can validate each other’s views and choices, resulting in pleasant interaction that all parties may seek to repeat. Such interactions may reduce feelings of exclusion and harassment.

Once again, we expect the positive effects of gender similarity with other doctors to be
significantly stronger for women than for men. Women in military units with higher percentages of men report more gender harassment and less acceptance of women (Rosen & Martin, 1997). The increased incidence of gender harassment associated with higher percentages of men may be the result of women’s greater contact with men on those units (Gutek, Cohen, & Konrad, 1990) as well as women’s lower status in a traditionally masculine setting (Ridgeway, 2001). Additionally, Heilman (2001) argues that competent women in traditionally masculine settings are disliked. To support her claim, she reports research results showing that highly successful female managers were seen as equally competent but less likeable than equivalent men. Dislike of competent women in masculine settings may result in the harassment and exclusion of female doctors working in settings numerically dominated by men.

H3: Gender similarity with other doctors in the medical unit is more strongly negatively related to social exclusion and gender harassment for women than for men.

**Method**

Under the sponsorship of the Swedish Medical Association, we surveyed a nationally representative sample of 1,956 medical doctors in Sweden. In response to two mailings, we received 1024 usable responses, for a total of 594 men and 430 women. Respondents provided demographic information on themselves, as well as the gender composition of their medical units (percentage of men), the gender of their immediate supervisors, and the gender of the top administrator in their work organizations.

We adapted previously published multiple-item measures to assess value similarity and the five outcome variables. Value similarity was assessed with 6 items adapted from Jehn, Northcraft and Neale (1999). Response options ranged from 1 = strongly disagree to 6 = strongly agree. Principle components analysis indicated that the 6 six items comprised two factors explaining 83% of their variance. The first factor was composed of 4 items assessing value similarity with administrators (i.e., “the values of administrators in my medical unit are similar to mine,” “doctors and administrators agree on what is important to the medical unit,” “administrators in my medical unit have goals similar to me,” “doctors and administrators in my medical unit have similar goals”) (Cronbach’s $\alpha = .92$). The second factor consisted of 2 items assessing value similarity with other doctors (i.e., “the values of other doctors in my medical unit are similar to mine,” and “other doctors in my medical unit have goals similar to mine”) (Cronbach’s $\alpha = .81$).

Perceived fairness was assessed with three items taken from Tyler and Blader (2000), specifically, “my work schedule here is fair,” “I think that my level of pay is fair,” and “I consider my workload to be quite fair.” Response options ranged from 1 = strongly disagree to 6 = strongly agree, and the index composed of these three items showed adequate reliability (Cronbach’s $\alpha = .77$).

Perceived gender discrimination was assessed using four items adapted from Konrad and Spitz (in press), specifically, “I receive lower pay than equally qualified doctors of the opposite sex,” “I have a lower status than equally qualified doctors of the opposite sex,” “I have poorer working conditions than equally qualified doctors of the opposite sex,” and “I receive less organizational support than equally qualified doctors of the opposite sex.” Response options ranged from 1 = strongly disagree to 6 = strongly agree, and principle components analysis indicated that the four items constituted a single factor explaining 82% of the variance (Cronbach’s $\alpha = .92$).

Perceived organizational support was assessed using 8 items from the measure developed by Eisenberger, Huntington, Hutchison, and Sowa (1986) (items 1, 3, 6, 17, 20, 21, 25, and 27). Principle
components analysis indicated that the 8 items constituted one factor explaining 52% of the variance (Cronbach’s $\alpha = .87$).

The 7 items assessing of social exclusion and gender harassment were adapted from Schneider, Hitlan, and Radhakrishnan’s (2000) ethnic harassment measure. Principle components analysis indicated that the 7 items constituted 2 factors explaining 70% of their variance. The first factor was composed of 4 items assessing perceived gender harassment (i.e., respondents indicated how often, “someone at work tells jokes about your gender,” “someone at work uses sexist language to describe you,” “someone at work makes sexist comments,” and “someone at work makes derogatory comments about your gender”) (Cronbach’s $\alpha = .83$). The second factor consisted of three items assessing perceived social exclusion (i.e., respondents were asked how often, “someone at work excludes you from social interactions during work,” “someone at work excludes you from social interactions after work,” and “someone at work fails to give you information you need to do your job”) (Cronbach’s $\alpha = .80$). Response options ranged from 1 = never to 6 = more than once a week.

Both the gender harassment measure and the social exclusion measure were significantly positively skewed (skewness for gender harassment = 2.01, S.E. = .08; skewness for exclusion = 2.68, S.E. = .08). We tried a number of transformations to normalize the distributions and found that a reciprocal transformation performed the best (skewness for gender harassment = -.45, S.E. = .08; skewness for exclusion = -.95, S.E. = .08). We used the reciprocal of the two measures in the analysis so that high values indicated lower levels of exclusion and harassment.

Analysis

We used moderated hierarchical regression analysis to test our hypotheses. H1 was assessed by examining the two-way interaction of respondent gender by gender of immediate supervisor on the outcome variables, and H2 was assessed by examining the two-way interaction of respondent gender by gender of top administrator on outcomes. H3 was assessed by examining the two-way interaction of respondent gender by percentage of male doctors in the medical unit.

Results

Table 1 shows the means, standard deviations, and correlations among the study variables. Table 2 shows the results of the regression analyses. Respondent gender showed one main effect indicating men reported fewer personal experiences of gender discrimination. Percentage of male doctors in the medical unit showed significant negative main effects on perceived gender discrimination and the reciprocal of the gender harassment measure, indicating less gender discrimination and more gender harassment in units with higher percentages of men. Presence of a male supervisor showed significant negative main effects on perceived organizational support and the reciprocal of the gender harassment measure, indicating less organizational support and more gender harassment in units with a male supervisor. Presence of a male top administrator showed a significant positive main effect on gender discrimination and a significant negative main effect on the reciprocal of the social exclusion measure, indicating more discrimination and exclusion with a male top administrator.

Value similarity showed several significant main effects in the analyses, supporting Harrison, Price, and Bell’s (1998) assertion that deep-level similarity is an important factor to consider when examining the effects of demographic diversity. Our findings indicated that value similarity with administrators was significantly positively related to perceived fairness and organizational support, and negatively related to perceived gender discrimination. Value similarity with administrators was significantly positively related to the reciprocal of the gender harassment index, indicating less gender harassment with greater value similarity. Value similarity with other doctors was positively related to the
reciprocal of the exclusion measure, indicating less exclusion with greater value similarity, as predicted. Value similarity with other doctors was unrelated to the gender harassment measure, however. Value similarity with other doctors was positively related to perceived organizational support, but the association was considerably weaker ($\beta = .14$) for value similarity with other doctors than for value similarity with administrators ($\beta = .44$).

H1 predicted that gender similarity with the supervisor would be more strongly positively related to fairness and organizational support and more strongly negatively related to gender discrimination for women than for men. Findings for the two-way interaction between respondent gender and supervisor gender indicated a positive association with perceived organizational support and none of the other outcomes. To examine whether the significant interaction supported our specific prediction, we plotted its form in Figure 1. The plot indicates that for men, supervisor gender showed almost no association with perceived organizational support, whereas women who had a female supervisor perceived considerably more organizational support than women with a male supervisor. Also, separate regressions conducted for women and men and controlling for all other main effects (i.e., the value similarity measures and the other gender context variables) indicated that having a male supervisor had a significant negative effect on organizational support for women ($\beta = -.22$, $p < .05$) but no significant effect for men ($\beta = .02$, ns). These results were consistent with our prediction.

The two-way interaction between respondent gender and supervisor gender showed no significant relationships with the other four outcome variables. We had expected significant findings for perceived fairness and gender discrimination, and these non-significant findings were contrary to our hypothesis. We predicted that gender similarity with supervisor would have little or no association with harassment and exclusion, however, so these two non-significant findings were consistent with our arguments that administrators have more direct impact on rewards and less on social outcomes.

H2 predicted that gender similarity with the top administrator would be more strongly positively related to fairness and more strongly negatively related to gender discrimination for women than for men. Findings for the two-way interaction between respondent gender and top administrator gender indicated a negative association with gender discrimination. To examine whether this interaction supported our specific prediction, we plotted its form in Figure 2. The plot indicates that for men, top administrator gender showed almost no association with perceived gender discrimination, whereas women perceived less gender discrimination if they had a female rather than a male top administrator. In addition, separate regression analyses conducted on the data for women and men and controlling for all other main effects indicated that having a male top administrator had a significant positive effect on gender discrimination for women ($\beta = .31$, $p < .05$) whereas it was unrelated for men ($\beta = -.11$, ns). These results were consistent with our prediction.

The two-way interaction between respondent gender and top administrator gender was not significant for the outcome of fairness, contrary to our prediction. We predicted that gender similarity with top administrator would have little or no association with organizational support, harassment, and exclusion, however, so these three non-significant findings were consistent with our arguments.

H3 predicted that gender similarity with other doctors in the medical unit would be more strongly negatively related to social exclusion and gender harassment for women than for men. Findings for the two-way interaction between respondent gender and percentage of men in the medical unit indicated a positive association with gender harassment. To examine whether this interaction supported our specific prediction, we plotted its form in Figure 3. The plot indicates that for men, the percentage of men in the unit showed almost no association with perceived gender harassment, whereas for women, reducing the percentage of men in the unit was associated with a considerable reduction in perceived gender harassment. In addition, separate regression analyses conducted on the data for women and men and
controlling for all other main effects indicated that percentage of men had a significant negative effect on the reciprocal of gender harassment for women (β = -.22, p < .001) whereas it was unrelated for men (β = -.05, ns). These results were consistent with our prediction.

The two-way interaction between respondent gender and percentage of men in the unit was not significant for the outcome of exclusion, contrary to our prediction. We predicted that gender similarity with peers in the medical unit would have little or no association with perceived fairness, discrimination, and organizational support, so these three non-significant findings were consistent with our arguments that peers have more direct impact on social outcomes than on reward outcomes.

**Discussion**

Our findings indicate that gender demography effects are asymmetrical and show stronger relationships for women than for men. Specifically, women report less organizational support when they work for male supervisors, more gender discrimination when the top administrators in their organizations are male, and more gender harassment when they work with a higher percentage of men. These three gender demography variables had no significant relationship to reward or social outcomes for men. Although five of the two-way interactions we expected to find were non-significant, all three of the statistically significant two-way interactions were consistent with the notion that being different from the authorities or from the majority is more strongly related to outcomes for the historically subordinate group.

This pattern of findings is consistent with the predictions of status characteristics theory, which argues that people develop low expectations for the competencies of traditionally subordinate groups due to the group's historical lack of access to the resources needed to succeed (Ridgeway, 2001; Ridgeway & Balkwell, 1997; Webster & Hysom, 1998). Low expectations lead people to pay less attention and interrupt more when members of subordinate groups speak, provide fewer opportunities for such individuals to demonstrate competence, and remember failures more readily than successes. As a result of discriminatory treatment, members of low status groups may actually perform less effectively, reinforcing low expectations for the group.

Combining status characteristics theory with relational demography concepts, we proposed that being demographically different from authorities and peers has greater impact on low status groups. Although people hold lower expectations for women’s performance in fields from which they have historically been excluded (Carli, 2001; Heilman, 1995; 2001; Perry, 1997), working in a situation where there are proportionately more women peers as well as women in positions of authority may enhance women’s outcomes in two ways. First, as relational demography perspectives argue, demographic similarity to others in the workplace may make it easier to establish a positive rapport. The improved work relationships resulting from this rapport are likely to enhance perceptions of positive social and reward outcomes. Second, the presence of many women peers and authority figures may symbolize the legitimacy of the organization’s policies and practices toward women. This enhanced legitimacy may reduce the likelihood that women will attribute negative interactions or reward outcomes to gender, resulting in reduced perceptions of gender discrimination and gender harassment and increased perceptions of fairness, inclusion, and support.

We also emphasized the importance of level of analysis when examining gender demography effects. Previous research on gender demography has sometimes resulted in confusing and contradictory results (Konrad, Winter, & Gutek, 1992; Tsui, Egan, & O’Reilly, 1992; Kirchmeyer, 1995). By distinguishing between reward outcomes and social outcomes, we were able to build arguments that
gender composition among peers is likely to show a different pattern of findings than gender composition among managers. Specifically, we predicted that because managers, and not peers, have direct control over reward outcomes, gender composition at the management level of analysis would show stronger effects on the reward outcomes of fairness, organizational support, and gender discrimination. Because peers have direct control over social outcomes but not reward outcomes, we predicted that gender composition of peers in the work unit would show stronger effects on the social outcomes of exclusion and gender harassment. All of our significant two-way interactions examining the effects of gender demography were consistent with this predicted pattern. Hence, our results improve the predictive value of gender demography research by assessing gender demography at multiple levels of analysis simultaneously and drawing specific causal links between gender demography at each level to particular sets of outcome variables.

In summary, we sharpen the predictions made in the relational demography literature by considering both status effects and level of analysis carefully when developing hypotheses. The study has several strengths, including: (1) the use of a large, nationally representative sample, (2) the use of validated measures of new outcomes not previously examined in the relational demography literature, and (3) the simultaneous examination of surface-level demographics and deep-level value similarity. The asymmetrical relational demography associations observed for women and men are unlikely to be due to common methods bias because demographics are relatively objective factors to measure. As such, people are relatively unlikely to provide biased survey responses to the demographic questions constituting the gender demography variables.

Limitations of this study include the fact that no behavioral outcomes could be measured because supervisors could not be contacted using our sampling frame. Other studies have linked perceived organizational support, discrimination, harassment, and exclusion to important behavioral and stress/strain outcomes, however (James, Lovato, & Khoo, 1994; Brockner & Wiesenfeld, 1996; Parker & Griffin, 2002; Rhoades & Eisenberger, 2002; Schneider, Hitlan, & Radhakrishnan, 2000). Hence, the importance of these perceptual outcomes for behavior has been demonstrated in the literature, supporting the practical importance of our research.

Our results are also limited to the population of Swedish doctors from which we drew our sample. This highly educated sample from a country well known for its pro-feminist public policies may differ from other groups. Swedish doctors may be more aware of feminist principles, and for this reason, female Swedish doctors may be more likely to attribute negative reward outcomes to gender discrimination and to label negative social interactions gender harassment. Other demographic dimensions may have greater impact in other historical contexts.

Asymmetrical relational demography effects mean that dominant and subordinate groups have different experiences when in the numerical minority. These findings imply that special attention should be focused on members of subordinate groups when they are in the minority so that organizational support can be provided as needed.
References


### Table 1

**Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Gender (1=M, 0=F)</td>
<td>0.04</td>
<td>0.03</td>
<td>0.30</td>
<td>0.32</td>
<td>0.27</td>
<td>0.15</td>
<td>0.77</td>
<td>0.87</td>
<td>0.92</td>
<td>0.83</td>
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<tr>
<td>B: Male Supervisor (1=Y, 0=N)</td>
<td>0.04</td>
<td>0.05</td>
<td>0.03</td>
<td>0.06</td>
<td>0.77</td>
<td>0.87</td>
<td>0.92</td>
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<tr>
<td>C: Male Top Mgr (1=Y, 0=N)</td>
<td>0.03</td>
<td>0.01</td>
<td>0.01</td>
<td>0.36</td>
<td>0.87</td>
<td>0.92</td>
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<tr>
<td>D: % Male Doctors in Work Unit</td>
<td>0.32</td>
<td>0.27</td>
<td>0.15</td>
<td>0.74</td>
<td>0.74</td>
<td>0.74</td>
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<td>E: Perceived Fairness</td>
<td>0.07</td>
<td>0.05</td>
<td>0.03</td>
<td>0.06</td>
<td>0.77</td>
<td>0.87</td>
<td>0.92</td>
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<tr>
<td>F: Organizational Support</td>
<td>-0.42</td>
<td>-0.02</td>
<td>0.01</td>
<td>-0.17</td>
<td>-0.28</td>
<td>-0.36</td>
<td>0.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G: Gender Discrimination</td>
<td>-0.04</td>
<td>-0.10</td>
<td>-0.02</td>
<td>-0.15</td>
<td>0.04</td>
<td>0.08</td>
<td>-0.16</td>
<td>0.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H: 1/Gender Harassment</td>
<td>-0.04</td>
<td>-0.10</td>
<td>-0.02</td>
<td>-0.15</td>
<td>0.04</td>
<td>0.08</td>
<td>-0.16</td>
<td>0.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I: 1/Exclusion</td>
<td>0.07</td>
<td>-0.01</td>
<td>-0.06</td>
<td>-0.05</td>
<td>0.15</td>
<td>0.35</td>
<td>-0.35</td>
<td>0.31</td>
<td>0.80</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>J: Value Similarity Administrators</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.02</td>
<td>-0.04</td>
<td>0.29</td>
<td>0.41</td>
<td>-0.20</td>
<td>0.14</td>
<td>0.22</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>K: Value Similarity Other Doctors</td>
<td>0.06</td>
<td>0.03</td>
<td>0.02</td>
<td>0.02</td>
<td>0.11</td>
<td>0.30</td>
<td>-0.16</td>
<td>0.07</td>
<td>0.22</td>
<td>0.26</td>
<td>0.81</td>
</tr>
<tr>
<td>Mean</td>
<td>0.58</td>
<td>0.69</td>
<td>0.73</td>
<td>57.90</td>
<td>3.37</td>
<td>4.32</td>
<td>2.28</td>
<td>0.74</td>
<td>0.82</td>
<td>3.62</td>
<td>4.58</td>
</tr>
<tr>
<td>S.D.</td>
<td>0.49</td>
<td>0.46</td>
<td>0.44</td>
<td>23.65</td>
<td>1.23</td>
<td>0.84</td>
<td>1.33</td>
<td>0.26</td>
<td>0.25</td>
<td>1.15</td>
<td>0.91</td>
</tr>
</tbody>
</table>

**Note.** Cronbach's alpha coefficients for multiple item indices are shown on the diagonal. Ns range from 962 to 1004. Correlations of magnitude .07 or greater are significant at the p < .05 level. Variables E through K were rated on a 6-point scale where a higher score indicates greater agreement. A reciprocal transformation was used on variables H and I to normalize their distributions. Under this transformation, a higher score indicates less agreement.
Table 2

**Regressions Examining Associations between Gender Context and Outcome Variables**

### Outcome:

<table>
<thead>
<tr>
<th>Main effects</th>
<th>Fairness</th>
<th>Org Support</th>
<th>Discrimination</th>
<th>Harassment$^a$</th>
<th>Exclusion$^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Gender (1=M, 0=F)</td>
<td>.02</td>
<td>-.06</td>
<td>-.24**</td>
<td>-.10</td>
<td>.00</td>
</tr>
<tr>
<td>B: % Men in Work Unit</td>
<td>.07</td>
<td>.09</td>
<td>-.10*</td>
<td>-.23***</td>
<td>-.04</td>
</tr>
<tr>
<td>C: Male Supervisor (1=Y, 0=N)</td>
<td>.05</td>
<td>-.12*</td>
<td>.04</td>
<td>-.12*</td>
<td>-.01</td>
</tr>
<tr>
<td>D: Male Top Mgr (1=Y, 0=N)</td>
<td>.02</td>
<td>-.03</td>
<td>.10*</td>
<td>-.03</td>
<td>-.10*</td>
</tr>
<tr>
<td>E: Value Similarity Other Doctors</td>
<td>.01</td>
<td>.14**</td>
<td>-.05</td>
<td>.00</td>
<td>.23***</td>
</tr>
<tr>
<td>F: Value Similarity Administrators</td>
<td>.36**</td>
<td>.44***</td>
<td>-.32**</td>
<td>.32**</td>
<td>.11</td>
</tr>
</tbody>
</table>

$\Delta R^2$ | .09*** | .21*** | .23*** | .04*** | .09*** |

2-way Interactions

| A × B | -.02 | -.08 | .04 | .13* | -.02 |
| A × C | -.03 | .14* | -.06 | .12 | -.07 |
| A × D | .00 | .02 | -.16* | .03 | -.03 |

$\Delta R^2$ | .00 | .01# | .01# | .02** | .00 |

Adjusted $R^2$ | .08*** | .21*** | .24*** | .05*** | .08*** |

N | 933 | 933 | 924 | 927 | 926 |

Note. Final standardized regression coefficients are reported.

$^a$To reduce skewness, the reciprocal of this measure served as the dependent variable, so that a higher value indicated a lower level of harassment/exclusion.

#p < .10. *p < .05. **p < .01. ***p < .001.
Figure 1: Effect of Respondent Gender by Supervisor Gender on Organizational Support
Figure 2: Effect of Respondent Gender by Top Administrator Gender on Gender Discrimination

Gender Discrimination

Male  Female

Top Administrator Gender

Men

Women
Figure 3: Effect of Respondent Gender X % Men on Reciprocal of Gender Harassment

1/Gender Harassment

Low  High

% Male Doctors in Unit

- Men
- Women