THE DETERMINANTS AND CONSEQUENCES OF WORKPLACE SEX AND RACE COMPOSITION

Barbara F. Reskin, Debra B. McBrier, and Julie A. Kmec³

¹Department of Sociology, Harvard University, Cambridge, Massachusetts 02138; e-mail: reskin@wjh.harvard.edu; ²Department of Sociology, University of Miami, Coral Gables, Florida 33124-2208; ³Department of Sociology, University of Pennsylvania, Philadelphia, Pennsylvania 19104; e-mail: jkmec@sas.upenn.edu

KEY WORDS: sex composition, organizational demography, organizational sex ratios, organizational race ratios

ABSTRACT

This chapter reviews research on the determinants and consequences of race and sex composition of organizations. Determinants include the composition of the qualified labor supply; employers' preferences, including the qualifications they require; the response of majority groups; and an establishment's attractiveness, size, and recruiting methods. The race and sex composition of an establishment affects workers' cross-group contact; stress, satisfaction, and turnover; cohesion; stereotyping; and evaluation. Composition also affects organizations themselves, including their performance, hiring and promotion practices, levels of job segregation, and wages and benefits. Theory-driven research is needed (a) on the causal mechanisms that underlie the relationships between organizational composition and its determinants and consequences and (b) on the form of the relationships between organizational composition and workers outcomes (e.g., cross-group contact, cohesion, turnover, etc). Research is needed on race and ethnic composition, with a special focus on the joint effects of race and sex.

INTRODUCTION

Almost 20 years ago, Baron & Bielby (1980) appealed to researchers studying stratification in labor markets to "bring the firm back in." "Firms," they argued,

"link the 'macro' and 'micro' dimensions of work organization and inequality" (p. 738). They practiced what they preached, publishing pathbreaking studies of the impact of organizational characteristics on the level of sex segregation in California firms (see, e.g., Bielby & Baron 1986, Baron & Bielby 1986) and California state agencies (see, e.g., Baron et al 1991, Baron & Newman 1989). Researchers have since begun to collect survey data on work organizations (see, e.g., Kalleberg et al 1996, Osterman 1994). These data, along with studies of work group dynamics, support a growing body of scholarship on the determinants of the sex and race composition of organizations and on the consequences of that composition for workers and for the organizations themselves. Many of these analyses have been guided by the renewed attention to the importance of organizational demography for workers and establishments (Pfeffer 1983, Martin 1985, Baron & Newman 1989, Davis-Blake 1992, Mittman 1992, Shenhav & Haberfeld 1992, Tsui et al 1992), often built on the insights of Kanter (1977) and P Blau (1977).

The sex and race composition of an organization is an important expression of its social structure. In the aggregate, compositions of organizations are indicative of the extent to which sex and race serve as bases of workers' differentiation across the economy. Thus, organizations' composition allows the study of the determinants of sex- and race-based ascription in employment in general. Establishments' race and sex compositions shape the demographic mix in which Americans work and their likelihood of contact with persons from their own and other races and sexes. Establishments provide a context in which researchers can test competing theories about how composition affects workers from numerical minority and majority groups. Thus, scholars can use establishment data to address a question of considerable moment in contemporary political dialogue: the consequences of diversity within organizations.

Researchers have addressed some of the above questions with data on occupations or industries. But occupations and industries do not employ workers or constitute the settings in which people work. Establishments are both actors in employment decisions and the settings in which workers perform. Hence, understanding the factors that affect the race and sex composition of establishments, and the effects of those compositions on workers and organizations, illuminates not only what establishments do, but when and why their decisions matter for workers and work groups.

Composition refers to the prevalence of some attribute or the distribution of some variable within a unit. To describe an organization's composition with respect to some demographic characteristic, we need to know the distribution of some demographic trait within the organization (e.g., the number of females and males). When data are available on the share a sex or race has of the pool from which establishments recruit (e.g., similar organizations, the industry,

the local labor force), researchers can assess whether sex-race groups are under-, over-, or proportionally represented in organizations.

Researchers have drawn attention to the sex or race segregation of workers across occupations, and some have examined sex and race segregation by industry (Jacobs 1989, Reskin 1993, Cotter et al 1998). In the context of employment, segregation refers to the degree to which two or more groups are differently distributed across work settings. Thus, an organization in which sexes or races are employed proportionally to their share of the labor pool may nonetheless be highly segregated if job assignments are based on sex or race, and a one-sexdominated establishment could nevertheless be perfectly integrated across jobs if the minority sex was represented in the same proportion in every job.

After briefly describing the race and sex composition of US establishments, we review research on the causes of sex and race composition of organizations. We then review studies of the consequences of composition for workers and their employers.

SEX AND RACE COMPOSITION OF ORGANIZATIONS

Organizations can be described in terms of their degree of differentiation on various dimensions. This chapter shows that a consequential and highly variable dimension of organizational differentiation is sex and race composition. According to the National Organizations Study (NOS), a 1991 nationally representative survey of organizations (Kalleberg et al 1996), one fifth of the employees in an average establishment are minorities, in keeping with minorities' share of the US labor force (US Bur. Census 1998:Table 621). However, almost one in four establishments employed no minorities, and in slightly more than one quarter of organizations, minority employees numbered less than one in ten (BF Reskin, unpublished data). Thus, in over half of US establishments studied, minorities are substantially underrepresented.

Women are distributed more evenly across establishments than are minorities. On average, almost half of an establishment's full-time employees are female. However, in one establishment in nine, less than 10% of full-time employees are female, whereas in one in 14, more than 90% are female [computed from NOS data (Kalleberg et al 1996)]. In sum, US work organizations are far from homogeneous with respect to sex and race composition. We turn to factors that give rise to the variations.

FACTORS AFFECTING SEX AND RACE COMPOSITIONS OF ORGANIZATIONS

There is a large body of research literature on the effects of sex and race on employment. Scholars emphasize both sex and race differences in the characteristics of the labor supply and race- and sex-linked considerations that affect an employer's hiring practices. Although we drew on this scholarship—especially research on the determinants of occupational or job segregation—to identify important causal factors, our review is limited to research on establishments.

Composition of the Labor Pools

The sex and race composition of establishments that are indifferent to a worker's race and sex and that use sex- and race-neutral recruitment methods should be roughly proportional to that of the supply of qualified workers in the labor pool. All else being equal, the larger a group's share of the qualified labor supply, the more of its members firms will employ. The larger the establishment relative to the size of the labor pool, the more its composition will depend on the composition of the labor supply (Szafran 1982:182, Cohn 1985:196).

The labor pools from which establishments hire may be the local or regional labor market, the establishment's industry, or the labor markets for the occupations that the establishment draws on, so the sex and race composition of these entities will influence an establishment's composition. 1 For example, an establishment's proximity to African American populations affects the likelihood of blacks applying for employment in that firm and the firm's likelihood of employing them (Holzer 1996:91). Among small- to medium-sized establishments, the more female-intensive the industry, the greater women's share of the jobs (Carrington & Troske 1994:521–23). In a national probability sample of establishments, women's share of full-time jobs in establishments was positively related to their share of jobs in the establishment's industry (r = 0.71; BF Reskin, unpublished data).

To the extent that the skills and credentials of prospective workers vary by sex or race within the pools from which establishments hire or employers mistakenly believe that they do, variation in employers' demand for skills will distribute the sexes and races unevenly across establishments. Skills are not identically distributed by sex and race (Farkas & Vicknair 1996). School segregation and tracking by race and sex have produced race and sex differences in educational attainment and majors, and hiring discrimination and occupational segregation have generated differences in experience and skills. Differences in the jobs that establishments comprise mean that establishments may differ in the skill levels they seek in workers, so it stands to reason that sex and race differences in skill or experience will affect an establishment's race and

¹Geographic location affects an establishment's employment practices by limiting its labor market and serving as a proxy for local customs that affect an employer's hiring practices (Baron 1984:49). However, regional differences in residential segregation, industrial mix, unionism, employment norms, and cultural attitudes in the institutional community may obscure regional effects of demographic composition (Jones & Rosenfeld 1989:687).

sex composition. Little research exists on how the skills establishments require affect its composition. Surveys of employers indicate that retail and service-sector firms are more likely than manufacturing and public-service establishments to exclude black men (by making personality and appearance job qualifications) (Moss & Tilly 1996:260; P Moss & C Tilly, unpublished data). In addition, firms in four urban labor markets that required general experience were less likely to employ black females than those that did not require general experience, and requiring the use of arithmetic or computers reduced the likelihood of employing black males (Holzer 1996:100–1).² We know almost nothing about what factors lead firms to require skills that are distributed unequally across the sexes or races.

Statistical Discrimination

The more establishments use race or sex as proxy for an individual's skills, potential productivity, or employment costs—in other words, the more establishments practice statistical discrimination on the basis of race or sex—the more the representation of women and minorities will depart from that of the qualified labor supply (Mittman 1992:16). A tendency to discriminate statistically will exacerbate the effect of sex or race differences in skills or credentials in a labor pool on an establishment's composition. Small, nonbureaucratized establishments are hypothetically more likely than are large bureaucracies to practice statistical discrimination, because they are less likely to have regular procedures for assessing a worker's qualifications. However, there is no research on what kinds of firms are more likely to practice statistical discrimination or how statistical discrimination affects the sex and race composition of an establishment.

Hiring Discrimination

Some employers are openly reluctant to hire nonwhites or women (Neckerman & Kirschenman 1991, Kennelly 1998; P Moss & C Tilly, unpublished data) because they are hostile toward or uncomfortable with persons from certain race-sex groups or because social dissimilarity hinders trust (Tolbert & Oberfield 1991:306).³ Others, however, pursue equal-employment or affirmative action hiring (Konrad & Linnehan 1995, Holzer & Neumark 1999). Variation among employers in hiring discrimination contributes to their varying compositions. The associations between the sex or race of employers and the compo-

²Although suburban firms require fewer skills for entry-level workers than do urban firms, the latter are more likely than the former to employ blacks (Holzer 1996:95).

³This propensity for "homosocial reproduction" (Kanter 1977:48, 63) may be especially apparent in establishments that have created organizational cultures into which they want employees to fit (Baron 1984:50–57).

sition of their employees are consistent with discrimination. Firms whose owners and supervisors are black disproportionately employ black workers (Carrington & Troske 1998b:251), and female-owned establishments are more likely than male-owned establishments to employ women, net of other firm characteristics, such as size (Carrington & Troske 1994:521–22).

Relative Numbers, Group Power, and Threat

The demographic makeup of the labor supply influences an organization's composition through its potential to affect the balance of power between groups. Some sociologists have argued that the greater the representation of minorities or women in a labor market, the better able they are to successfully challenge white men's monopoly of good jobs (Tienda & Lii 1987:145). Others, however, contend that there is a positive correlation between women's and minorities' share of jobs, their threat to white and male workers, and the severity of the latter's response (Blalock 1982:56). Studies at the occupational level support the threat rather than the power hypothesis (see, e.g., Frisbie & Niedert 1977:1028–29), but researchers have not shown a relationship at the establishment level, where such a response should occur.⁴

Large and growing establishments are able to accommodate heterogeneity without denying employment to dominant-group members or requiring them to work with groups they wish to avoid. Thus, both establishment size and establishment growth should be positively associated with the employment of minorities and women (for evidence at the job or occupational level, see Baron 1984:43, Baron et al 1991: Table 1, Reskin & Roos 1990). Of course, there are other reasons to expect establishment size to foster racial and gender heterogeneity: Organizational size is positively related to sophisticated personnel systems (Pfeffer 1977:557), formalization, and job differentiation, which, as indicated below, contribute to diversity in firms. The associations between establishment size and racial and gender heterogeneity are not always consistent with this expectation.⁵ Organizational size was negatively associated with the percentage of female workers in California establishments in the 1960s and 1970s (Bielby & Baron 1986:787), perhaps because the association between size and slack resources allows organizations to indulge preferences for white or male workers (Cohn 1985:219, Tolbert & Oberfield 1991:311). However, more recent national data show the expected positive correlations for job

⁴Historical research recounts resistance by employees of establishments to the incursion of outsiders (Anderson 1982, Skrentny 1996), and the positive correlation between an establishment's level of unionization and white men's share of jobs (Szafran 1982:181) is consistent with exclusion by the dominant group.

⁵Heterogeneity, according to P Blau (1977:77–78), refers to the distribution of people among different groups such that the more equally sized the groups, the more heterogeneous the population.

shares for women (Carrington & Troske 1994:523, 1998a:456) and minorities (Moss & Tilly 1996, Holzer 1996:102; P Moss & C Tilly, unpublished data).⁶

The limited evidence regarding the effect of growth suggests that it expands employment for women. For example, the growth of sociology departments was positively associated with the number of women on their faculties (Kulis & Miller-Loessi 1992:103). The increasing heterogeneity of the labor pools from which establishments hire should also foster an association between growth and turnover on the one hand and an establishment's demographic composition on the other (Mittman 1992:30). However, no research has examined this possibility.

The more attractive an organization—as reflected in its pay, benefits, promotion opportunities, and working conditions—the greater the incumbents' incentive to exclude outsiders. Consistent with this expectation, women are overrepresented at lower-paying plants, and men are overrepresented at betterpaying plants (Carrington & Troske 1998a:460). More generally, whites and men are overrepresented in core firms, whereas women and especially minorities are concentrated in firms on the economic periphery (Howell & Reese 1986:93). Although an establishment's sex and race composition and the attractiveness of its characteristics should be reciprocally related (F Blau 1977: 77–80), two longitudinal studies suggest that employment conditions causally precede an establishment's sex and race composition. For example, establishments that upgraded skills and improved advancement opportunities became more male dominated (Baron 1984:44), and the change in average salaries between 1978 and 1983 was negatively associated with the proportion of women administrators colleges and universities employed in 1983 (Pfeffer & Davis-Blake 1987:19-20).

Labor Costs and Group Status

Race and sex differences in employment costs and prestige influence the employment of equally productive workers who differ in race or sex, although labor costs are relevant primarily to establishments that face pressures to contain expenses (Reskin 1991:183). However, establishments that can afford higher-priced white male labor are likely to purchase it because it tends to confer status on the employer. Consistent with this reasoning, the more labor intensive an establishment's activities, the more it should depend on female and minority workers. At the industry level, labor-intensive production technology is associated with the overrepresentation of women (Wallace & Chang 1990: 341). By the same reasoning, the more competitive an establishment's market

⁶The median small independent establishment is 99% white (Kalleberg et al 1996:55).

⁷Growth does not inevitably benefit underrepresented groups because white men can often monopolize new jobs in desirable work settings (Baron 1984:43).

or the lower its revenues, the greater its incentive to employ workers who customarily work for low pay. The results of three studies support this expectation. First, the higher a restaurant's prices, the more likely serving jobs will be offered to men rather than women (Neumark 1996:933). Second, women are overrepresented in industries dominated by small firms with competitive market structures and low profit margins (Wallace & Chang 1990:341). Third, women's greater representation in private rather than public universities may reflect the greater economic constraints faced by the former (Tolbert & Oberfield 1991:311–12). There is some evidence at the occupational level that employers' efforts to deskill jobs are accompanied by the employment of relatively more women (Baron & Bielby 1980:754), but we located no firm-level studies of the link between deskilling and an establishment's composition.

Antidiscrimination laws make discrimination against minorities and women potentially costly, but not all establishments are subject to these laws. Federal law banning sex discrimination in employment exempts firms with fewer than 15 workers, and enforcement efforts have often targeted large firms. 8 In addition, affirmative action regulations apply only to firms that do at least \$50,000 worth of business with the federal government and have at least 50 employees (Reskin 1998). Thus, effects of establishment size may include the effects of vulnerability to equal employment opportunity and affirmative action regulations. In addition, comparisons of the composition of firms with and without federal contracts or of those that reportedly do and do not practice affirmative action indicate that the executive order requiring affirmative action—when enforced—prompted modest gains in the representation of African Americans and white women in firms required to practice affirmative action (Salancik 1979:390, Holzer 1996:85). Scrutiny by the California state regulatory agency substantially increased government agencies' employment of women and minorities (Baron 1984:51-52, Baron et al 1991:1394), and case studies of firms that have been targets of enforcement activities are consistent with equal employment opportunity and affirmative action regulations having increased the employment of women and minorities (N diTomaso, unpublished data).

Government employers are thought to be more receptive to women and minorities than are private-sector employers, for political reasons. Because the former are obligated to provide equal employment opportunity and because government employment practices are subject to public scrutiny, they should employ relatively more minorities than do private-sector employers. Available

⁸Title VII of the 1964 Civil Rights Act prohibits sex or race discrimination in establishments with at least 15 workers; an 1866 civil rights law bars race discrimination in employment contracts regardless of establishment size.

data indicate that this is the case for minorities but not women (BF Reskin, unpublished data).

Market-Based Incentives

The clientele for an organization's services or products may create a sex- or race-specific demand for workers, especially in establishments in which employees interact with customers (Blum et al 1994:243, Tolbert & Oberfield 1991:305, Mittman 1992:17). For example, the sex composition of university faculties varied directly with the sex composition of student bodies (Tidball 1986, Tolbert & Oberfield 1991:311), the share of a restaurant's customers who were men affected the restaurant's employment of male servers (Neumark 1996:935), and the proportion of blacks and women that federal agencies served correlated positively with each group's employment in the agencies (Borjas 1982: 292, 294). In a cross section of organizations, the proportion of black workers correlated positively with the proportion of customers who were black (Holzer 1996:102, Carrington & Troske 1998b:251).

Employment Practices

The hiring practices of establishments strongly affect their composition. Variation in the mechanisms employers use to recruit workers gives rise to variation in organizations' sex and race composition. Particularly important is whether recruitment procedures are formalized (Mittman 1992:16). Formalized practices or formal structures such as a personnel or human resources department reduce the use of sex and race as hiring criteria by limiting decision makers' discretion (Mayhew 1968, Baron & Bielby 1980:742, Szafran 1982: 175, Konrad & Linnehan 1995:805, Kalleberg et al 1996:135; P Moss & C Tilly, unpublished data). Recruitment through state employment agencies or community groups increased the representation of black men—and to a lesser degree Latinos (P Moss & C Tilly, unpublished data).

Recruitment through informal networks, in contrast, reproduces an establishment's composition because workers usually tell people who are similar to them about jobs (Kalleberg et al 1996:135). Thus, construction firms' recruitment of workers through informal ties blocked employment of African Americans (Waldinger & Bailey 1991:299). Firms were more likely to offer jobs to people who were referred by others than to those who were not referred, partly because personal ties provide information to applicants about the organization's hiring process (e.g., good times to apply for jobs) (Fernandez & Weinberg 1997:900). Methods of selection also affect an organization's composition. Subjective hiring procedures and vague criteria free decision makers

⁹Ethnic enclaves epitomize customer-employee matching by creating both a supply of and a demand for minority workers (Tienda & Lii 1987:144, Waldinger et al 1990:21).

to favor persons of their own race or sex (Kanter 1977, Baron 1984:55). Thus, firms that relied primarily on interviews to screen applicants employed fewer African Americans than those that did not (Moss & Tilly 1995:371), whereas the use of tests enhanced blacks' share of jobs, net of firm size, occupation, and neighborhood composition (Neckerman & Kirschenman 1991:443–45). 10

Because an establishment's practices are influenced by the norms and environments that existed when it was founded and because hiring practices tend to become institutionalized, older establishments employ fewer women or minorities than do younger ones (Baron et al 1991:1394). As longitudinal research confirms, an establishment's demographic composition tends to reproduce itself through its hiring practices. Thus, educational administrators were typically the same sex and race as their predecessors, net of the composition of the recruitment pools (Konrad & Pfeffer 1991:153), and the proportion of savings and loan association employees who were female was positively related to the association's likelihood of hiring women (Cohen et al 1998).

THE CONSEQUENCES OF AN ORGANIZATION'S RACE AND SEX COMPOSITION

Social behavior occurs within organizations, and as Pfeffer (1991:792) observed, it is shaped not only by the attributes of individual actors but by their distribution within the organization. For this reason, demography is an important structural property of organizations. For example, in his classic article on organizational demography, Pfeffer (1983:303–4) wrote that "the relative proportions of [groups] condition the form and nature of social interaction and group processes" that in turn affect workers' "psychological well-being, attitudes, and even job performance."

The demography of organizations matters, of course, because it is within organizations that the micro- and macro-level processes that affect workers are played out (Baron & Bielby 1980:743). An establishment's sex and race composition can be particularly consequential because workplaces are likely to be more heterogeneous than are the other settings in which people interact. ¹¹

Although theorists agree on the importance of composition, they disagree on why or how the sex or race compositions of workplaces affect workers. The heart of their disagreement is over why numerical majorities respond nega-

¹⁰Although formal procedures such as written applications and the verification of educational and criminal records enhanced a firm's likelihood of employing black men, skills tests were more common in high-skilled jobs for which blacks were underrepresented among qualified candidates, and checks on education and criminal record were used to select low-skill workers who were disproportionally black (P Moss & C Tilly, unpublished data).

¹¹Occupational segregation, because it involves sex- and race-specific occupational specialization, makes intergroup contact especially likely in establishments that include diverse occupations.

tively to minorities. Blalock (1956, 1957, 1967) argued that a minority's share of workers in a geographic area (or a labor market) affects majority-group members' behavior. He reasoned that the larger the minority group relative to the majority group, the more threatened the majority group will be, as more minorities mean more competition for the majority group (as well as a greater risk of status contamination through contact with someone from a low-status group and a greater chance of challenge to their customary practices) (see, e.g., Allmendinger & Hackman 1995:426). Although Blalock focused on race composition, his theory should hold for sex composition as well (see, e.g., Cassirer 1996).

Both Kanter (1977) and P Blau (1977) disagreed with Blalock on the effect of minorities' share. Kanter argued that the sex ratio in an organization affects men's perceptions of and reactions to women. Belonging to a numerical minority (under 15%) heightens a group's visibility, thereby subjecting it to stereotyping by the majority group. The majority's perceptual distortions can adversely affect the minority's performance. The greater the minority's representation, however, the more likely the majority is to perceive them realistically and to interact with them without focusing on group differences.

In 1977, P Blau (pp. 78–83) argued that the closer the sizes of the groups (i.e. the more heterogeneous an organization's composition), the less salient group membership is to the in-group and hence the less likely the in-group is to discriminate against the out-group (see also Taylor 1981). All else being equal, the greater the disparity between the sizes of the two groups, the less contact majority group members have with minorities, but the more contact minorities have with members of the majority. The preponderant group responds to this asymmetry, according to Blau, by discouraging contact with the numerical minority group. However, the smaller the disparity in the groups' sizes and, thus, the greater likelihood of interaction, the less likely members of the preponderant group are to avoid interacting with the minority. However, Blau (1994) later recognized that the salience of some statuses are so overarching that it overwhelms the structural effect of relative group size and he acknowledged that sex is such a status (p. 82).

Both Blau and Kanter asserted that the processes through which composition affects interaction and individual workers are invariant, regardless of whether the statistical majority group belongs to the socially dominant or subordinate sex or race. Each assumed that the more equal the groups' share of the workforce, the less salient group membership and the weaker its effects. For this reason, Blau focused on heterogeneity rather than on minority group relative size. In contrast, Blalock (1967) contended that the consequences of composition differ for socially subordinate and socially dominant numerical minority groups because only the socially dominant group enjoys the power to adversely affect groups that pose a competitive threat.

In this section, we review the research on the effects of an organization's sex and race composition on workers' relationships, their job satisfaction, how they are evaluated, their earnings, and their performance. We discuss these topics in the order implied by the causal process through which an organization's composition is thought to matter: the effect on workers, on intergroup relations, and on organizations themselves. Much of this research is based on work groups, not entire organizations. The dynamics reported in this research presumably apply to small establishments, the vast majority of business establishments, ¹² but probably do not hold for large organizations.

Effects on Workers

INTERGROUP CONTACT AND ISOLATION The relative sizes of groups employed in the same establishment affect the probability of minority-majority group interaction (P Blau 1977, Jacobs 1986). Research by South and his colleagues (1982:595, 1983:374-75) confirmed the importance of a work group's composition on intergroup contact: Each sex's share of the work group correlated positively with workers' contact with members of that sex. But the preference to associate with similar others exacerbates the effect of a group's relative size. Thus, the greater exposure that results from increased representation is not sufficient for positive contacts. Social psychologists point out that demographic similarity mediates the effect of contact, with people attracted to and identified with others who resemble them (Tajfel 1982:29, Byrne & Neuman 1992). Identification in turn hypothetically increases attraction and enhances communication, cohesion, and commitment to the collectivity. Consistent with this reasoning, women in the minority in their work groups felt more isolated than either women who were in the majority, or men, regardless of their share of group members (Konrad et al 1992:131), and women in mixed groups initiated less interaction and were addressed less frequently than women in all-female groups (Aries 1976:15, Carlock & Martin 1977:31).

INTERGROUP CONFLICT AND COHESION Following Blalock's reasoning, Wharton & Baron (1991:369) hypothesized that sex-based conflict was less likely in predominantly male than in mixed-sex settings in which the presence of women constitutes a greater threat to men's prerogatives. If sex-balanced organizations reduce men's well-being, then hostility toward women should occur more often in such settings and cohesiveness should be lower (Ibarra 1992:423–24). We could locate no organizational-level multivariate research bearing on this point.

 $^{^{12}}$ In 1994, 87% of business establishments had fewer than 20 employees (US Bur. Census 1998:Table 847).

Work-group homogeneity hypothetically fosters interpersonal attraction and trust, which, in turn, maintain group cohesion. Research is consistent with this reasoning. For example, the percentage of women in 76 work groups in a public agency correlated negatively with the amount of social support they received (South et al 1983:376-77). Within major symphony orchestras, members' perception of the quality of their relationships displayed a negative bivariate association with the percentage of female members in the symphony; in minor orchestras, the association between members, although weak, was positive (Allmendinger & Hackman 1995:446). Among blue-collar work groups, gender but not racial heterogeneity led to more emotional conflict (Pelled 1996:241).

In contrast, the percentage of women in university departments was positively related to workers' perceptions of cohesion, with men in all-male departments expressing the least cohesion and men in predominantly female departments expressing the most (Wharton & Bird 1996:109). Perhaps the threat stemming from heterogeneity induces cohesion among members of the majority group. Finally, the proportion of women in a work group was positively associated with the support for advancement that men received from both male and female coworkers and negatively associated with the support that females receive from their male coworkers (South et al 1987:274-76). (Work-group sex composition was not associated with how much support women received from female coworkers.)

According to a meta-analysis of case studies of organizations, neither gender nor racial homogeneity nor the sex composition of the work group was associated with workers' solidarity (Hodson et al 1993:407, Hodson 1995: 149). Of course, the absence of associations does not rule out the possibility that race or sex heterogeneity exacerbates antagonism between workers from different races or sexes.

VISIBILITY, PERFORMANCE PRESSURE, AND STRESS According to Kanter (1977:210-14) and Taylor (1981), workers who are minorities in their work setting are highly visible to members of the majority group, and this visibility hypothetically subjects them to performance pressure. The two studies that address this issue are consistent with that expectation. Racial tokenism, as measured by the proportion of blacks or women with whom African American leaders worked, was associated with experiencing performance pressure (Jackson et al 1995:550-51). Similarly, women in a law school with fewer female students reported more performance pressure than women in a school with more female students (Spangler et al 1978:164-65), and female students in academic departments with low proportions of women received lower grades than did their counterparts in departments with more female students, although males' grades were unaffected by their department's sex composition (Alexander & Thoits 1985:335–38). Exacerbating the stress associated with being in the minority is an organization's tendency to assign minorities to roles as representatives of their race or sex (Jackson et al 1995:550–51).

STEREOTYPING AND EVALUATION BIAS Dominant groups hypothetically shore up the boundaries between themselves and minority groups by focusing on the differences between a minority group and themselves, while ignoring the differences among the minority group members—in other words, by stereotyping persons who belong to numerical minority groups in terms of group membership. Consistent with this expectation, women in maledominated work groups experienced more sex stereotyping than did women in female-dominated groups (Konrad et al 1992:131). In one study, students working on Masters of Business Administration (MBA) degrees were more likely to attribute stereotypically feminine traits to women in an applicant pool when the women numbered fewer than three in eight than when there were at least three (Heilman 1980).

By ascribing to women and racial minorities undesirable characteristics and by blinding evaluators to evidence that would challenge their stereotypes, sex and race stereotyping negatively biases the evaluation of women and minorities (Heilman 1984, Gerber 1989, Foschi et al 1994). Skewed race and sex ratios affect these processes (Nieva & Gutek 1980, Tsui & O'Reilly 1989). According to a meta-analysis of social psychological research (Kraiger & Ford 1985:61), African Americans were evaluated least favorably in work settings in which their share was small. Research on sex composition shows the same pattern. MBA students participating in an experiment judged women to be less qualified when they were one quarter or less of the applicant pool than when they were at least three eighths of the pool (Heilman 1980). In addition, in an analysis of 486 jobs across several firms, the percentage of women in bluecollar and clerical jobs in a given firm was positively related to supervisors' ratings of women's performance, net of women's education and ability, but supervisors' evaluations of blacks were lower than those of whites, regardless of the race composition of the job (Sackett et al 1991:265). According to a study of the evaluation of small groups of promotion candidates at a utility company, group composition affected workers' evaluations on several dimensions (Schmitt & Hill 1977). The most consistent finding was that the greater white men's share of the group, the more positive were evaluators' assessments of individual white men. However, white men's numbers were negatively related to the evaluation of white women on six of the dimensions, although none of the correlations differed significantly from zero. The number of white women in a group was positively related to the evaluation of black women as forceful and negatively related to evaluators' assessment of their effectiveness at communicating in writing, whereas the more white men there

were in a group, the less forceful evaluators viewed black women (Schmitt & Hill, 1977:263, Table 2).¹³

However, contrary to predictions by Blau and Kanter about the positive effects of intergroup contact, the amount of interaction male bank managers had with female managers was unrelated to their attitudes toward women managers (Bhatnagar & Swamy 1995:1295).

In sum, although the evidence is mixed, the greater a minority group's representation, the less distorted evaluations tend to be.

JOB SATISFACTION, ORGANIZATIONAL ATTACHMENT, AND TURNOVER Theoretically, the negative reactions of dominant group members to minorities are commensurate with the minority group's representation. These negative reactions, which include reduced group cohesion, should erode the job satisfaction of both groups (Blalock 1967). Research on work groups offers mixed support for this prediction but suggests that the psychological impact of being a member of a gender minority may differ by sex (Tolbert et al 1998:21). According to Wharton & Bird (1996:110), men in predominantly male and mixed-sex work groups were more satisfied than men in all-male groups. In addition, both sexes in gender-balanced work groups were more satisfied than workers in homogeneous groups, with workers in male-dominated groups reporting the least satisfaction (Fields & Blum 1997:190). However, female managers reported lower job satisfaction when they worked in organizations with high proportions of men (Burke & McKeen 1996:1100), and women's representation was negatively related to job satisfaction in both sexes in symphony orchestras (Allmendinger & Hackman 1995:435) and university departments (Wharton et al 1999). One study hints that this inconsistency may stem from differences in the group to which female and male workers are oriented. The sex composition of the departments in a military supply depot increased women's satisfaction but did not affect men's satisfaction, but having more women at his hierarchical level lowered a man's overall satisfaction (Martin & Harkreader 1993: 329). The presence of women appears to increase men's satisfaction with one aspect of their jobs, however. Women's share of manufacturing jobs was positively related to both sexes' satisfaction with their earnings, presumably because more female establishments had lower earners in workers' reference group (Loscocco & Spitze 1991:14). Similarly, in a national survey of establishments, the racial heterogeneity of establishments was positively related to employees' perception regarding the extent of earnings inequality (Kalleberg & van Buren 1994:942-44), probably because of the lower pay of workers of color.

¹³There were too few black men for the researchers to reliably assess compositional effects on their evaluation

In a study of 151 work units within three large organizations, Tsui et al (1992:569) found that the organizational attachment of men and whites dropped as the race and sex heterogeneity of their work groups increased. In contrast, and consistent with Blalock's reasoning, women's attachment increased and that of nonwhites was not affected.

To the extent that the presence of women and racial minorities threatens white men who respond in ways that distress women and minorities, the greater the proportion of women and minorities in customarily white or male workplaces, the higher turnover rates for all workers. Research partially supports this proposition. In three large organizations, sex heterogeneity was associated with men's, but not women's, intention to leave the organization (Tsui et al 1992:569), and in a Canadian sample, the proportion of men in an organization was positively related with the intention of managerial and professional women to quit (Burke & McKeen 1996:1100–101). However, consistent with the reasoning of Kanter and Blau, the presence of women in academic departments was unrelated to men's turnover and reduced women's turnover only in settings in which women were at least 35% of the employees (Tolbert et al 1995:570–71).

Effects on Organizations

PERFORMANCE Theories offer contradictory predictions regarding the effect of composition on performance. If homogeneity fosters trust and cohesion and facilitates communication, it should enhance group performance. However, Kanter argued that as the minority-majority ratio approaches parity, the less performance pressure on numerical minority groups and the better their performance. Both these theories imply curvilinear relationships, but the former predicts a positive relationship between performance and the size of the disparity between the groups' sizes, whereas the latter predicts a negative correlation. In keeping with these contradictory predictions, two establishment-level studies reported contradictory findings. In firms with considerable market power, the proportion of women was positively related to profitability, which may signal performance (JK Hellerstein, D Neumark & KR Troske, unpublished data). But in symphony orchestras—organizations in which performance requires interdependence—the bivariate relationships between the percentage of women in an orchestra and each sex's perceptions of orchestral functioning were negative (Allmendinger & Hackman 1995:436). The higher emotional conflict among sex-heterogeneous work groups reduced their productivity (Pelled 1996:241).

HIRING PATTERNS As noted above, demographic patterns tend to be self-perpetuating. First, the sex and race composition of a workplace influences an employer's conceptions of appropriate employees (Kanter 1977, Acker 1990,

Baron 1991, Perry et al 1994:796–98). Given homosocial reproduction, evaluations of potential employees by gatekeepers are likely to depend on the prospective workers' demographic similarity to "organizational elites" (Baron 1984:57). Second, the most common recruitment method—hiring through informal networks—perpetuates an establishment's sex and race composition (Braddock & McPartland 1987:8). Third, the social environment of predominantly white or predominantly male work settings may be sufficiently inhospitable as to exclude women or people of color (Bergmann & Darity 1981:49, Swerdlow 1989, Padavic 1991). Research confirms this expectation. In police agencies, women's application rates were more closely related to the proportion of women already employed in the job than to an agency's recruitment efforts (Martin 1991:499), and as noted, the greater women's share of employees in savings and loan associations, the more likely women were to be hired (Cohen et al 1998).

JOB SEGREGATION AND PROMOTION STRUCTURES Given the possibility that whites and men resist the employment of outsiders, organizations that employ relatively more women or minorities may segregate them to insulate majorities from contact with equal-status minorities (Kulis & Miller-Loessi 1992:95). ¹⁴ However, Bielby & Baron (1984:51, 53; Baron & Bielby 1985:238–39, 247) found that an establishment's level of sex segregation was negatively associated with women's share of the workforce, net of occupational composition and other occupational characteristics. In fact, a longitudinal analysis of California state agencies indicated that as the job shares of women and, to a lesser degree, racial minorities increased, agencies became less sex segregated (Baron et al 1991:1388, 1395).

Heterogeneity can affect an organization's structure through its impact on the balance of power. To the extent that the majority's perception of threat is directly related to minorities' share of jobs and the majority can shape organizational practices to protect its self-interest, women's or minorities' share of jobs will be negatively related to their outcomes (pay, assignments, promotion, opportunities). Consistent with this reasoning, the percentage of minority workers across establishments was negatively related to the likelihood of promotion for black workers but not white workers (Baldi & McBrier 1997:489). On the other hand, if a minority group's size is positively related to its power, it should also be positively related to its opportunities and rewards. In keeping with this expectation, the proportion of women employed by savings and loan associations was positively related to the likelihood of the savings and loan

¹⁴According to DiPrete (1989:113–14), the designers of the civil service used job-title distinctions to segregate higher-status professional positions that employed mostly white men from lower-status clerical and manual jobs that employed men and women of color and white women.

promoting women (Cohen et al 1998). In addition, although the causal order of these relationships is unclear, several cross-sectional studies show a positive relationship between the percentage of female workers in an establishment and the percentage of female managers (Blum, et al 1994:260, Shenhav & Haberfeld 1992:131, Stover 1994:396; BF Reskin & DB McBrier, unpublished data), and one observed a positive bivariate correlation between percentage of blacks and blacks' share of managerial jobs in medium-to-large Detroit firms (Shenhav & Haberfeld 1992:131).

WAGES The devaluation of activities that are associated with lower-status groups might lead the sex or race composition of establishments to affect the pay of workers. In occupations and jobs, the percentage of female workers is negatively associated with wages, net of appropriate controls (see Baron & Newman 1989:123, England 1992, Kilbourne et al 1994). However, devaluation should occur at the establishment level only if (a) most of the jobs in an establishment involve activities that are sex-typed and typical of just one sex (for example, a social welfare agency) or (b) a single entity (e.g., a civil service commission) sets pay for several establishments and hence can systematically vary pay for all workers in an establishment based on an establishment's race or sex composition. ¹⁵

Five studies show establishment-level effects of demographic composition on one or both sexes or races; a sixth reported no association. Using data from industry wage surveys conducted between 1973 and 1983, Groshen (1991: 466–68) found that the greater women's share of workers in establishments, the less all workers earned. In Detroit firms, women's earnings were curvilinearly related to their share of jobs: In establishments with less than 12% female employees, the correlation was positive, but in establishments with more than 12% female employees it was negative (men's pay was unaffected) (Shenhav & Haberfeld 1992:137). Also, the earnings of manufacturing workers—especially women—were negatively related to women's share of plant work (Carrington & Troske 1998a:460–62). A 1991 study of almost half a million workers employed in more than 28,000 establishments showed that, net of workers' sex and the sex composition of the industry, occupation, and job, the percentage of female employees in an establishment was negatively related to

¹⁵The process of differentially evaluating activities depending on their sex or race label must occur for the entity that sets pay. Devaluation occurs at the occupational level because some occupations are labeled as female work. There is almost no empirical evidence of race-based devaluation, presumably because whites so outnumber minorities that occupations are not labeled as minorities' work.

¹⁶Kalleberg & van Buren (1994:944) found that an organization's sex heterogeneity was positively related to earnings dispersion, but the percentage of workers that was female had no effect.

workers' earnings. Net of a variety of control variables, an establishment's sex composition explained between one ninth and one fifth of the pay gap between the sexes (K Bayard, JK Hellerstein, D Neumark & KR Troske, unpublished data). Similarly, the wages of black workers fell with blacks' share of an establishment's employment, whereas the wages of white workers rose with blacks' share of employment (Carrington & Troske 1998b:258). Finally, an establishment's sex composition did not significantly affect workers' earnings, net of the effect of the sex composition of their occupations and jobs (Huffman et al 1996:201). In sum, the majority of the research indicates that the representation of women and minorities in establishments is negatively related to their own earnings and sometimes to those of men. The inconsistent findings may reflect the fact that organizational practices can mitigate any tendency toward devaluation (Baron 1991:123).

BENEFITS If white and male workers have more power than women and minorities or are more valued, the more white and male an establishment's workforce, the more fringe benefits the establishment should provide. Empirical research on two national samples of organizations provides mixed support for this expectation. The greater women's share of employment, the less likely employers were to offer personal benefits and bonuses, and the greater the proportion of employees who were not white, the less likely establishments were to offer many personal and family benefits (Knoke 1994:972-75). However, other analyses of these data showed a curvilinear relationship between women's share of full-time employment and benefits, with the proportion of females positively associated with both conventional and family benefits for establishments whose employees were at least 50% male, and negative for establishments whose employees were over half female (C Deitch & ML Huffman, unpublished data). Whether at least 10% of the establishment's employees were minority did not affect any of the benefits the researchers examined. According to research based on a second sample of establishments, the proportion of employees who were female was positively associated with organizations having work-family programs and—in unionized workplaces—with the likelihood that the organization provided parental leave (Osterman 1995:693). The proportion of employees who were female did not affect whether a sample of northern Indiana establishments provided childcare benefits (Glass & Fujimoto 1995:400), however.

CONCLUSIONS

We can think of the demographic composition of establishments as both social fact and social structure. As social fact, the race and sex composition of individual establishments is a significant feature of the environment in which em-

ployees interact. In the aggregate, an establishment's race and sex composition provides a rough gauge of the extent to which ascribed characteristics segregate the workforce. Moreover, variation in the race and sex composition of establishments that differ on wages, benefits, working conditions, and advancement opportunities provides the opportunity to investigate sex and race stratification in employment.

The writings of P Blau (1977) make the case for viewing demographic composition as social structure. Pfeffer (1991:790) concurred, arguing that an organization's demography constitutes a theoretical and empirical reality whose effects are distinct from the aggregated effects of the behaviors or attitudes of its members (Pfeffer 1983:303–4). Scholars can examine the interrelationship between demographic structures and other organizational structures, such as internal labor markets, reward systems, and the like, as well as the structural effect of composition on workers' experiences. Below we summarize what such research has revealed about the determinants and consequences of an organization's sex and race structures. We conclude by recommending a brief research agenda.

Determinants of an Organization's Sex and Race Composition

Research indicates that an establishment's composition is a function of the race and sex composition of the qualified labor supply and that employers affect this supply by the qualifications they impose. Employers' preferences for or aversions to prospective workers on the basis of their sex and race affect an establishment's composition, although these effects are conditional on whether firms are subject to government antidiscrimination and affirmative action regulations. Although, hypothetically, majority group workers' responses to the composition of the labor supply affect their opposition to the employment of racial minorities and women, no establishment-level research has tested this hypothesis. Several studies have confirmed that indicators of the attractiveness of an establishment as an employment setting are negatively related to the share of jobs women and racial minorities hold, although none has pinpointed the mechanisms underlying this relationship. In general, the more establishments pay, the less likely they are to employ racial minorities and women, and those that have formalized their employment practices are more likely to do so.

Consequences of an Organization's Sex and Race Composition

It is axiomatic in sociology that context affects attitudes and behaviors, and theorists concur that workplace composition is consequential for workers and work organization (Pfeffer 1983, 1991:790). For example, as Ridgeway & Smith-Lovin (1999) pointed out, situational factors "overdetermine" inequal-

ity in male-female interaction. Research confirms the importance of composition for workers and for organizational outcomes, such as performance, hiring and promotion practices, levels of job segregation, and wages and benefits. However, theoretical accounts of the effects of group composition on workers disagree over the underlying mechanisms and the direction of compositional effects. Specifically, they disagree over whether the relationship between outgroups' relative numbers and majority-group resistance is positive or negative, and whether the hypothesized response by the majority group is limited to social majorities or occurs as well among societal minorities (e.g. women) when they constitute a numerical majority in an establishment.

Research on the effects of an organization's sex and race composition on workers' intergroup contacts, cohesion, job satisfaction, and how they are evaluated does not resolve the disagreement. Much of the research on the likelihood of contact, liking, isolation, and stereotyping conforms to Blau's predictions, and research on evaluation bias and stereotyping is consistent with Kanter's theory of tokenism. In contrast, research on intergroup hostility and job satisfaction is generally consistent with Blalock's majority-threat theory. As noted below, however, many studies are preliminary, and there is rarely a set of consistent findings based on well-specified models from which to draw final conclusions.

Future Research

REPLICATION AND EXTENSION Although the topic of an organization's sex and race composition is linked intellectually to that of occupational segregation, the latter constitutes a specialty area with a cohesive body of knowledge that displays considerable consensus on segregation's causes and consequences. In contrast, the research we have reviewed is not a cohesive research area. We drew eclectically on psychology, economics, and management as well as sociology and, within these disciplines, from several specialty areas. Although the empirical results reviewed above are generally consistent with some theory or with a priori conjecture, any general conclusions must be preliminary. Many findings are based on bivariate relationships and hence are starting points, at best, for more systematic study.

CONTINGENT RELATIONSHIPS It seems likely that many of the observed determinants and effects of composition depend on unmeasured organizational characteristics such as firm size, sector (public or private), labor process, workers' interdependency, recruitment methods, and region, among others. For example, Baron & Bielby (1985:239) speculated that larger shifts in sex composition may be required to achieve desegregation in big firms relative to small ones. The results of laboratory experiments, although revealing as to

processes, do not incorporate contextual factors that condition the social psychological outcomes in actual work settings. In other words, assessments of the determinants or consequences of an organization's race and sex composition must be based on properly specified models. With a few exceptions, the studies we reviewed either were not designed to examine the causes and consequences of an organization's demographic composition or their designs were inadequate for this purpose.

UNDERLYING CAUSAL MECHANISMS Even for relationships that appear to be robust, the causal processes are uncertain. This is particularly true with respect to the finding that an establishment's proportion of female or minority workers is negatively related to workers' earnings. We know that it is within establishments that employment decisions are made and their consequences are played out; we have yet to determine the causal processes that lead structures to matter for workers and organizations.

LINEARITY OF EFFECTS OF COMPOSITION ON WORKERS Blalock (1967) assumed that the relationship between a racial minority's share and the exclusionary responses of majority group members was negative and linear. In contrast, both Kanter and Blau hypothesized nonlinear relationships. Kanter suggested that when women's share of the work group exceeds a token level, they should encounter less stereotyping and more acceptance as individuals rather than as women, whereas Blau argued that the closer the groups' relative sizes, the less salient its minority status and the less severe the reactions by the majority status group.

Few researchers have tested for threshold effects of composition, and only a few have been observed in the hypothesized direction. These include negative effects of the proportion of women on salaries (Pfeffer & Davis-Blake 1987: 14–15); on orchestral functioning, the quality of relationships between players, and players' job involvement (Allmendinger & Hackman 1995:456–57); on female turnover (Tolbert et al 1995); and on sex stereotyping and the devaluation of female candidates (Heilman 1980). Research on the effects of organizational demography can uncover the reasons for the negative effects of the presence of women and racial minorities only when they test models that allow threshold effects and, thus, permit them to test competing theories

RACE COMPOSITION Even a cursory reading of the reviewed research reveals that the research on race composition is much scantier than that on sex composition. Although medium-to-large organizations express strong concerns with workplace diversity—especially racial and ethnic diversity—little scholarship is available to guide organizations. The extant scholarship focuses either on gender composition or on race composition; we found almost no research that

simultaneously takes gender and race into account to examine, for example, what establishment characteristics are associated with the employment of women of color. In addition, we located no establishment-level research that goes beyond black and white in conceptualizing race, although Hispanics' share of the labor force was 84% that of African Americans' in 1996 (US Bureau of the Census 1998:Table 621), and responses to Hispanic, Asian, and Native American women and men may differ from those to African American women and men.

As Bielby & Baron (1984) and Davis-Blake (1992) pointed out, an organization's demography is slow to change. However, as labor pools become more heterogeneous, so too will the American workplace. Workers will increasingly encounter members of other sexes, races, and ethnic groups at work. The research reviewed here indicates that increasing gender and racial heterogeneity of organizations is likely to alter intergroup relations among workers and may affect an establishment's performance. ¹⁷ One consequence is the attention that corporations are giving to concerns related to diversity (Kelly & Dobbin 1998). This concern with diversity provides both the opportunity and the need for systematic attention by researchers.

ACKNOWLEDGMENTS

We are grateful to Rachel Rosenfeld for her comments on a previous version of this chapter and to Pamela Tolbert for sharing with us a preprint of her forthcoming chapter.

¹⁷For example, whites employed in firms that practiced affirmative action were more likely than other whites to believe that blacks experience race discrimination and were more supportive of race-targeted interventions (Taylor 1995:1406).

Visit the *Annual Reviews home page* at http://www.AnnualReviews.org.

Literature Cited

Acker JR. 1990. Hierarchies, jobs, bodies: a theory of gendered organizations. *Gend. Soc.* 4:139–58s

Alexander VD, Thoits PA. 1985. Token achievement: an examination of proportional representation and performance outcomes. *Soc. Forces* 64(2):332–40

Allmendinger J, Hackman JR. 1995. The more, the better? A four-nation study of the inclusion of women in symphony orchestras. *Soc. Forces* 74:423–60

Anderson KT. 1982. Last hired, first fired: black women workers during World War II. J. Am. Hist. 69:82–97

Aries E. 1976. Interaction patterns and themes of male, female and mixed groups. *Small Group Behav.* 7:7–18

Baldi S, McBrier DB. 1997. Do the determinants of promotion differ for blacks and whites? Evidence from the U.S. labor market. Work Occup. 24:478–97

Baron JN. 1984. Organizational perspectives

- on stratification. Annu. Rev. Sociol. 10: 37 - 69
- Baron JN. 1991. Organizational evidence of ascription in labor markets. In New Approaches to Economic and Social Analyses of Discrimination, ed. R Cornwall, P Wunnava, pp. 113-43. New York: Praeger
- Baron JN, Bielby WT. 1980. Bringing the firm back in: stratification, segmentation, and the organization of work. Am. Sociol. Rev. 45:737-65
- Baron JN, Bielby WT. 1985. Organizational barriers to gender equality: sex segregation of jobs and opportunities. In Gender and the Life Course, ed. A Rossi, pp. 233-51. New York: Aldine
- Baron JN, Bielby WT. 1986. The proliferation of job titles in organizations. Admin. Sci. O. 31:561–86
- Baron JN, Mittman BS, Newman AE. 1991. Targets of opportunity: organizational and environmental determinants of gender integration within the California civil service, 1979-1985. Am. J. Sociol. 96: 1362-401
- Baron JN, Newman AE. 1989. Pay the man: effects of demographic composition on prescribed wage rates in the California civil service. In Pay Equity: Empirical Inquiries, ed. RT Michael, H Hartmann, B O'Farrell, pp. 107-29. Washington, DC: Natl. Acad.
- Bergmann BR, Darity W. 1981. Social relations, productivity, and employer discrimination. Mon. Labor Rev. 104(4):47–49
- Bhatnagar D, Swamy R. 1995. Attitudes toward women as managers: Does interaction make a difference? Hum. Relat. 48(11):1285-307
- Bielby WT, Baron JN. 1984. A woman's place is with other women: sex segregation within organizations. In Sex Segregation in the Workplace, ed. BF Reskin, pp. 27-55. Washington, DC: Natl. Acad
- Bielby WT, Baron JN. 1986. Men and women at work: sex segregation and statistical discrimination. Am. J. Sociol. 91:759-99
- Blalock HM. 1956. Economic discrimination and Negro increase. Am. Sociol. Rev. 21: 584-88
- Blalock HM. 1957. Percent nonwhite and discrimination in the south. Am. Sociol. Rev. 22:677-82
- Blalock HM. 1967. Toward a Theory of Minority-Group Relations. New York: Wiley
- Blalock HM. 1982. Race and Ethnic Relations. Englewood Cliffs, NJ: Prentice Hall
- Blau FD. 1977. Equal Pay in the Office. Lexington, MA: Lexington Books
- Blau PM. 1977. Inequality and Heterogeneity. New York: Free Press

- Blau PM. 1994. Structural Contexts of Opportunity. Chicago: Univ. Chicago Press
- Blum TC, Fields DL, Goodman JS. 1994. Organizational-level determinants women in management. Acad. Manage. J. 37:241–68
- Borjas G. 1982. The politics of employment discrimination in the federal bureaucracy. J. Law Econ. 25:271-99
- Braddock JH, McPartland JM. 1987. How minorities continue to be excluded from equal employment opportunity: research on labor markets and institutional barriers. J. Soc. Issues 43:5–39
- Burke RJ, McKeen CA. 1996. Do women at the top make a difference? Gender proportions and the experiences of managerial and professional women. Hum. Relat. 49(8):1093-104
- Byrne D, Neuman JH. 1992. The implications of attraction research for organizational issues. In Issues, Theory, and Research in Industrial Psychology, ed. K Kelley. New York: Elsevier
- Carlock CJ, Martin PY. 1977. Sex composition and the intensive group experience. Soc. Work 22:27-32
- Carrington WJ, Troske KR. 1994. Gender segregation in small firms. J. Human Res. 30: 503-33
- Carrington WJ, Troske KR. 1998a. Sex segregation in U.S. manufacturing. Ind. Labor Relat. Rev. 51:445-64
- Carrington WJ, Troske KR. 1998b. Interfirm segregation and the black/white wage gap. J. Labor Econ. 16:231-60
- Cassirer NR. 1996. Race composition and earnings: effects by race, region, and gender. Social Sci. Res. 25:375-99
- Cohen LE, Broschak JP, Haveman HA. 1998. And then there were more? The effects of organizational sex composition on hiring and promotion. Am. Sociol. Rev. 63: 711 - 27
- Cohn S. 1985. The Process of Occupational Sex-Typing: The Feminization of Clerical Labor in Great Britain. Philadelphia, PA: Temple Univ. Press
- Cotter DA, DeFiore JA, Hermsen JM, Kowalewski BM, Vanneman R. 1998. The macro-level effect of occupational integration. Am. Sociol. Rev. 62:714-34
- Davis-Blake A. 1992. The consequences of organizational demography: beyond social integration effects. Res. Sociol. Organ. 10: 175 - 97
- DiPrete TA. 1989. The Bureaucratic Labor Market: The Case of the Federal Civil Service. New York: Plenum
- England P. 1992. Comparable Worth: Theories and Evidence. New York: de Gruyter

- Farkas G, Vicknair K. 1996. Appropriate tests of racial wage discrimination require controls for cognitive skill. *Am. Sociol. Rev.* 61:557–60
- Fernandez RM, Weinberg N. 1997. Sifting and sorting: personal contacts and hiring in a retail bank. *Am. Sociol. Rev.* 62:883–902
- Fields DL, Blum TC. 1997. Employee satisfaction in work groups with different gender composition. J. Organ. Behav. 18(2): 181–96
- Foschi M, Lai L, Sigerson K. 1994. Gender and double standards in the assessment of job applicants. Soc. Psychol. Q. 57(4): 326–39
- Frisbie W, Niedert L. 1977. Inequality and the relative size of minority populations: a comparative analysis. *Am. J. Sociol.* 82: 1007–30
- Gerber GL. 1989. The more positive evaluations of men than women on gender-stereotyped traits. *Psychol. Rep.* 65(1): 275–86
- Glass J, Fujimoto T. 1995. Employer characteristics and provision of family responsive policies. Work Occup. 22:380–411
- Groshen EL. 1991. The structure of the female male wage differential—is it who you are, what you do, or where you work? *J. Hum. Resour.* 26(3):457–72
- Heilman ME. 1980. The impact of situational factors on personnel decisions concerning women: varying the sex composition of the applicant pool. Organ. Behav. Hum. Decis. Process. 26:386–95
- Heilman ME. 1984. Information as deterrent against sex discrimination: the effects of applicant sex and information type on preliminary employment decisions. *Organ. Behav. Hum. Decis. Process.* 33(2): 174–86
- Hodson R. 1995. Cohesion or conflict? Race, solidarity, and resistance in the workplace. *Res. Sociol. Work* 5:135–59
- Hodson R, Welsh S, Rieble S, Jamison CS, Creighton S. 1993. Is worker solidarity undermined by autonomy and participation? Patterns from ethnographic literature. Am. Sociol. Rev. 58:398–416
- Holzer HJ. 1996. What Employers Want. New York: Russell Sage Found.
- Holzer HJ, Neumark D. 1999. Are affirmative action hires less qualified? Evidence from employer-employee data on new hires. J. Labor Econ. In press
- Howell FM, Reese WA. 1986. Sex and mobility in the dual economy. *Work Occup*. 13: 77–96
- Huffman ML, Velasco SC, Bielby WT. 1996. Where sex composition matters most: comparing the effects of job versus occu-

- pational sex composition on earnings. *Sociol. Focus* 29:189–207
- Ibarra H. 1992. Homophily and differential returns: sex differences in network structure and access in an advertising firm. Admin. Sci. O. 37:422–47
- Jackson PB, Thoits PA, Taylor HF. 1995. Composition of the workplace and psychological well-being: the effects of tokenism on America's black elite. Soc. Forces 74: 543–57
- Jacobs JA. 1986. Trends in workplace contact between men and women, 1971–1981. Sociol. Soc. Res. 70:202–5
- Jacobs JA. 1989. Long-term trends in occupational segregation by sex. Am. J. Sociol. 95:160–73
- Jones J, Rosenfeld RA. 1989. Women's occupations and local labor markets: 1950–1980. Soc. Forces 67:666–92
- Kalleberg AL, Knoke D, Marsden PV, Spaeth JL. 1996. Organizations in America: Analyzing Their Structures and Human Resources Practices. Thousand Oaks, CA: Sage
- Kalleberg AL, van Buren ME. 1994. The structure of organizational earnings inequality. Am. Behav. Sci. 37:930–47
- Kanter RM. 1977. Men and Women of the Corporation. New York: Basic Books
- Kelly E, Dobbin F. 1998. How affirmative action became diversity management: employer response to antidiscrimination law, 1961 to 1996. Am. Behav. Sci. 41(7): 960–84
- Kennelly I. 1999. You've got that singlemother element: employers' images of African American women. Gend. Soc. 13:168
- Kilbourne BS, England P, Beron K. 1994. Effects of individual, occupational, and industrial characteristics on earnings: intersections of race and gender. Soc. Forces 72:1149–76
- Knoke D. 1994. *Cui bono?* Employee benefit packages. *Am. Behav. Sci.* 37(7):963–78
- Konrad AM, Linnehan F. 1995. Formalized HRM structures: coordinating equal employment opportunity or concealing organizational practices? Acad. Manage. J. 38:787–820
- Konrad AM, Pfeffer J. 1991. Understanding the hiring of women and minorities in educational institutions. Sociol. Educ. 64: 141–57
- Konrad AM, Winter S, Gutek BA. 1992. Diversity in work group sex composition: implications for majority and minority workers. Res. Sociol. Organ. 10:115–40
- Kraiger K, Ford JK. 1985. A meta-analysis of ratee race effects in performance ratings. J. Appl. Psychol. 70(1):56–65

- Kulis S, Miller-Loessi KA. 1992. Organizations, labor markets, and gender integration in academic sociology. Soc. Perspect. 35:93-117
- Loscocco KA, Spitze G. 1991. The organizational context of women's and men's pay satisfaction. Soc. Sci. Q. 72(1):3-19
- Martin PY. 1985. Group sex composition in work organizations: a structural-normative model. Res. Sociol. Organ. 4:311-49
- Martin PY, Harkreader S. 1993. Multiple gender contexts and employee rewards. Work Occup. 20:296-336
- Martin SE. 1991. The effectiveness of affirmative action: the case of women in policing. Justice Q. 8:489-504
- Mayhew L. 1968. Ascription in modern societies. Sociol. Ing. 38:105-20
- Mittman BS. 1992. Theoretical and methodological issues in the study of organizational demography and demographic change. Res. Sociol. Organ. 10:3-53
- Moss P, Tilly C. 1995. Skills and race in hiring: quantitative findings from face-toface interviews. East. Econ. J. 21:357-74
- Moss P, Tilly C. 1996. Soft skills and race: an investigation of black men's employment problems. Work Occup. 23:252-76
- Neckerman KM, Kirschenman J. 1991. Hiring strategies, racial bias, and inner-city workers: an investigation of employers' hiring decisions. Soc. Probl. 38:433-47
- Neumark D. 1996. Sex discrimination in the restaurant industry: an audit study. Q. J. Econ. 111:915-41
- Nieva VF, Gutek BA. 1980. Sex effects on evaluation. Acad. Manage. Rev. 5:267-76
- Osterman P. 1994. How common is workplace transformation and who adopts it? Ind. Labor Relat. Rev. 47(2):173-88
- Osterman P. 1995. Work/family programs and the employment relationship. Admin. Sci. O. 40:681–700
- Padavic I. 1991. Attraction of male blue-collar jobs for black and white women: economic need, exposure, and attitudes. Soc. Sci. Q. 72:33-49
- Pelled LH. 1996. Relational demography and perceptions of group conflict and performance: a field investigation. Int. J. Confl. Manage. 7(3):230-46
- Perry EL, Davis-Blake A, Kulik CT. 1994. Explaining gender-based selection decisions: a synthesis of contextual and cognitive approaches. Acad. Manage. Rev. 19(4): 796-820
- Pfeffer J. 1977. Toward an examination of stratification in organizations. Admin. Sci. D. 22:553–67
- Pfeffer J. 1983. Organizational demography. Res. Organ. Behav. 5:299-357

- Pfeffer J. 1991. Organization theory and structural perspectives on management. J. Manage. 17:789-803
- Pfeffer J, Davis-Blake A. 1987. The effect of the proportion of women on salaries: the case of college administrators. Admin. Sci. Q. 32:1-24
- Reskin BF. 1991. Labor markets as queues: a structural approach to changing occupational sex composition. In Macro-Micro Linkages in Sociology, ed. J Huber, pp. 170-91. Newbury Park, CA: Sage
- Reskin BF. 1993. Sex segregation in the workplace. Annu. Rev. Sociol. 19:241-70
- Reskin BF. 1998. The Realities of Affirmative Action in Employment. Washington, DC: Am. Sociol. Assoc.
- Reskin BF, Roos P. 1990. Job Queues, Gender Oueues: Explaining Women's Inroads into Male Occupations. Philadelphia, PA: Temple Univ. Press
- Ridgeway CL, Smith-Lovin L. 1999. The gender system in interaction. Annu. Rev. Sociol. 25:191-216
- Sackett PR, DuBois CLZ, Noe AW. 1991. Tokenism in performance evaluation: the effects of work group representation on male-female and white-black differences in performance ratings. J. Appl. Psychol. 76:263-67
- Salancik GR. 1979. Interorganizational dependence and responsiveness to affirmative action: the case of women and defense contractors. Acad. Manage. J. 22:375-94
- Schmitt N, Hill T. 1977. Sex and race composition of assessment center groups as a determinant of peer and assessor ratings. J. Appl. Psychol. 62(3):261-64
- Shenhav Y, Haberfeld Y. 1992. Organizational demography and inequality. Soc. Forces 71:123-43
- Skrentny JD. 1996. The Ironies of Affirmative Action. Chicago: Univ. Chicago Press
- South SJ, Bonjean CM, Markham WT, Corder J. 1982. Social structure and intergroup interaction: men and women of the federal bureaucracy. Am. Sociol. Rev. 47: 587-99
- South SJ, Bonjean CM, Markham WT, Corder J. 1983. Female labor force participation and the organizational experiences of male workers. Sociol. Q. 24:367-80
- South SJ, Bonjean CM, Markham WT, Corder J. 1987. Sex differences in support for organizational advancement. Work Occup. 14(2):261-85
- Spangler E, Gordon MA, Pipkin RM. 1978. Token women: an empirical test of Kanter's hypothesis. Am. J. Sociol. 84:160-70
- Stover DL. 1994. The horizontal distribution of female managers within organizations. Work Occup. 21:385-402

- Swerdlow M. 1989. Men's accommodations to women entering a nontraditional occupation: a case of rapid transit operatives. Gend. Soc. 3:373-87
- Szafran RF. 1982. What kinds of firms hire and promote women and blacks? A review of the literature. Sociol. Q. 23(Spring): 171 - 90
- Tajfel H. 1982. Social psychology of intergroup relations. Annu. Rev. Psychol. 33: 1 - 39
- Taylor MC. 1995. White backlash to workplace affirmative action: peril or myth? Soc. Forces 73:1385-414
- Taylor SE. 1981. A categorization approach to stereotyping. In Cognitive Processes in Stereotyping and Intergroup Behavior, ed. D Hamilton, pp. 83–114. Hillsdale, NJ:
- Tidball ME. 1986. Baccalaureate origins of recent national science doctorates. J. Higher Educ. 57(6):606–20
- Tienda M, Lii D. 1987. Minority concentration and earnings inequality: blacks, Hispanics, and Asians compared. Am. J. Sociol. 93: 141 - 65
- Tolbert PS, Graham ME, Andrews AO. 1998. Gender group composition and work group relations: theories, evidence, and issues. In Handbook of Gender Organizations, ed. G Powell. In press
- Tolbert PS, Oberfield AA. 1991. Sources of organizational demography: faculty sex ratios in colleges and universities. *Sociol*. Educ. 64:305-15
- Tolbert PS, Simons T, Andrews AO, Rhee J. 1995. The effects of gender composition in academic department on faculty turnover.

- Ind. Labor Relat. Rev. 48:562-79
- Tsui AS, Egan TD, O'Reilly CA. 1992. Being different: relational demography and organizational attachment. Admin. Sci. Q. 37:549-79
- Tsui AS, O'Reilly C. 1989. Beyond simple demographic effects: the importance of relational demography in superiorsubordinate dyads. Acad. Manage. J. 32: 402 - 23
- US Bur. Census. 1998. Statistical Abstract of the United States: 1997. Washington, DC: US Dep. Commerce
- Waldinger R, Aldrich H, Ward R. 1990. Ethnic Entrepreneurs: Immigrant Business in Industrial Societies. Newbury Park, CA: Sage
- Waldinger R, Bailey T. 1991. The continuing significance of race: racial conflict and racial discrimination in construction. Polit. Soc. 19:291-323
- Wallace M, Chang CF. 1990. Barriers to women's employment: economic segmentation in American manufacturing. Res. Soc. Stratif. Mobil. 9:337-61
- Wharton AS, Baron JN. 1991. Satisfaction? The psychological impact of gender segregation on women at work. Sociol. Q. 32: 365 - 87
- Wharton AS, Bird SR. 1996. Stand by your man: homosociality, work groups, and men's perceptions of difference. In Masculinities in Organizations, ed. C Cheng, pp. 97-114. Thousand Oaks, CA: Sage
- Wharton AS, Rotolo T, Bird SR. 1999. Social context at work: a multilevel analysis of job satisfaction. Sociol. Forum. In press