

## The Job Climate for Women in Traditionally Male Blue-Collar Occupations<sup>1</sup>

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*Rapid growth has been observed in recent years in the number of women entering traditionally male blue-collar occupations, yet researchers have paid little attention to this pioneering group. The present study undertook a comparison of the job conditions of two groups of nontraditional women workers, tradeswomen (N = 71), and transit workers (N = 151); a third group, school secretaries (N = 389), was studied as a comparison group of traditionally female workers. Results from a 16-page mail questionnaire revealed that women in traditionally male occupations encountered significantly more adverse working conditions than did their traditional counterparts, and, in addition, reported significantly less satisfaction and more stress at work. Tradeswomen were the most likely to experience sexual harassment and sex discrimination, and black tradeswomen to experience race discrimination. The degree of job satisfaction expressed by the secretaries was unexpected, since most evidence suggests that clerical workers lack autonomy, and encounter boredom and routinization on the job. These findings are discussed in terms of gender segregation and the need to focus future research efforts on specific occupational groups in order to make appropriate policy recommendations as well as to provide help for women in these jobs.*

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Although most women in the paid labor force still are employed in traditional "women's work," e.g., clerical work, nursing, service industries (Fox & Hesse-Biber, 1984; U.S. Department of Labor, 1988), a considerable number of them are moving into traditionally male professions. Between 1960 and 1980, for example, the proportion of female accountants, college teachers, physicians, lawyers, and financial officers rose considerably (Lillydahl, 1986).

Growth also has been observed in the number of women working in traditionally male blue-collar jobs, such as skilled craft and kindred workers — e.g., carpenters, plumbers, electricians, machinists, and construction workers — where the rates of increase have been much higher for women than men in recent years (U.S. Department of Labor, 1983). More women are also employed as transportation operatives — e.g., fork lift operators, bus drivers, and truck drivers — where the rates have risen for women but actually declined for men (U.S. Department of Labor, 1983).

Despite these gains in *numbers*, the actual *proportions* of women in most traditionally male blue-collar occupations remain low (Lillydahl, 1986). The most recent figures from The Women's Bureau of the Department of Labor, for example, reveal that by 1988, only 8.7% of all craft, repair, and precision production workers were women, a figure not much greater than the 8.1% reported in 1983 (U.S. Department of Labor, 1989). Similarly, while there has been rapid growth in the numbers of women transportation operatives, only 9.0% of all those employed in the transportation and materials moving occupations in 1988 were women (although 48.5% of bus drivers today are women; U.S. Department of Labor, 1989).

In other words, occupational segregation by gender has changed only slightly in recent years for women who choose to work in traditionally male occupations (Lillydahl, 1986). It is well established that gender becomes a more salient issue in sex-segregated, nontraditional jobs, where women must not only demonstrate their competence on the basis of their skills but must somehow "overcome" their gender as well (Mansfield, Vicary, Cohn, Koch, & Young, 1988; Walshok, 1981). As a result, such women may be more vulnerable to experiences of isolation, sex harassment, and discrimination (Gruber & Bjorn, 1982; Gutek & Dunwoody, 1987; Mansfield et al., 1988).

### *Job Satisfaction and Job Stress*

Such adverse working conditions as these, as well as more rewarding ones, must be carefully documented by researchers if we are to make

policy recommendations to retain this group of women in the work force, increase their job satisfaction, and enhance their physical and emotional well-being. The shrinking labor pool necessitates that management address issues regarding employment conditions for women. Liability issues add incentive as well. It is well established that prolonged stress can lead to permanent emotional and physical impairment, as well as to growing problems with worker dissatisfaction and consequent absenteeism, substance abuse, and reduced productivity (Haw, 1982; McIlwee, 1982; Motowidlo, Packard, & Manning, 1986). Likewise, identification of the specific features of women's blue-collar jobs that are most and least satisfying provides important information to management about ways to enhance the work environment.

Research is inconsistent with regard to the relative importance of intrinsic and extrinsic rewards for different groups of workers. One now outdated sexist contention was that women focused on the social aspects of their jobs, while men valued autonomy and achievement (Murray & Atkinson, 1981). A recent study by the authors (Mansfield et al., 1988) showed clearly that intrinsic rewards such as feeling valued were the most important aspects of a satisfying job for all types of women workers studied. Mottaz (1985) found that both intrinsic and extrinsic social rewards were powerful determinants of job satisfaction for all workers, while extrinsic organizational rewards were important only for workers in low-status occupations. The age of the worker may be another important factor; Janson and Martin (1982) found that intrinsic rewards were more important to younger workers.

Although the importance of investigating the satisfying and stressful conditions specific to women in traditionally male occupations seems obvious, researchers have been slow to respond to this need (Baruch, Biener, & Barnett, 1985; Haw, 1982; Lillydahl, 1986). In fact, until recently, research on job satisfaction and stress usually excluded women totally or failed to examine gender differences (Baruch et al., 1985; Haw, 1982; Mansfield et al., 1988). Today, more studies of women are conducted (McBride, 1988), but these typically focus either on traditionally female occupations (e.g., nursing, teaching) or on traditionally male professions (e.g., law, medicine). There is still little research concerning women in skilled or semiskilled blue-collar jobs (Gruber & Bjorn, 1982; Lillydahl, 1986; Mansfield et al., 1988; Walshok, 1981).

Studies of clerical workers have identified several stressors in their work environments, such as increased automation of office equipment leading to boredom, social isolation, and task routinization (Fox & Hesse-Biber, 1984; Glenn & Feldberg, 1977; McNally, 1979); low pay; and few opportunities for promotion (Fox & Hesse-Biber, 1984; Mansfield, 1984).

Extrinsic rewards reported by clerical workers include regular work hours and little overtime (Verbrugge, 1979).

The few studies of women working in traditionally male jobs point to the problems of segregation (DeFleur, 1985; Hill, 1986; Roby, 1981; Shaeffer & Lynton, 1979); sexual harassment and discrimination, including hostility and sabotage, withholding of training opportunities, and supervisory indifference (Shostak, 1985), often directed especially at those women with the least power (Gruber & Bjorn, 1982); and long shifts and odd working hours that play havoc with workers' home lives. The positive aspects most consistently reported by these women are their earnings, the autonomy and control over their work, and the physicality (Walshok, 1981).

When researchers have compared levels of satisfaction and stress between women workers in traditionally female and traditionally male occupations, different results have emerged. Two studies found no differences in overall job satisfaction level between the two groups (Moore, 1985; O'Farrell & Harlan, 1982), although in the latter study, those features considered by both groups as the theoretically most important aspects of a satisfying job — namely job security, pay and work content — were actually rated as satisfactory only by the blue-collar group. McIllwee's (1982) study found higher levels of both satisfaction and stress in the non-traditional group, and Verbrugge (1984) found that female clerical workers reported the lowest level of job satisfaction of all occupational groups studied.

Previous research conducted by the authors found that blue-collar women workers reported less work satisfaction and more work stress than their clerical counterparts (Mansfield et al., 1988). A shortcoming of this study, however, was its failure to differentiate between the blue-collar occupational groups studied. The following study, therefore, attempts to recognize the important diversity in blue-collar ranks as noted by Shostak (1985).

Our hypotheses are as follows:

1. The clerical group will report lower overall job satisfaction than either of the two blue-collar groups. This prediction is based on numerous studies that point to the increasingly adverse working conditions of clericals, including boredom, automation, and isolation, and their low pay and status (Fox & Hesse-Biber, 1984; Verbrugge, 1984).
2. The tradeswomen will report lower levels of satisfaction than the transit workers. Tradeswomen encounter certain work conditions,

e.g., isolation, segregation, withholding of training opportunities, that are not as commonplace among transit workers and that predict low job satisfaction (DeFleur, 1985; Hill, 1986; Roby, 1981; Shostak, 1985).

3. Both groups of blue-collar workers will experience more sexual harassment and discrimination than the clerical workers, with the tradeswomen showing the highest levels. It is believed that as more women enter an occupational group, they help break down existing sexist barriers. Thus, it is anticipated that tradeswomen, the group with the smallest percentage of women, will encounter the most hostility.

For the purpose of this study, we define "tradeswomen" to include workers in the skilled crafts, repair, and construction trades (U.S. Department of Labor, 1989). Our "traditional" and "nontraditional" designations are not based on specific percentage cutoff points but rather on the history of each occupation as male or female dominated and on its current composition. Recent U.S. Department of Labor statistics show that women comprise 3.1% of all mechanics and repairers, and 2.1% of all construction tradesworkers, and that these figures represent increases (U.S. Department of Labor, 1989); these women clearly are nontraditional. Similarly, female transportation workers constitute just 9% of all such workers, again an increase; thus, our transit worker group also represents a nontraditional group. In contrast, clerical work is overwhelmingly women's work and has been for most of this century (Fox & Hesse-Biber, 1984).

## METHOD

The present investigation examines the unique work environments of two groups of women employed in traditionally male blue-collar jobs: tradeswomen and transit workers. In self-reports, these women described their work in detail, and rated the characteristics of their jobs in terms of their satisfaction and stressfulness to them. As a means of comparing the nontraditionally employed women's responses with those of women working in a traditionally female occupation, the study also included a sample of female clerical workers (school secretaries).

### *Procedure*

Respondents were recruited from three occupational groups: school secretaries, transit workers, and skilled tradeswomen. Clerical worker and

transit worker unions in two large metropolitan areas in an Eastern U.S. state provided their mailing lists, and the name of skilled tradeswomen were identified through trade organizations in the same regions.

A 16-page questionnaire concerning aspects of work and home life, health, and other personal characteristics was mailed to each member of these organizations. Participants were offered a ten-dollar incentive for their anonymous participation. Two follow up reminder postcards were sent to all participants at three- and five-week intervals. A total of 1211 surveys was mailed, consisting of 700 surveys to clerical workers, 391 to transit workers, and 120 to tradeswomen. The overall return rate was 50.5%; the highest returns were from the tradeswomen (60%), followed by the secretaries (56%); the transit workers' return rate of 30% was lowest, as a result of outdated union records.

### *Participants*

The final subject pool ( $N = 611$ ) for this study consisted of 389 school secretaries [the traditionally female (TF) occupation], 151 city transit workers and 71 skilled tradeswomen [the two traditionally male (TM) occupations] in two large metropolitan areas in an Eastern U.S. state.

Table I presents demographic data for the three groups. The average age of the clerical workers was 49, transit workers, 40, and tradeswomen, 34; these differences were statistically significant. More than 70% of the tradeswomen and 58% of the transit workers were unmarried, compared to only 17% of the clericals; again, these differences are statistically significant ( $\chi^2 = 149.8$ ,  $df = 8$ ,  $p = .000$ ). The clerical workers were primarily in marriages with children, whereas nearly one-half of the tradeswomen were both unmarried and without children. The tradeswomen also had significantly fewer children, on average, than the other two groups. Many more of the transit workers and tradeswomen than the secretaries were single parents.

A statistically significant difference ( $\chi^2 = 20.15$ ,  $df = 2$ ,  $p < .001$ ) was found between the education levels of the groups: whereas the transit workers and clericals were primarily high school educated, over two-thirds of the tradeswomen were college educated. Salary, however, was more related to whether the job was traditionally male or female than to education background, with the secretaries by far the lowest paid. Racial differences also were found: fully one-third of the transit workers was black, whereas the other two groups were predominantly white.

Table I. Demographic Profile of Respondents in Three Occupational Groups  
(Percentages Unless Otherwise Specified)

	Tradeswomen (N = 69)	Transit workers (N = 138)	Clericals (N = 381)
Age (mean) <sup>a,b</sup>	34	40	49
Family structure <sup>a</sup>			
Married, children	22	35	65
Married, No children	7	7	18
Not married, children	25	39	8
Not married, no children	46	19	9
Total number of children <sup>a,b</sup>	0.8	2.2	2.3
Education <sup>a</sup>			
High school	33	61	62
College	67	39	38
Income (Own) <sup>a</sup>			
< \$11,000	20	10	18
\$11,000-20,999	34	23	80
\$21,000-30,999	23	53	1
\$31,000+	22	14	1
Race <sup>a</sup>			
White	88	63	95
Black <sup>c</sup>	12	34	4
Residence <sup>a</sup>			
Urban	37	44	6
Suburban	31	38	57
Small town	13	9	25
Rural	18	9	25

<sup>a</sup>  $P \leq .001$ .

<sup>b</sup> Based on ANOVAs and Scheffe comparisons. Mean ages all significantly different. Tradeswomen have significantly fewer children than either of the other groups. All other results based on Chi-square analyses.

<sup>c</sup> There were no other racial groups represented.

Although the three samples were obtained from mailing lists and are not, therefore, random, evidence suggests that the samples are representative of women employed in these occupations. With regard to the clerical workers, our sample matches very closely a statistical profile of U.S. secretaries (National Secretarial Association, 1980), showing that most clerical workers today are married with children, predominantly white, low-paid, high school educated, and with an average age in their 40s, a profile that matches ours in every category. Nonetheless, it is

important to acknowledge that the job description "clerical worker" may include a wide variety of settings and expectations, of which school secretary is just one.

With regard to the nontraditional workers, current U.S. Department of Labor (1989) statistics on blue-collar women workers and a report from the leader of a tradeswomen's organization (Picardi, personal communication, 1987) suggest considerable congruence between our samples and national data with regard to age, race, income, and education. We feel confident, therefore, of the generalizability of our findings.

### *Measures*

The instrument used was a 16-page questionnaire assessing a variety of work, home, personality, and demographic characteristics, as well as coping behaviors, substance use, health and job performance outcomes. For the results presented here, the following measures were used:

1. The Work Environment Scale, developed for this study, was based in part on the Job Descriptive Index (Smith, Kendall, & Hulin, 1969) and on the Office Workers' Survey of Gordon and Stellman (1981). Subjects rated 52 positively and negatively worded items according to how well each item described their job *most* of the time, using 4-point Likert scale ranging from *not at all* to *completely or nearly so*, along with a *does not apply* option. These items represented three categories, including descriptions of their day-to-day job (25 items), their supervisor (13), and the people you work with at your job (14). Reliability of the overall scale was rather high, with Cronbach's alpha of .86.
2. The presence of race discrimination, sexual harassment, and sex discrimination "at your present position" were determined by three Yes/No questions as well as adjectives — e.g., *sexist*, *prejudiced* — on the supervisor and co-worker check lists described above.
3. Job satisfaction and job stress were measured by two 16-item scales (a Job Satisfaction Index and a Job Stress Index) developed for this study (see Table IV for items). Both scales have high internal consistency, with Cronbach's alphas of .87 (Job Stress) and .86 (Job Satisfaction). Respondents rated each item on a 4-point Likert scale of satisfaction (or stress) ranging from *extremely dissatisfied* (or *too much stress to handle*) to *extremely satisfied* (or *no stress*).

Table II. Reported Incidents of Race and Sex Discrimination and Sexual Harassment, by Race, for Three Occupational Groups

	Race discrimination %	Sexual harassment %	Sex discrimination %
Tradeswomen ( <i>N</i> = 69)	12.2 <sup>a</sup>	60.0 <sup>b</sup>	55.7 <sup>c</sup>
Whites ( <i>N</i> = 61)	4.6 <sup>d</sup>	57.4 <sup>e</sup>	52.7 <sup>f</sup>
Blacks ( <i>N</i> = 8)	66.7	83.3	83.3
Transit workers ( <i>N</i> = 136)	23.9	36.2	38.3
Whites ( <i>N</i> = 86)	6.9 <sup>g</sup>	29.1 <sup>h</sup>	38.0 <sup>i</sup>
Blacks ( <i>N</i> = 50)	51.1	51.4	38.9
Clericals ( <i>N</i> = 361)	3.1	6.4	8.1
Whites ( <i>N</i> = 347)	2.1 <sup>j</sup>	6.1 <sup>k</sup>	7.8 <sup>l</sup>
Blacks ( <i>N</i> = 14)	28.6	14.3	14.3

<sup>a</sup>  $\chi^2 = 49.0$ , *df* = 2, *p* = .001 (*a-c*:  $\chi^2$  comparisons between 3 occupational groups).

<sup>b</sup>  $\chi^2 = 126.2$ , *df* = 2, *p* = .000.

<sup>c</sup>  $\chi^2 = 104.6$ , *df* = 2, *p* = .000.

<sup>d</sup>  $\chi^2 = 18.8$ , *df* = 1, *p* = .000 (*d-l*:  $\chi^2$  comparisons in each occupational group).

<sup>e</sup> NS.

<sup>f</sup> NS.

<sup>g</sup>  $\chi^2 = 29.7$  *df* = 1, *p* = .000.

<sup>h</sup>  $\chi^2 = 5.4$  *df* = 1, *p* = .02.

<sup>i</sup> NS.

<sup>j</sup>  $\chi^2 = 31.3$ , *df* = 1, *p* = .000.

<sup>k</sup> NS.

<sup>l</sup> NS.

## RESULTS

Measures of the job environment included three questions about personally experienced discrimination at the workplace. Discrimination by race was reported by 25% of the transit workers, by 14% of the tradeswomen, but by only 4% of the clericals (see Table II), results that are consistent with the numbers of black workers in each group. When blacks and white rates were compared within occupational groups, all differences were statistically significant; half the black transit workers, two thirds of the black tradeswomen, and just over a quarter of the black secretaries reported race discrimination.

Sexual harassment and sex discrimination differences also were found, both between occupational groups and between racial groups within occupational categories. Significantly more harassment (60%) and sex discrimination (55.7%) were experienced by tradeswomen than either transit or clerical workers; the clerical rates were 6.4% and 8.1%, and the transit

**Table III.** Work Environment Scale Items<sup>a</sup> Used to Describe Secretaries', Tradeswomen's, and Transit Workers' Jobs<sup>b</sup>

Day-to-day job subscale	Supervisor subscale	Coworker subscale
Smoke-free (A) <sup>c</sup>	Friendly (A)	Responsible (A)
Interesting/fun (A)	Polite (A)	Supportive (A)
Clear (A)	Gives clear instruc. (A)	Friendly (A)
Safe (A)	Seeks my ideas (A)	Listen (A)
Control over work area (A)	Gives helpful feedback (A)	Care (A)
Shortage of personnel (A)	Supportive (A)	Lazy (B, C)
Monotonous/boring (B, C) <sup>d,e</sup>	Disrespectful (B)	Disrespectful (B, D)
Lonely (B, D) <sup>f</sup>	Unfair (B, C)	Sexist (B, D)
Isolated (B, D)	Critical (B, C)	Prejudiced (B, D)
Noisy (B, D)	Sexist (B, D)	Don't do share (C)
Undesirable workplace (B, D)	Prejudiced (B, C)	
Tense (B, C)		
Tiring (B,D)		

<sup>a</sup> Items were rated on the following Likert scale: 1 = item does not at all describe job/supervisor/coworker; 2 = only a little; 3 = quite a bit; 4 = completely or nearly so.

<sup>b</sup> All tests were ANOVAs and post hoc Scheffe tests between mean item scores. All differences significant at  $p < .05$ .

<sup>c</sup> (A) = Item significantly more descriptive of secretaries' jobs than *either* tradeswomen's or transit workers'.

<sup>d</sup> (B) = Item significantly more descriptive of tradeswomen's jobs than secretaries'.

<sup>e</sup> (C) = Item significantly more descriptive of transit workers' jobs than secretaries'.

<sup>f</sup> (D) = Item significantly more descriptive of tradeswomen's jobs than transit workers'.

workers' rates were 36.2% and 38.3%, respectively. Within occupational groups, black/white comparisons revealed that black transit workers reported significantly more sexual harassment than did their white counterparts (see Table II). Overall, tradeswomen experienced significantly more different types of discrimination, up to three kinds ( $t = 2.05, p = .04$ ) than did transit workers.

A profile of job characteristics for each of the three occupational classifications was obtained by analyzing the responses from the three groups of women workers to the Work Environment Scale. Table III displays these results. In describing their day-to-day jobs, tradeswomen reported significantly more isolation, loneliness, noise, and general undesirability than either the transit workers or secretaries (although the levels were not always high), and more monotony, tension, and fatigue than the secretaries (but not the transits). Further, tradeswomen characterized their supervisors in the most negative terms (e.g., more sexist than either of the other groups, and more disrespectful, unfair, critical, and prejudiced than the secretaries). Their co-workers were reported in very negative terms as well, e.g., lazy, disrespectful, sexist, prejudiced.

In contrast, secretaries described their day-to-day jobs in significantly more positive ways than the two TM groups: cleaner, safer, more control over their work area, more interesting, more smoke free. Their supervisors were significantly more friendly, polite, and supportive, and were more likely to give clear instructions, give helpful feedback, and seek their ideas; their co-workers were significantly more responsible, supportive, friendly, caring, and willing to listen than co-workers in the TM groups.

Despite these significant differences, not all the ratings by the TM workers were negative. For example, the following supervisor and co-worker characteristics were described by both TM groups as occurring "quite a bit" of the time: respectful, fair, and (not) restricting freedom, for the supervisors; and friendly, respectful, and (not) lazy, for the co-workers. Nonetheless, other descriptions of tradeswomen's jobs included smoky, unclean, "only a little" safe, having "only a little" control over their work area, and "quite a bit" tiring and unpredictable. Descriptions of their supervisors included seeking their ideas "only a little" and their co-workers caring "only a little." A similar but less extreme picture emerged for the transit workers, as was mentioned earlier.

These results can also be examined in relation to perceived levels of job satisfaction for the respondents. Satisfaction with 16 job characteristics was measured by the Job Satisfaction Index; satisfaction ratings are presented in Table IV. As shown, the clerical workers (TF group) scored highest on the satisfaction scale. Their overall score, 3.2 out of a possible 4, was significantly higher than that of the tradeswomen (3.0). TF workers were somewhat or extremely satisfied with all but 2 of the 16 job characteristics, results consistent with their positive job descriptions. Other evidence of their higher levels of satisfaction compared to the TM groups is shown in Table IV through a comparison of groups ratings on each scale item. The TF group gave significantly higher satisfaction ratings than one or both of the TM groups to every item, with only two exceptions. These were that the TM groups were more satisfied with their salaries than the TF group, and the transit workers (but not tradeswomen) were more satisfied with their opportunities for promotion.

The translation between workers' descriptions of their job environments and their reported job satisfaction broke down most in terms of supervisors and co-workers. Table IV, for instance, reveals rather high levels of satisfaction (3.0–3.2 out of a maximum 4) by the TM groups in relation to their supervisors and co-workers, despite the widespread work-related sex and race discrimination and sexual harassment they reported. Likewise, very little stress related to their colleagues was reported by either TM group.

Table IV. Most to Least Satisfying Aspects of Job for Clericals, Tradeswomen, and Transit Workers

	Tradeswomen		Transit workers		
Clericals	$\bar{X}^a$	$\bar{X}$	$\bar{X}$	$\bar{X}$	
Transportation	(3.7) <sup>bg</sup>	Accomplishments	(3.4)	Transportation	(3.3)
Independence	(3.5) <sup>cf</sup>	Independence	(3.2)	Independence	(3.3)
Work schedule	(3.5) <sup>bg</sup>	Transportation	(3.2)	Accomplishments	(3.2)
Safety	(3.5) <sup>bg</sup>	Actual work	(3.2)	Actual work	(3.2)
Accomplishments	(3.5) <sup>df</sup>	Pay	(3.1)	Benefits	(3.2)
Benefits	(3.4) <sup>bg</sup>	Co-workers	(3.0)	Treatment	(3.1)
Actual work	(3.3) <sup>ns</sup>	Treatment	(3.0)	Co-workers	(3.1)
Treatment	(3.3) <sup>bf</sup>	Supervisor	(3.0)	Pay	(3.1)
Security	(3.3) <sup>bg</sup>	Benefits	(3.0)	Supervisor	(3.0)
Supervisor	(3.2) <sup>e</sup>	Child care	(2.9)	Security	(3.0)
Co-workers	(3.2) <sup>ns</sup>	Others at work	(2.9)	Physical setting	(3.0)
Others at work	(3.0) <sup>e</sup>	Work schedule	(2.9)	Others at work	(2.9)
Physical setting	(3.0) <sup>ce</sup>	Security	(2.7)	Work schedule	(2.8)
Child care	(2.8) <sup>ns</sup>	Safety	(2.7)	Safety	(2.8)
Pay	(2.3) <sup>bg</sup>	Physical setting	(2.7)	Treatment	(2.7)
Opportunities for promotion	(2.2) <sup>4e</sup>	Opportunities for promotion	(2.3)	Opportunities for promotion	(2.6)
Overall mean	3.2 <sup>cg</sup>	Overall mean	3.0	Overall mean	3.1

<sup>a</sup> Mean score on 4. pt. Likert Scale: (4 = extremely satisfied, 3 = somewhat satisfied, 2 = somewhat dissatisfied, 1 = extremely dissatisfied).

<sup>b</sup> Clericals more satisfied than both blue-collar groups.

<sup>c</sup> Clericals more satisfied than tradeswomen.

<sup>d</sup> Clericals more satisfied than transit workers.

<sup>e</sup>  $p < .05$ .

<sup>f</sup>  $p < .01$ .

<sup>g</sup>  $p < .001$ .

Finally, all three groups showed a number of similarities in their satisfaction ratings: ease of transportation to work, feelings of independence, and a sense of accomplishment were rated as very satisfactory, while opportunities for promotion were not.

## DISCUSSION

The findings of this study begin to answer a fundamental question posed by contemporary researchers (Lillydahl, 1986; Shostak, 1985): What kind of working environment can women expect to encounter if they choose employment in one of the traditionally male blue-collar occupations, and how do such environments differ from one another? The present study of women employed in two very different traditionally male (TM) blue-collar occupations (tradeswomen and transit workers) and one traditionally female (TF) occupation (school secretaries) provides an opportunity to define, compare, and contrast the working environments of women in these diverse settings.

A notable and surprising finding was the consistently and significantly higher levels of negativity attributed by both groups of TM workers to several key aspects of their work compared to their secretarial counterparts; thus, Hypothesis One was not supported. More negative attributions were made to their jobs (more monotonous and tense), their supervisors (more unfair, critical, and prejudiced), and their co-workers (lazier). In addition, the tradeswomen characterized their jobs as more lonely, isolated, noisy, tiring, and undesirable, their supervisors as more sexist, and their co-workers as more disrespectful and sexist as compared to *both* the transit workers and the secretaries. In this regard, Hypothesis Two, predicting lower satisfaction for the tradeswomen than the transit workers, was supported. Further, significantly more satisfaction and less stress was reported by the secretaries in relation to nearly every aspect of their work explored in the study.

This study has revealed high levels of sexual harassment, sex discrimination, and race discrimination directed at the nontraditional women, especially the tradeswomen. These results provided support for Hypothesis Three. More than half of the tradeswomen, and over a third of the transit workers, reported incidents of sex discrimination or harassment; incidents for blacks exceeded those for whites in both TM groups. These results are not surprising, since several other researchers (DeFleur, 1985; Gruber & Bjorn, 1982; Hill, 1985; Lillydahl, 1986; McIlwee, 1982; Moore, 1985; Roby, 1981; Shaeffer & Lynton, 1979; Walshok, 1981) have identified these forms of discrimination directed at women

blue-collar workers by their supervisors and co-workers. In fact, the levels of harassment reported by the transit workers actually are lower than those reported (42%) by over 10,000 women workers in a nationwide random survey (Hamilton, Alagna, King, & Lloyd, 1987) and no higher than those reported (36%) by other groups of women blue-collar workers (Gruber & Bjorn, 1982). What is surprising and disturbing are the very high levels of harassment and discrimination experienced by the tradeswomen, for whom these barriers present a special problem because their skills usually are acquired during apprenticeships or on the job, and are dependent on the help and support of their co-workers (Shostak, 1985; Walshok, 1981). It is possible that these high discrimination levels reflect in part the younger age, on average, of the tradeswomen compared to the other two groups; discrimination and harassment are likely to be directed at those individuals with the least power (Gruber & Bjorn, 1982), in this case, the younger workers.

Equally disturbing are the findings for black workers; in every job category, blacks encountered at least one form of discrimination more frequently than did their white counterparts. Discrimination seems to be a nearly universal condition for black tradeswomen.

That the tradeswomen experienced significantly more harassment and sex discrimination than the transit workers, another "nontraditional" occupation, suggests that sexist barriers in an occupational setting may be inversely related to the level of female participation in that occupation; there are proportionally more female transit workers than tradeswomen (U.S. Department of Labor, 1989). As more women enter a traditionally male realm, they do their part to break down the gender barrier, thereby creating a less hostile environment over time for other women workers. That the two TM groups each reported different levels of discrimination and harassment also challenges the conjecture that nontraditional women, in choosing a nonstandard career path, are simply self-selected to notice and report acts of hostility, but in fact experience no excess in such discrimination. Future studies that collect more detailed data on the nature and frequency of acts of discrimination can address such issues more definitively.

These results raise serious concerns about the quality of work life for future tradeswomen, and indeed, about future opportunities as well. The most recent report by the Women's Bureau on women in the trades (U.S. Department of Labor, 1989) states that "a variety of barriers — legal, institutional and informal — still limit women's access to occupations in which men have customarily predominated . . . [such as] requirements for nonessential training . . . and factors such as work climate, harassment, and sponsorship" (p. 20). Perhaps such conditions can account for the only

modest increase in the numbers of tradeswomen between 1983 and 1988 (U.S. Department of Labor, 1989).

Overall, the school secretaries in this study were significantly more satisfied than either TM group with their jobs, with only two (important) exceptions, pay and promotions. Both TM groups were more satisfied with their salaries, a non-surprising result, since women in clerical jobs still earn only 60% of men's salary for the same job (U.S. Department of Labor, 1989). Transit workers were more satisfied with advancement possibilities. Perhaps the fact that the transit workers in this study all were union members, working for a quasi-governmental entity, enhanced their opportunities somewhat.

Such positive results for the TF group were unexpected, and contradict the findings of McIlwee (1982), whose nontraditional subjects reported higher satisfaction (also stress), and Verbrugge (1984), whose female clerical worker group reported the lowest levels of job satisfaction. What, then, might account for their overall sense of satisfaction, accomplishment, and independence? One possible explanation lies with this particular sample of clerical workers — school secretaries. It will be recalled that their average age was 49, making them significantly older than the other two groups, and suggesting perhaps that this group represents women who have sought and found permanent work that pleases them. Traditionally, school secretaries encounter an unusual amount of both autonomy and challenge, and in addition, tend to receive considerable respect and affection from students. Work hours and vacations implicit in school schedules are other benefits. It is easy to imagine such working conditions giving rise to feelings of satisfaction and accomplishment more than typical office work might. In fact, earlier work by the authors (Mansfield *et al.*, 1988) demonstrated the high value placed on such intrinsic rewards by working women. Indeed, the positive feelings of accomplishment and independence also reported by the TM workers probably explains their rather high levels of satisfaction despite specific reported adversities in their workplace.

All workers were highly dissatisfied with the opportunities they perceived for advancement; this was the lowest ranked item on the satisfaction scale for all groups. Although others (Fox & Hesse-Biber, 1984) have reported this problem among clerical workers, who often find themselves locked into their position with no room for advancement, the literature offers little information concerning this problem among women in TM jobs. It is quite possible, however, that the extent of discrimination experienced by these workers is related to their pessimism about advancement.

## RECOMMENDATIONS

Findings of this study call attention to the importance of studying women employed in a variety of traditionally male blue-collar occupations in order to obtain a more complete picture of the work environments women can expect to encounter if they choose such work. Clearly, it would be misleading to generalize findings from one traditionally male occupation to another. These are crucial times for engaging in such research, in order to document the changes in such working conditions as more women enter these fields.

The results of this study give rise to a number of policy recommendations. First, career counseling for young women must include information about the most satisfying and stressful elements present in the occupational choices they are considering. Women considering nontraditional work need to be informed about the special barriers they can expect to encounter. Second, on-the-job workshops are urgently needed to help supervisors and workers overcome deeply rooted gender and racial stereotypes so that discrimination and harassment can be eliminated. Finally, improved working conditions must be established and enforced by management, with the help of unions and other work organizations. With such policies in place, women can look forward to safer, better-paid, and more satisfying work in whatever occupation they choose.

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