Ridgeway argues that we can increase our understanding of the creation and perpetuation of gender inequality in the workplace by applying micro-level theories of social psychological processes that operate in such settings. We go beyond her arguments to propose that the degree of mixed-sex interaction in the workplace be viewed as a factor that produces differences in gender workplace inequalities. Specifically, we hypothesize that when the collective task-directed behavior in a work group involves face-to-face mixed-sex interaction, gender workplace inequalities will be greater than in settings where such behavior involves women and men working largely independently of each other. This hypothesis is supported strongly by natural-setting data that compare gender workplace inequalities in agricultural research teams, where face-to-face interaction is present, with the same inequalities in agricultural extension settings, where there is little face-to-face interaction.

Ridgeway (1997) argues that our understanding of gender inequalities in the workplace will be enhanced significantly if we rely more strongly on theories from a social psychology tradition that spell out the micro, interaction-based processes that underlie and perpetuate the observed inequalities. She acknowledges various macro arguments that attempt to explain gender inequalities, but boldly claims that “interactional mechanisms are sufficient in themselves to create gender inequality in pay and power among participants and to generate sex-typing of work” (1997:230). The main point of her argument is that “occupational arrangements and wage outcomes are interactionally mediated” (1997:225) in that “interacting with a concrete other evokes primary cultural roles for making sense of self and of other, pushing actors to sex categorize one another in … hiring, job searches, placement, performance evaluation, task assignment, promotion, and dealing with customers, clients, bosses, coworkers, and subordinates” (1997:231).

After identifying the micro theories that she believes are useful for explaining how this mediation takes place, Ridgeway challenges researchers to empirically test her claim in “organizationally chaotic” work settings, where these interactional processes are confounded less fully with institutionalized structural features that promote and perpetuate gender inequalities (1997:230–31).

Beginning with Ridgeway’s argument for gender inequalities, and following a nonexperimental strategy (see Cohen 1982; Cohen and Roper 1972), we compare two naturally formed work settings: one in which the processes described by Ridgeway are likely to operate so as to produce gender inequalities, and one in which we believe these processes are less likely to operate. Our approach is unique in that we go beyond Ridgeway’s argument (described below) to hypothesize that gender inequalities will be
greater in mixed-sex settings (agricultural research teams), where women and men interact routinely in working toward some common goal, than in mixed-sex settings (agricultural extension work), where women and men interact minimally in working toward such a goal. In short, we view the degree of workplace gender inequality as varying across settings; and we regard the degree of mixed-sex interaction as an independent variable that will influence, indirectly through interactional processes, the degree of gender inequality.

INTERACTIONAL PROCESSES AND GENDER INEQUALITIES

Because the theory is critical to Ridgeway's argument about the role of interactional processes in creating and perpetuating gender inequalities, we begin with a summary of the core ideas and arguments associated with status characteristics theory (SCT), one branch of expectation states theory.1 We then draw on Ridgeway (1997), but go beyond her claims, to develop our argument that the interactional processes which produce gender inequalities will be less pronounced in settings where women and men interact less often in working toward a common goal.

Status Characteristics Theory: A Summary of the Core Ideas

For this summary we rely almost entirely on Wagner and Berger (1993) while acknowledging the more often cited sources of Berger, Cohen, and Zelditch (1966, 1972). SCT is devoted to understanding how and under what conditions status organizes interaction; in simpler terms, it is a theory of status-organizing processes.

We simultaneously present the core ideas of SCT and apply them to explaining how interactional processes account for gender inequalities in the workplace. This is not difficult because the theory is designed to address precisely such issues.

The scope of SCT is limited to situations where two or more individuals (who differ on one or more diffuse or specific status characteristics) are working collectively (interacting) on a task that is perceived to have positive or negative outcomes (e.g., success or failure) and on which actors seek a positive outcome. The theory explains how initial differentiating status characteristics in this interactional context become the basis for differential expectations regarding competence in the current situation, and how these expectations in turn result in behavior differentiated by an observable power and prestige order. Diffuse status characteristics, such as gender, possess different states (male or female) that are valued differentially and hierarchically (e.g., being male rather than being female). Four core principles explain the process whereby these diffuse status characteristics are linked causally to task behavior differentiated by power and prestige.

The first principle answers the question about what status information is used (activated) when the individuals are interacting. The answer is "any diffuse status information that discriminates between the actors in the situation or that is believed to be task-relevant will be activated" (Wagner and Berger 1993:28). For our purposes, gender is the diffuse characteristic that usually differentiates actors unambiguously in a mixed-gender group setting.

The second principle indicates the conditions under which this activated (salient) status information will be considered relevant to the task at hand. This is the "burden of proof" principle: Activated status information is assumed to be relevant to the task unless it is demonstrated otherwise. Thus, in a mixed-gender setting, actors will behave as if gender is relevant unless it is demonstrated to be irrelevant.

The third principle states "[G]iven relevance, actors assign expectations for performance at the task to self and other based on the relevant status information" (Wagner and Berger 1993:28). In other words, an individual with a status advantage is expected to do better at the task than an individual with a
status disadvantage. In light of Ridgeway’s claims, males in the group are expected to perform better at the task than females.²

The fourth principle, called the basic expectation assumption, explains how these expectations lead to behavior differences between the actors. This principle claims that the differences in expectations for oneself and for another directly affect power and prestige behaviors of self and of the other. In regard to Ridgeway’s claims, males will expect higher task performance for themselves; consequently they will exercise influence over female group members, will initiate interaction more than women, and actually will outperform women. Similarly, women will expect less from themselves and more from the males; the resulting deference behaviors will facilitate creation of the inequalities between women and men.

These four principles then predict “that individuals will be ordered in their power and prestige positions by their initial status differences” (Wagner and Berger 1993:29). Critical to the argument, and to its application to gender inequalities as argued by Ridgeway, is the claim that this status characteristic (gender) need not be task-relevant for this process to operate. Thus the process will operate even when women and men have the same skills necessary for engaging successfully in the task.

In the picture created by these principles, then, the mere existence of status differences (gender) is sufficient to create and perpetuate gender inequalities. As we state in our review below, Ridgeway suggests a strategy for assessing this claim. We view her strategy and argument as reasonable, but we wish to do more than merely show that status differences activate interactional processes. We wish to explain why gender workplace inequality varies across work settings. Thus we offer an alternative strategy that emphasizes the degree of mixed-sex interaction as a factor affecting the degree to which these interactional processes are activated.

Identifying an Appropriate Research Site

Ridgeway recognizes that these interactional processes are confounded with effects of gender-biased organizational structures, institutions, and practices in all organizations. Therefore she suggests that the effect of interactional processes could be assessed in “organizationally chaotic” work settings such as start-up companies, newly formed professions, or settings where considerable change is occurring (1997:230–31). In such settings, these processes will generate gender hierarchies where none existed previously.

We do not disagree with this suggested strategy. In fact, by studying work settings in a developing society, where the modern-sector work arrangements are relatively “new,” we have attempted to follow this suggestion. Our major claim, however, is that the degree of collective task-directed interaction will help us explain differences in gender inequalities across work settings, and that such an explanation requires a design that allows this interaction to vary.

As described more completely below, we rely on a design that matches more closely a traditional two-group comparison study, in which the level of mixed-sex task-directed interaction is high in one group but limited in the other. We then compare the two groups on the degree of gender inequality that emerges.

Within the Scope: Degree of Interaction As a Variable

As summarized above, SCT requires (as a scope condition of the theory) collective task-directed activity among the participants (Wagner and Berger 1993:27). The theory makes no claims about status processes and outcomes when this condition is not met. Actual face-to-face interaction is not required to meet this condition, as long as participants are collectively and task-oriented. Lovaglia et al. (1998) even go so far as to argue, with supporting data, that these status processes operate, in the absence of a task-directed group, when future interaction is anticipated. Thus the scope condition is not highly restrictive and includes a variety of social arrangements including most workplaces. If we are to take Ridgeway’s argu-

²This is not a “right or wrong” issue; it refers to the empirically demonstrated fact that this typically occurs and is assumed to be mainly culturally determined.
ment seriously, we must be able to apply the theory to a variety of real-world workplace settings because Ridgeway predicts that these processes operate to produce and perpetuate gender inequalities across an extremely wide range of workplace structures and arrangements.

Gender inequality (or any form of inequality) is not simply “present” or “absent.” Except perhaps among Marxists and other utopian purists, stratification scholars uniformly have conceptualized and operationalized inequality as a matter of degree. One of the major scholarly tasks in the study of stratification has been to explain this variation in degree of inequality (Grusky 2001). We recognize that SCT is not intended to predict this variation in degree; certainly the degree of face-to-face interaction is not used as an independent variable in the theory in any way. We are not challenging SCT, because we believe that the processes described are operating as argued. We claim, however, that the predictions from SCT are more likely to be supported when face-to-face interaction is present. Ridgeway (1997:231) seems to agree when she states the importance, in the process, of “interacting with a concrete other.” Thus we propose that the degree of mixed-sex interaction is critical in the degree to which predictions about gender inequalities will be supported.

Concretely, we argue that the processes described by Ridgeway (and by SCT) as resulting in gender workplace inequalities will operate more strongly in a setting where women and men interact face-to-face as part of their task-directed behavior than in a setting where they have a common goal but do not interact face-to-face (or where this type of interaction is minimal). The scope condition for SCT is met in both instances; one, however, involves considerable mixed-sex task-directed face-to-face interaction, while the other does not.

The basic mechanisms involved in status differences eventually leading to gender inequalities are the same in all settings that meet the scope condition, regardless of whether face-to-face interaction is present. We argue, however, that in the presence of face-to-face mixed-sex interaction, the processes will be activated more strongly, thus producing greater inequality.

Reviewing again the chain of four logically connected SCT assumptions for the face-to-face interaction situation, we say that gender as a status characteristic becomes more salient (more noticeable to those in the setting) when there is face-to-face mixed-sex interaction; this salient gender status is more likely to be viewed as relevant to the task when women and men regularly interact face-to-face; performance expectations for women and for men are more likely to be formed and solidified when the sexes regularly interact face-to-face; and these more strongly held performance expectations will be translated into greater differences in rewarding (i.e., greater prestige and power differences) of women and of men when face-to-face interaction is present. As the result of a self-fulfilling prophecy, then, the high-status-rank members (males) in the mixed-sex interaction settings (1) are given more opportunities to perform, (2) perform more often, (3) receive higher evaluations for their performance, and (4) exert more influence over group decisions than do low-status members (females).

Thus the hypothesis to be tested is as follows: Gender workplace inequality will be greater in work settings where women and men routinely interact face-to-face in collective task-directed activities than in work settings where women and men interact little in collective task-directed activities.

DATA AND METHODS

Sample

The data analyzed for this study were collected in Kenya between November 1991 and July 1992 (Mulinge and Mueller 1998). Surveys (self-administered questionnaires) were administered to a national probability sample of 1,850 technically trained agricultural personnel. The overall response rate for the study was 78.2 percent. In the space allowed, it is impossible to provide a historical and cultural account of gender issues and the structure of the labor force in Kenya. It is sufficient to say that although Kenya includes an emerging modern sector where gender equality is publicly supported, patriarchal
cultural traditions and a sexual division of labor are still pervasive (Nzomo 1993, 1995; Von Bülow 1991). Such conditions, of course, still exist in most societies, including the United States, but they are especially marked in developing nations such as Kenya.

All respondents in the sample are black Kenyan natives with formal training in agriculture or in a related field such as plant breeding, horticulture, agronomy, plant pathology, entomology, and soil conservation. Those in the sample are engaged either in educating farmers about more effective farming techniques, commonly known as extension services (public and private sectors), or in agricultural research (the parastatal sector).3 Throughout the rest of the paper we refer to these employees (in all sectors) as agricultural specialists. They are critical to the agricultural productivity in this developing nation, and perhaps are closest in function and importance to engineers in more highly developed nations.

These agricultural specialists work in one of two workplace settings—settings that differentiate the employees, in part, by the degree of gender-mixed interaction. The extension personnel in the public sector are women and men who work out of district offices in the District Agricultural Extension Services branch of the national Division of Agricultural Education. Their duties are spelled out formally in job descriptions; these include the general goals of informing farmers about innovations, demonstrating how to adopt and properly utilize these innovations, and making follow-up visits to monitor the adoption rate and success in the use of the technology. Actual job tasks include demonstrating to farmers how to plant specific crops and how to mix sprays and spray the crops; teaching farmers about types of fertilizers that are suitable for various crops, including how to apply them; and educating farmers about methods of grain storage. These activities may be conducted separately with individual farmers or in a group setting that combines all of the extension worker’s contact farmers in a particular zone.

Interaction among extension personnel is limited: it is confined to monthly district training sessions and biweekly divisional training sessions. During such sessions, the employees are taught the technologies they will convey to their contact farmers. Not only are the tasks and procedures identified for all extension personnel at the meetings, but a collective orientation is reinforced in that all extension personnel receive the same information and are presented with the same goals. The meetings are usually formal and programmed, allowing for only limited informal interaction. Outside these meetings, each extension specialist works mostly alone; he or she is responsible to the farmers in a particular geographical area that does not overlap areas of other extension workers.

In short, extension specialists work for the same organization, receive similar training, and have the same general goals. They are oriented toward the task of reaching these goals; all must work collectively toward that task if the goals of the extension organization are to be achieved. Yet, there is very little workplace interaction (either same-gender or mixed-gender) among these extension personnel.

The second workplace setting involves agricultural researchers in the parastatal (semipublic) sector. Among the organizations in this sector, the Kenya Agricultural Research Institute (KARI) is the largest; it was established in 1979 to conduct research in agriculture as well as in numerous related areas. The 24 centers are characterized by

3 To obtain a broad sample of agricultural specialists, we found it necessary to sample across three modern employment sectors: the public, the parastatal (semipublic), and the private. From the public sector we selected a sample of 1,102 respondents from six administrative districts chosen randomly from the 41 districts in Kenya. Parastatal-sector organizations are semi-autonomous government monopolies established to provide government-controlled services. Virtually all agricultural technicians employed in the parastatal sector work for the Kenya Agricultural Research Institute (KARI). From this organization, we drew a sample of 503 respondents from eight centers selected randomly from the 24 research centers that make up the KARI. The private sector includes firms owned and funded by international and/or local commercial companies and/or by groups of investors. Of the 245 employees in the private-sector sample, only five were women. As a result we could not make meaningful gender comparisons; thus our analysis of gender differences is restricted to the public and parastatal sectors, where substantially more women are employed.
research teams of women and men headed by a lead scientist/researcher. These teams, working in the research setting, conduct laboratory and field studies to test and perfect various types of farming technologies. For instance, those dealing with seed production work to create breeds better suited to different ecological zones. Other teams are responsible for testing soils to determine the types of crops that are suited to various zones; still others are involved in researching pesticides or grain storage techniques.

Researchers are assigned a specific task, on which they work collectively every day as a team or in small groups. Sometimes different teams may be required to interact because their activities are linked. For example, one team may be working to develop seeds for a particular ecological zone, and must coordinate its research with the teams conducting soil analyses and working on pesticide control. The important point is that the women and the men in these teams interact daily, on the job, in activities directed toward an agricultural research problem.

To reiterate, we hypothesize that gender workplace inequalities will be greater in the parastatal-sector research teams, where employees interact routinely, than in the public sector, where the extension personnel also have a collective orientation and are task-directed but seldom interact in performing their work. The public-sector extension setting should produce gender inequalities that favor men because the scope conditions of SCT are met in that setting. Yet, because there is less mixed-sex interaction among employees, we predict that these inequalities will be fewer than in the research-team setting where considerable mixed-sex interaction is present.4

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4 It is essential to our argument, of course, that these two settings differ in the degree of mixed-sex interaction. The second author, a native Kenyan, spent more than a year in securing permission for the study, pretesting the questionnaire, and administering the survey. He traveled to the various sites to gain permission and to administer the survey. This activity gave him many opportunities to observe the settings and to validate the differences in interaction patterns that we have described. The extension workers worked largely independently of each other, while

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Rival Explanations: The Need for Controls

In comparing naturally formed enduring groups (as opposed to randomly generated groups), rival explanations for gender inequalities must be identified and controlled. One such explanation for the differences identified in our hypothesis comes from the more general expectation states theory, where performance expectations are created and changed by status characteristics (gender) and by several other factors. The other factors receiving the most attention are actual task-directed behavior (in which some group members actually perform better than others), nonverbal behaviors (e.g., some are more positive toward their work than others), evaluations from an outside source (e.g., some receive outside job offers), and rewards (e.g., some are promoted) (Ridgeway and Walker 1995). If related to gender, any of these factors could operate in addition to or instead of the diffuse status characteristic of gender to differentiate the employees, and thus could serve as the basis for performance expectations that activate the same basic process as described above.

In addition, and related to the previous point, the study of naturally formed work groups implies that selection processes (operating from both the supply and the demand side) could be operating so as to produce the differences we hypothesize. For example, if equally skilled men and women end up in the extension jobs, but women with less skill than men are employed on the research teams, then the differences we have hypothesized would be found, but not because of gender status and the interactional processes we believe are operating.

Another competing explanation for the inequality differences that we hypothesize comes from the substantial literature on the way employers control workers (e.g., Clawson 1980; Edwards 1979; Halaby 1986; Halaby and Weakliem 1989; Lincoln and Kalleberg 1990; Vallas 1993; Williamson the members of the research teams worked collectively every day in laboratory settings. Women and men with similar types of training worked together. No sex segregation in the research team setting was observed during these site visits.
1975). With supply and demand held constant, firms adopt "bureaucracy" (rules, regulations, and promotion ladders) to control employees. When these same bureaucratic rules and regulations are applied to both male and female employees, the direct consequence is less gender inequality. Other factors are at work here, however, because a key feature of many of these modern structural models (see e.g., Lincoln and Kalleberg 1990) is that the organizational structures also control employees indirectly. Employees perceive the rules and regulations as impersonal and in principle as applied equally; thus workers believe they are protected from arbitrary and discriminatory actions. Therefore, these rules and regulations legitimate the organization's authority structure in the eyes of the employees (Halaby 1986; Lincoln and Kalleberg 1990).

The problem posed for us by these organizational structures in testing our hypothesis is the possibility that the two natural work settings we study differ in these legitimacy- and equality-producing features. If the settings differ systematically in organization structure and employment relationships, it may be that these features rather than the micro-level interaction processes are producing any gender inequality differences we observe. We address this possibility, as well as the other competing explanations, in the analysis.

Measuring Gender Inequality in the Workplace

The behavioral consequences resulting (in research on SCT) from the status hierarchies that emerge suggest the gender inequalities that we should expect to find. Berger, Wagner, and Zelditch (1985) identify four behavioral outcomes: those with the higher status (males) are given (1) more chances to participate in the group (action opportunities), (2) more attempts to solve the group's problems (performance outputs), (3) more positive evaluations for performance outputs (reward actions), and (4) more opportunities to alter group members' opinions (influence).

Although the data we use were not collected with SCT in mind, there are 14 workplace conditions (material and nonmaterial "rewards" as well as workplace stressors) on which gender inequality could be based. A number of these workplace conditions can be mapped onto the four behavioral response categories identified above for SCT. The workplace conditions we consider are pay, promotional opportunities, job security, autonomy, goal socialization, task significance, supervisory support, opportunity for grievance resolution, and resource adequacy. (The appendix provides definitions as well as measures for these variables.)

Action opportunities are captured by jobs with greater task significance, jobs offering access to grievance procedures, and goal socialization. A job that is linked more closely to the organization's goals gives the employee the opportunity to demonstrate goal-related skills and abilities. Similarly, but less important, an outlet for filing grievances increases the opportunity to act in the group setting. Finally, more information about the organization's goals gives employees an advantage over other employees because they know better what is expected and can adjust their behavior accordingly. As a consequence, their behavior will be more consistent with workplace expectations.

We have no measures that represent performance outputs in the work setting. As described below, we use school performance as a control to help equalize the two groups we are comparing.

Reward actions are captured by pay, promotional opportunities, resource (in)adequacy, job security, supervisory support, and work group cohesion (support). High pay, promotional opportunities, sufficient resources, and job security are commonly recognized as positive workplace conditions, and are identified in dual-labor-market arguments as characterizing "good" (primary-market) jobs (Hodson

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5 We wish to thank a reviewer for suggesting that we map our list of workplace conditions onto the behavioral response categories from SCT. This step helps to connect arguments from the sociology of work to those from Ridgeway and SCT. One must remember that these data were not collected with SCT theory in mind; thus our mapping involves some slippage.
and Kaufman 1982). Supervisory support and work group cohesion (a form of co-worker support) are acknowledged as positively related correlates of job satisfaction (Spector 1997). As such, they can be viewed as workplace conditions capturing whether the employee is informally brought into the work group, or left out. Although we listed degree of task significance of a job as representing action opportunities, it also could be viewed as a reward action, in that persons perceived as high performers will be given more task-significant jobs. In either case, we predict that males more often will end up with task-significant jobs.

Finally, influence opportunities are more likely if the employee has greater autonomy to make decisions. A worker without autonomy will follow the rules and regulations more rigidly, and will have little opportunity to influence others with innovations or suggestions.

For all of these behavioral outcomes, then, we predict that gender differences will be greater (with men higher) in the setting characterized by mixed-gender, face-to-face, task-directed interaction (research teams). Such situations activate more strongly the interaction processes that originate from the basic status difference of being male or female.

Other work conditions that also affect employees' job satisfaction are often identified as work stressors (rather than workplace rewards). Because they affect job satisfaction, stressors can be viewed as work characteristics that could favor women or men differentially, and thus could be used to define the degree of gender workplace inequality. The stressors in our study are routinization, workload, role ambiguity, and role conflict. Resource inadequacy also is usually regarded as a job stressor; above, however, to be consistent with SCT, we viewed it as a reward action. These features represent work conditions that make work more stressful. In the literature on the sociology of work, employees engaged in work marked by variety, low workloads, role clarity, and no role conflict are consistently viewed as having better jobs (see Lincoln and Kalleberg 1990; Meyer and Allen 1997; Spector 1997).

In sum, we expect gender inequalities (captured by these 14 work conditions) that favor men to be greater in the research work teams (parastatal sector) than in the public sector, where the extension specialists are employed. In the collaborative work teams, characterized by mixed-sex face-to-face interaction, the interactional processes triggered by the status of gender should be especially important in creating these gender workplace inequalities.

Measures

We measured the 14 workplace conditions in the study with employees' responses to questionnaire items. This is standard practice in organization research (Cook et al. 1981; Price 1997). (Information on the measures and scales is presented in Table 1 and in the appendix.) Most of the measures are standardized scales that have been used in numerous studies and have been judged to have acceptable validity and reliability. (Control variables, discussed below, are also included in the appendix.)

The Logic of the Analysis

Our hypothesis predicts greater gender differences on these 14 workplace rewards for research team members. To test this prediction we compare, within each sector, the male and female means (unadjusted) on these 14 variables. In addition, we compare adjusted mean gender differences to control for the possibility that the rival explanations are responsible for the unadjusted mean differences. The appropriate control variables (covariates) for obtaining adjusted means are suggested by the competing explanations identified above.

Gender differences that favor men in actual task-directed behavior could explain men's advantages on all of the above variables. That is, if males exhibited more task-relevant behaviors, such behavior would cause employers to rationally grant them more favorable workplace rewards and experiences; in addition, performance expectations favoring males would be created on
INTERACTIONAL PROCESSES

Table 1. Measurement Information for Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Items</th>
<th>Range</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work Conditions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action opportunities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task significancea</td>
<td>3</td>
<td>1–15</td>
<td>.72</td>
</tr>
<tr>
<td>Grievance resolution</td>
<td></td>
<td>1–15</td>
<td>.65</td>
</tr>
<tr>
<td>Goal socialization</td>
<td>3</td>
<td>1–15</td>
<td>.88</td>
</tr>
<tr>
<td><strong>Reward Actions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay</td>
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<td>500–30,000</td>
<td>NA</td>
</tr>
<tr>
<td>Promotional opportunities</td>
<td>4</td>
<td>1–20</td>
<td>.84</td>
</tr>
<tr>
<td>Resource inadequacy</td>
<td>3</td>
<td>1–15</td>
<td>.74</td>
</tr>
<tr>
<td>Job security</td>
<td></td>
<td>1–15</td>
<td>.81</td>
</tr>
<tr>
<td>Supervisory support</td>
<td>3</td>
<td>1–15</td>
<td>.74</td>
</tr>
<tr>
<td>Work group cohesion</td>
<td>3</td>
<td>1–15</td>
<td>.77</td>
</tr>
<tr>
<td><strong>Influence opportunities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>3</td>
<td>1–15</td>
<td>.85</td>
</tr>
<tr>
<td><strong>Stressors</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Routinization</td>
<td>3</td>
<td>1–15</td>
<td>.90</td>
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<td>Workload</td>
<td>3</td>
<td>1–15</td>
<td>.87</td>
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<tr>
<td>Role ambiguity</td>
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<td>1–15</td>
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<tr>
<td>Role conflict</td>
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<td>1–15</td>
<td>.73</td>
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<td><strong>Control Variables</strong></td>
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<td>Past promotions</td>
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<tr>
<td>Work motivation</td>
<td>3</td>
<td>1–15</td>
<td>.74</td>
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<td>Positive affectivity</td>
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<td>1–15</td>
<td>.83</td>
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<tr>
<td>Negative affectivity</td>
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<td>.83</td>
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<tr>
<td>Education</td>
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<tr>
<td>Tenure</td>
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<td>1–37</td>
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<tr>
<td>Firm-specific training</td>
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</tr>
<tr>
<td>Performance</td>
<td>1</td>
<td>1–4</td>
<td>NA</td>
</tr>
</tbody>
</table>

*a Task significance could be placed in either the “action opportunities” or the “reward actions” category. (See text.)

the basis of actual performance rather than gender status. For these reasons we control on work motivation and on a proxy measure of performance (school performance) to capture this possibility. Also, because education, experience in the organization, and organization-specific training signal level of productivity according to human capital theory (Becker 1964), we control them as well. If males are higher on these forms of human capital, then (according to expectation states theory) performance expectations, and eventually inequalities, favoring males would emerge. As with the effect of actual differences in task performance, the gender inequalities would be due to factors other than gender status.

Past workplace rewards that favor men over women could also be the basis for gender-based performance expectations; these in turn would produce the predicted gender inequalities. We control on the number of previous promotions to rule out this potential rival hypothesis.

Nonverbal behaviors also have produced performance expectations that result in inequalities (Ridgeway and Walker 1995). To consider this possibility we control on the personality traits of positive and negative affectivity. These kinds of nonverbal behaviors are not typically investigated in the SCT tradition, but research shows that both are relatively stable personality traits that are not altered by the workplace (Staw, Bell, and Clausen 1986; Watson and Clark 1984). Because employers generally want employ-
ees with positive outlooks, differences on these traits by gender, rather than the status characteristic of gender, could produce the performance expectations and inequalities. Controlling for these traits helps eliminate this rival hypothesis. In addition and as described above, work motivation is a relatively stable employee trait desired by most employers. It must be controlled because gender differences on this trait could trigger the status processes.

The fourth factor that affects performance expectations, other than gender status, is evaluation from an outside source—for example, a better job offer from another company. This would signal to those who did not receive the offer that the recipient may be more valuable or may possess more skills than originally believed. The data set includes no variables that capture this source of performance expectations. We will discuss this possible threat after the results are presented.

In sum, by controlling for tenure, education, firm-specific training, performance, work motivation, and positive and negative affectivity, we will obtain adjusted mean differences between women and men that represent more accurately the degree to which gender as a status characteristic has generated the interaction processes that in turn produce the gender inequalities.

RESULTS

Between-Sector Differences (Independent of Gender)

Table 2 displays descriptive data for the two work settings. Before we test for within-sector gender differences, tests for differences in sector means provide an initial picture of how the two settings are similar and different. We find differences for pay: the research teams are paid better. The extension employees fare better in three respects: supervisory support is greater and the grievance resolution procedures are more formalized, as is the early job-related socialization. The extension employees experience greater work overload than the research teams, however.

For the seven control variables, we see no work-setting differences for negative and positive affectivity. The extension workplace, however, is higher on tenure, firm-specific training, and the employment of women; the research team employees are higher on work motivation, education, and performance.

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8 We also used ANOVA with post hoc Scheffé tests to assess differences in work conditions among the public, parastatal and private sectors (data not shown). Across the 19 variables for which we found sector differences, the private sector rather consistently was the “best” place to work. This sector showed the highest means for autonomy, task significance, past promotions, promotion opportunities, and pay; in contrast both the public and the parastatal sectors provided more job security. Work group cohesion, grievance resolution, and goal socialization also were highest for the private sector. The private-sector employees experienced the lowest resource inadequacy and role ambiguity, but the greatest role overload. Finally, for the seven control variables, the private-sector employees were highest only on proportion male; interestingly, they were lower on work motivation than employees in either the public or the parastatal sectors. In sum, the private sector generally provides a work setting with better work conditions for employees who do not have higher qualifications (the control variables) than those in the other two sectors. The private sector also is distinguished, however, by being overwhelmingly male (98 percent); this fact strongly suggests that women do not have access to the sector with the best work conditions. This amplifies Ridgeway’s (1997) argument that both interactional processes and structural factors affect gender inequalities.

9 Although there are more men in the research setting than in the extension setting, neither setting exhibits what Kanter (1977) calls an unbalanced ratio (85 percent men or more); nor does either setting fit what she calls a balanced setting (a split of 60–40 or less). The sex ratios in both settings fall into the intermediate category that Kanter calls “male-tipped.” For this reason, the “interaction advantage” that Kanter believes men gain should be similar in both settings. (Also see note 11 for related comments on gender-by-setting differences in positions of power and job segregation.)
In sum, without reference to gender, we find no apparent advantage to employment in the parastatal rather than the public sector. Nor is there convincing evidence that the public sector exhibits more bureaucratic control, which in itself could produce the gender inequality differences that we predicted. We now turn to the hypothesized gender differences.

Gender Differences: Extension Personnel in the Public Sector

Table 3 presents the unadjusted and adjusted means, by gender, for the various work conditions for extension personnel. For these workers we find no significant gender differences in either unadjusted or adjusted means for action opportunities (task significance, grievance resolution, goal socialization), nor for influence opportunities (autonomy). For reward actions, men receive higher pay (women's pay is 92 percent of men's) and exhibit greater work group cohesion, with and without controls. We observe no differences in job security without controls, but women perceive greater security when the controls are introduced. This finding, however, is opposite in direction from our prediction of superiority in men's working conditions.

In regard to the workplace stressors, we see that women and men do not differ significantly in the routinization of their work, workload, or role ambiguity. We find a significant difference in the amount of role...
conflict experienced, but it is the male extension personnel who experience the most role conflict.

For the eight control variables, we see that the men have received more previous promotions and have worked an average of 3 1/2 years more than the women. Overall, however, the male and female extension employees are the same on control variables.

In sum, once the control variables are introduced, female and male extension personnel are the same on 10 of the 14 work conditions. Men receive higher pay and experience more work group cohesion; women experience less role conflict and perceive greater job security. The picture is one of relative gender equality in the public sector, where women and men interact little in achieving the common objective of providing extension services.10

Gender Differences: Research Teams in the Parastatal Sector

The results for the research teams in the parastatal sector are noticeably different (see Table 4). Without controls, nine of the 14 work conditions show significant gender differences. With controls we find eight signifi-

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Table 3. Gender Differences in Workplace Conditions in the Public Sector: Extension Personnel

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unadjusted</th>
<th>Adjusted*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Work Conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action opportunities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task significance</td>
<td>12.04</td>
<td>12.42</td>
</tr>
<tr>
<td>Grievance resolution</td>
<td>8.80</td>
<td>9.17</td>
</tr>
<tr>
<td>Goal socialization</td>
<td>9.93</td>
<td>10.05</td>
</tr>
<tr>
<td>Reward actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay</td>
<td>3,386.36</td>
<td>3,616.53**</td>
</tr>
<tr>
<td>Promotional opportunities</td>
<td>11.30</td>
<td>11.61</td>
</tr>
<tr>
<td>Resource inadequacy</td>
<td>9.85</td>
<td>9.52</td>
</tr>
<tr>
<td>Job security</td>
<td>11.80</td>
<td>11.55</td>
</tr>
<tr>
<td>Supervisory support</td>
<td>10.93</td>
<td>11.19</td>
</tr>
<tr>
<td>Work group cohesion</td>
<td>10.54</td>
<td>10.96**</td>
</tr>
<tr>
<td>Influence opportunities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>8.84</td>
<td>9.12</td>
</tr>
<tr>
<td>Stressors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routinization</td>
<td>8.45</td>
<td>8.20</td>
</tr>
<tr>
<td>Workload</td>
<td>8.33</td>
<td>8.53</td>
</tr>
<tr>
<td>Role ambiguity</td>
<td>5.20</td>
<td>5.13</td>
</tr>
<tr>
<td>Role conflict</td>
<td>7.41</td>
<td>7.74**</td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past promotions</td>
<td>.57</td>
<td>.86***</td>
</tr>
<tr>
<td>Work motivation</td>
<td>12.04</td>
<td>12.10</td>
</tr>
<tr>
<td>Positive affectivity</td>
<td>9.76</td>
<td>9.88</td>
</tr>
<tr>
<td>Negative affectivity</td>
<td>7.82</td>
<td>7.67</td>
</tr>
<tr>
<td>Education</td>
<td>13.22</td>
<td>13.03</td>
</tr>
<tr>
<td>Tenure</td>
<td>9.97</td>
<td>13.81***</td>
</tr>
<tr>
<td>Firm-specific training</td>
<td>9.33</td>
<td>9.14</td>
</tr>
<tr>
<td>Performance</td>
<td>1.71</td>
<td>1.66</td>
</tr>
</tbody>
</table>

Notes: N = 810.
Significance tests are for gender mean differences with t-tests. There are 502 males and 308 females.
* The means are adjusted for gender differences on the eight control variables.
* Significant but not in the hypothesized direction.
*p < .05; **p < .01; ***p < .001 (one-tailed tests for work conditions; two-tailed for controls)
cant differences: women enjoy less autonomy and task significance in their work, perceive fewer promotional opportunities, earn less (women's pay is 93 percent of men's), experience less work group cohesion, experience less positive at-entry job socialization, have lighter workloads, and experience greater role ambiguity. For the control variables, the only differences are those for positive affectivity and tenure. Men are more positive in outlook than their female counterparts; they also show longer tenure.\(^{11}\)

We hypothesized that women's workloads would be greater than men's, but we

\(^{11}\) The possibility that women and men in the research teams are differentiated more strongly by power or work tasks than women and men in extension work could explain the greater inequality in work conditions in the research teams. An "employment grade" variable captures a person's rank in both sectors in a manner similar to civil service grades in developed societies. We find no mean gender difference in employment grade for extension employees, but women actually are slightly (and significantly) higher in grade for research teams (which should improve their work conditions). The chi-square test for gender distribution differences in grade was not significant for research teams, but it was significant for extension personnel. In sum, women are not in lower-grade positions than men in the research teams, nor are they distributed differently by grade.

At the suggestion of a reviewer we conducted the same series of analyses for job category. Gender segregation on the basis of job category can be expected to affect the degree of interaction that is possible. If more segregation exists in the extension settings, then this situation (which certainly is related to the amount of mixed-sex interaction that could occur) could produce the smaller differences in gender outcomes among extension personnel. The chi-square test for gender by job category showed a significant relationship in the extension setting but not in the research team setting. Control for job category in the

Table 4. Gender Differences in Workplace Conditions in the Parastatal Sector: Research Teams

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unadjusted</th>
<th>Adjusted*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Work Conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action opportunities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task significance</td>
<td>12.00</td>
<td>12.64***</td>
</tr>
<tr>
<td>Grievance resolution</td>
<td>8.23</td>
<td>8.68</td>
</tr>
<tr>
<td>Goal socialization</td>
<td>8.76</td>
<td>9.75**</td>
</tr>
<tr>
<td>Reward actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay</td>
<td>6,546.88</td>
<td>7,035.84</td>
</tr>
<tr>
<td>Promotional opportunities</td>
<td>10.76</td>
<td>11.98**</td>
</tr>
<tr>
<td>Resource inadequacy</td>
<td>10.09</td>
<td>9.80</td>
</tr>
<tr>
<td>Job security</td>
<td>11.42</td>
<td>11.55</td>
</tr>
<tr>
<td>Supervisory support</td>
<td>10.34</td>
<td>10.80*</td>
</tr>
<tr>
<td>Work group cohesion</td>
<td>10.08</td>
<td>11.10***</td>
</tr>
<tr>
<td>Influence opportunities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>8.24</td>
<td>9.27**</td>
</tr>
<tr>
<td>Stressors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routinization</td>
<td>8.62</td>
<td>7.79**</td>
</tr>
<tr>
<td>Workload</td>
<td>6.38</td>
<td>7.67****</td>
</tr>
<tr>
<td>Role ambiguity</td>
<td>5.99</td>
<td>4.92***</td>
</tr>
<tr>
<td>Role conflict</td>
<td>7.56</td>
<td>7.41</td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past promotions</td>
<td>.88</td>
<td>1.06</td>
</tr>
<tr>
<td>Work motivation</td>
<td>12.82</td>
<td>12.51</td>
</tr>
<tr>
<td>Positive affectivity</td>
<td>9.32</td>
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<tr>
<td>Negative affectivity</td>
<td>7.71</td>
<td>7.41</td>
</tr>
<tr>
<td>Education</td>
<td>15.19</td>
<td>15.11</td>
</tr>
<tr>
<td>Tenure</td>
<td>5.26</td>
<td>6.63*</td>
</tr>
<tr>
<td>Firm-specific training</td>
<td>7.26</td>
<td>7.68</td>
</tr>
<tr>
<td>Performance</td>
<td>2.02</td>
<td>2.01</td>
</tr>
</tbody>
</table>

Notes: N = 389.
Significance tests are for gender mean differences with t-tests. There are 293 males and 96 females.
*The means are adjusted for gender differences on the eight control variables.
**Significant but not in the hypothesized direction.
\(^{p} < .05; **p < .01; ***p < .001 (one-tailed tests for work conditions; two-tailed for controls)
found the opposite. In retrospect, we believe this is the result of status generalization processes as well. In collaborative work settings, those who are identified as the high performers are expected and encouraged to do more because the team's success is thus increased. The finding that women's workloads are smaller than men's is consistent with the predictions from SCT: women are not taken very seriously, are "considered passive and ineffective" (Ridgeway 1997:227), and are given reduced workloads relative to their male counterparts.

In sum, and in comparison with the extension personnel, we find considerable gender inequality in the research teams. As hypothesized, women are more disadvantaged relative to men (in action opportunities, reward actions, influence opportunities, and job stressors) when they collaboratively work together face-to-face than when they work toward the same goal but do so independently of each other. This finding is consistent with our extension of Ridgeway's argument that interaction processes produce and perpetuate gender inequalities.

Rival Explanations

We acknowledge that our nonexperimental design lacks the power of an experimental design to eliminate competing explanations for the inequality differences. We do not wish to be overapologetic for our design, however. As Ridgeway (1997:230–31) discusses when suggesting that empirical tests be undertaken, the multilevel nature of the processes operating and the effects of both interactional processes and structures make it very difficult to test such claims outside the laboratory. We recognize these difficulties and consider several alternative explanations for our findings.

First, selection processes may be operating (for a general discussion, see Lieberson 1985). If women and men enter the research teams with substantially different characteristics, while women and men enter the extension positions with similar characteristics, we would expect to find greater gender differences in workplace rewards and experiences in the research teams. These would result in different performance expectations (as we discuss below). In addition, if these differences are in human capital and/or in performance, then (following human capital arguments) we can expect the kinds of differences we have observed.

Despite selection differences in the entry of both women and men into extension and research settings (see significant between-sector differences for control variables in Table 2), an examination of the control variables in Tables 3 and 4 suggests that women and men entering a particular setting are not different. No gender differences exist in either setting for the relatively stable traits of negative affectivity and work motivation (although men are more positive in outlook than women in the research teams). Similarly, women and men in both settings do not differ in years of schooling nor in school performance. Given this similarity, and given that we control statistically for any differences that exist, we have strengthened our claim that the differences in collaborative interaction across the two settings explain the differences in gender inequality.

Second, if a more bureaucratic form of social control is employed in the extension settings than in the research settings, we can expect the greater gender equality that we observed in the extension setting. In such instances, the bureaucratic rules and regulations are impersonal and in principle are applied equally to all; thus they protect workers from arbitrary and discriminatory actions. As indicated in Table 2, we find some support for this possibility but it is not strong. Formalized grievance procedures and socialization at entry are higher among the extension personnel, as would be expected in a more bureaucratic organization. Yet we observe no differences across the two sectors in role ambiguity, role conflict, promotion opportunities, job security, or routinization; all of these characteristics have been discussed in the literature on bureaucratic control (Edwards 1979) or on modern indirect
methods of control over employees (Lincoln and Kalleberg 1990; Wallace 1995).

It is also possible that one type of setting is “newer” than the other, and thus contains more institutionalized and more enduring gender inequalities. Although the extension service originated in the colonial period, it did not take its current organizational form until the 1970s, when the Training and Visiting Program was created. The research teams came into existence in 1977, at which time KARI was created in the parastatal sector. Thus their organizational “ages” do not differ. If anything, the extension service is older and should exhibit greater patriarchy-driven gender inequality, but of course it does not.

Finally, neither sector uses affirmative action programs, and in both, clear, written, civil-service-type terms of service detail entry ports, salary scales, and promotional procedures. In sum, we simply find no convincing evidence that differences in organizational structure and employment relationships are responsible for the observed gender inequality differences across the two settings.

A third threat still exists: the possibility that certain sources of performance expectations, other than the status of gender, exist only in the research team setting and produce the observed gender differences. As we discussed above, SCT researchers do not claim that status is the only factor activating performance expectations that lead to gender inequalities. Actual task-relevant performance, nonverbal behaviors, evaluations from outside the group, and differential rewards received by group members also generate performance expectations that will affect the gender inequalities. In considering this threat to our conclusions, we refer only to the research teams (Table 4) because this is where we found the hypothesized gender differences.12

If men actually perform better than women, the outcome will be performance expectations that result in the kinds of inequalities we have observed. We find no evidence of performance differences, however. Women and men are the same on work motivation and on our proxy for performance. Also, we see no differences on human capital characteristics (education and firm-specific training) that usually signal performance differences to employers and other employees. Men have greater tenure, which partly reflects women’s more recent inclusion in the modern workforce, but we control for this (as well as for the other performance indicators), and the gender differences remain.

In considering the possible confounding effect of nonverbal behaviors, we refer again to work motivation and to the two relatively stable personality traits, positive and negative affectivity. Men are higher in positive outlook (positive affectivity); as reported above, however, we find no gender differences in work motivation nor in negative affectivity. Given this, and because we find the predicted gender differences even with controls for positive affectivity, we infer little support for the rival hypothesis that gender differences in nonverbal behaviors, rather than the status of gender, produce the reward/experience differences.

If members of the research teams receive outside information suggesting higher performance by the men, this factor, rather than gender status, could produce the gender differences we have observed. Although we lack data on this point, the structure of the labor market for trained agricultural workers in Kenya tells us something about this possibility. As described above, these individuals work in three sectors: the public (extension personnel), the parastatal (research teams), and the private (also extension positions). The private sector is considered the most desirable because the pay is substantially higher. This sector, however, employs considerably more men than women (see note 8), relative to the other sectors. Thus it is common knowledge that men are recruited for this sector more vigorously than women. This differential mobility undoubtedly reinforces referential belief structures that favor men’s
abilities over women's. That is, even despite the long tradition of patriarchy, men's upward mobility is attributed to differences in ability.

If those in the research settings have more information about this differential mobility than those in the public extension setting, this additional "outside" information, rather than differences in mixed-gender interaction, can explain the inequality differences we have observed. We have no reason to believe, however, that members of research teams are privy to more information than the public-sector extension personnel regarding males' greater mobility into the private sector. In fact, because extension work is the focus in both the public and the private sectors, public-sector extension personnel probably are more aware of male advantages.

Finally, if the men in the research teams have received more work-related rewards, this will signal higher performance, which in turn will result in some of the gender differences we have observed. Men have been promoted more than women (Table 4), but because of the civil service model for promotions, this can be explained by the men's greater tenure rather than by task performance. Thus, again, we believe that the evidence does not support this particular rival hypothesis.

DISCUSSION AND CONCLUSIONS

Ridgeway (1997) has challenged researchers to test her claim that observed gender inequalities in the workplace at the macro level are produced and perpetuated in part by micro-level interaction processes that involve the creation of performance expectations based on the interactants' status characteristics. We extended her argument to posit that the degree of gender workplace inequality is greater in the presence of more mixed-sex interaction. We argued that the processes (depicted in SCT) leading to the inequality are activated more strongly when women and men interact collaboratively, rather than independently, to reach a common goal. Our results are consistent with this extension, and thus indirectly support Ridgeway's line of reasoning.

We conclude that gender as a status characteristic becomes more salient (more noticeable to those in the setting) in the presence of face-to-face mixed-sex interaction; this salient gender status is more likely to be viewed as relevant to the task when women and men regularly interact face-to-face; performance expectations for women and for men are more likely to be formed and solidified when the sexes regularly interact face-to-face; and these more strongly held performance expectations will be translated into greater differences in rewards (prestige and power differences) for women and for men when there is face-to-face interaction. We believe that our examination of possible rival hypotheses, presented above, establishes the internal validity of these conclusions, and it will not be repeated here. Instead we address the implications of these findings for changing gender inequality, with an emphasis on Kenya and on developing nations in general.

A number of steps have been identified for reducing gender inequalities in developing nations (see references below). We do not wish to offer our own list of steps or solutions; instead we comment on the implications of our findings for one of the most often stated recommendations. The Kenyan workplace historically was gender-segregated. In precolonial and colonial periods, women simply were not a significant part of the formal labor force; even now they compose less than 25 percent of the wage-earning workforce. The development literature directed at reducing gender inequalities (e.g., House-Midamba 1990; Kameri-Mbote and Kiai 1993; Nzomo 1995) speaks most strongly for increasing women's participation in the labor force and in the political arena.

We cannot disagree with this recommendation, but our data suggest that the battle is not won merely through increased participation. In fact, our findings suggest that at least in the labor force, the context in which this increased participation occurs is critical in determining whether inequality will be reduced. We found that in settings where educated women and men work independently of each other, but toward a common goal, they experience virtual equality in work conditions (though not in wages). In contrast,
where women and men with similar qualifications interact face-to-face to reach a common goal, women are significantly disadvantaged in the work conditions they experience relative to men. Thus it is possible, at least initially, that the more fully women in these developing countries are integrated into the labor force and work alongside men, the more strongly they will experience the increased inequalities we have documented here. Of course, the cost of remaining outside the formal economic sector is even greater inequality because in the informal sector, wages often are not earned at all, fringe benefits are limited, and the absence of government regulation leaves workers with no formal protections (Castells and Portes 1989).

The point we want to make is that gender equality will not emerge automatically when women enter the formal workforce which is dominated by men. Gender inequalities will continue to exist, not only because of numerous structural factors generated by the patriarchy but also because of the status processes that lead to power and prestige outcomes. This, of course, is the main thrust of Ridgeway’s argument.

One of the most prominent findings in the development literature about the importance of the informal sector is that African nations in general, and Kenya in particular, have an extremely strong tradition of women’s associations and organizations, which women use successfully to develop economic and political power (Adhiambo-Oduao 1995; House-Midamba 1996; Miller and Yeager 1994; Nzomo 1993, 1995; Sørenson 1992; Von Bülow 1991). Ironically, such structures are inconsistent with the recommendation that women be integrated into the formal workforce, where men dominate. Women seem to be “most successful” in settings where women and men do not interact to accomplish a common goal: that is, in single-sex settings where status processes that produce gender inequalities are activated less strongly, if at all.

The success of the female-only associations and organizations leads logically to questions of separatism. Both in feminist movements and in liberation movements more generally, there has been a long history of struggle over the issue of separatism for the sake of group self-determination. As an initial step toward overcoming past oppression, many feminists have advocated separation from mainstream economic and political institutions; integration is a secondary goal more appropriate as gender-based expectations fade within mainstream institutions (Ferree and Hess 1994). In less highly politicized discourse, women in developed nations are frequently advised to explore self-employment as an avenue to greater autonomy and material reward than can be found in corporate organizations; in fact, many women in the United States are turning to self-employment (Bregger 1996).

Although little empirical research exists to demonstrate that women receive greater work rewards when employed in female-dominated organizations in either developed or developing economies, the development of female-controlled organizations may prove to empower women workers in developing nations with strong patriarchal traditions more quickly than a strategy of integration in existing male-dominated economic institutions. It is also possible, however, that female-only enterprises ultimately may go the way of female occupations, which consistently have been undervalued and underrewarded (Jacobs 1989; Reskin 1991; Tomaskovic-Devey 1993).

Government-sponsored policies such as comparable worth and affirmative action have been offered to reduce gender inequality in developed nations. We agree with Ridgeway (1997:232) that such programs eventually will reduce gender inequalities by changing women’s and men’s referential reward expectations, and will alter actors’ interpersonal configurations to create more stereotype-disconfirming experiences. Yet because the informal economy (outside government regulation) is such a dominant component in men’s (and women’s) labor force involvement in developing nations, similar government-supported policies are likely to exert little effect on gender inequality in nations such as Kenya. If one’s goal is reduction of gender inequality, the answer obviously is not simple, as documented by the volumes of conceptual and empirical materials on the subject generated over the past
half-century. Such a task is beyond the scope of this paper. We have tried to address only one piece of the puzzle, demonstrating the importance of micro, interactional processes that operate within social structures to produce and perpetuate these inequalities.

We offer a number of caveats. First, and specific to the arguments on which we have relied, the two settings we studied were gender-integrated. Settings with more gender-skewed compositions can be expected to produce different dynamics. For example, settings in which the minority is male, the typically dominant status, cannot be expected to produce the same interactional processes as settings in which the minority is female. Important work on organizations (e.g., Kanter 1977; Tomaskovic-Devey 1993) points clearly to the effects of different gender compositions in occupations and jobs. Both Kanter and Tomaskovic-Devey discuss the importance of micro-level interaction dynamics, but they make no reference to SCT. Similarly, the relatively recent interest in what is called relational demography (e.g., Tsui, Egan, and O’Reilly 1992) makes predictions about effects of gender and racial group composition based on the interaction dynamics created by different compositions. Scholars in this area, however, do not rely on SCT, and arguments are spelled out less clearly than in SCT. We wish to make the point that interactional processes are claimed to be operating in a variety of arguments about gender inequalities. Much could be learned if this literature were integrated more fully to incorporate multiple and compatible theories rather than being so theory-specific.

Second, the data allowed us to infer only the consequences of employee-employee interaction. Employee-employer, employee-client, and employee-supervisor interaction certainly need to be considered in future research. We did not have the data to do this; therefore we do not know the degree to which such interactions confound our conclusions, if at all. Certainly, however, power differentials are not neutral factors in patterns of interaction and inequality.

Third, our research places us "in the middle" between those who routinely conduct experiments on micro-level processes that allow for ruling out rival explanations and those who use available data from natural settings, assume micro-level processes, and then rely on statistical controls to eliminate competing explanations. As Ridgeway (1997:230–31) discusses when she suggests that empirical tests be undertaken, the multi-level nature of the processes operating and the effects of both interactional processes and structures make tests of these arguments very difficult. We have acknowledged these difficulties and have tried to address various rival explanations. We do not have the "organizationally chaotic" setting that Ridgeway recommends for testing the arguments, but we feel secure in saying that the particular natural settings we have studied, and the statistical controls we have introduced, provide data consistent with the importance of interaction processes in producing and perpetuating gender inequalities in the workplace.

Fourth, our research is open to the criticism that findings for Kenya (and for any developing nation, for that matter) tell us little about whether such processes are operating in the United States and other Western cultures. We do not agree with such a criticism. These are general social processes. The social and cultural context (e.g., the prevalence of an informal rather than a formal economy) may affect how these processes actually are played out, but the processes will still be operating.

To conclude, we offer some comments on the implications of our findings for future research. Our research directs us and others to the task of merging micro and macro arguments and research. Journals are filled with gender investigations that rely on large, longitudinal, macro-level data sets. Such studies often rely on percent female (in an occupation, in a job, in an organization, or in a workplace) as a critical variable that is related to the outcome variables of interest. In these studies, numerous assumptions are made about the processes based on gender composition that are operating in the workplace, but these processes are not examined directly.

We do not deny that the gender composition is important, but the organization of the work setting is important as well. In both the extension setting and the research team setting there are more men than women, but we
have shown that the degree of gender inequality is affected by the social organization of the workplace. Yes, the status of gender activates interaction processes and performance expectations that result in gender differences in rewards and experiences, but this happens more often in workplaces where women and men interact face-to-face.

These dynamics will be better understood with the merging of the more macro theories about social organization and the more micro theories such as SCT. For example, it is still unclear whether status expectations operate (or operate as strongly) in collaborative face-to-face settings embedded in bureaucratized environments. Can strong bureaucratic controls in the assignment of tasks, the evaluation of performance, and the distribution of rewards prevent the disadvantages ordinarily faced by women in mixed-gender collaborative work groups? This question remains for future research, which can be addressed only by merging macro and micro theories and research. Such work will pressure macro researchers to directly address Ridgeway’s plea to add an “interactional account to labor market and organizational accounts of employment inequality” (1997:231), but will also pressure researchers in the micro tradition to expand the situations and contexts to which they typically limit their studies.

Appendix. Measurement
The groupings below mirror the categories of work conditions that are analyzed in the study. We use multiple-item scales for most variables. Unless indicated otherwise, all items were coded “strongly agree” (1) to “strongly disagree” (5). “R” indicates that the coding was reversed for the item. Alpha coefficients for reliability are given for the multiple-item scales.

Action Opportunities
Task significance refers to the degree to which an individual's role contributes significantly to the overall organizational process (Hackman and Oldham 1980). We measured it using a short form of a seven-point scale developed by Mottaz (1985). Employees responded to the following three of the seven items used by Mottaz: My work is a significant contribution to the successful operation of my department; my work is really important and worthwhile to my department; I often feel that my work counts for very little around here (R). Alpha = .72.

Grievance resolution is the extent to which employees have access to appeal procedures to air their complaints (see Freeman and Medoff 1984; Stolzenberg and Winkler 1983). We measured it with the following three items: Whenever I have complaints to make someone is always there to listen to me; my job has well laid down grievance procedures accessible to all employees; it is often frustrating trying to file a complaint in my job (R). Alpha = .65.

Goal socialization refers to procedures for familiarizing or acquainting (new) employees with the workings of the organization. We measured it using three items developed following Pascale (1985), as follows: Virtually all new employees in my job are required to identify and articulate the firm's shared values (i.e., the purpose or mission that ties the firm to society, the customer and its employees); in my job nobody cares to familiarize new employees with the in-depth workings and expectations of the firm (R); as a new employee in my job I was required to undergo an intensive inservice course to acquaint myself with the goals and expectations of my organization. Alpha = .88.

Reward Actions
Promotional opportunities refers to the degree of potential vertical mobility within the organization (Price and Mueller 1986). We measured it with a four-item scale, as follows: I have the opportunity for advancement; I am in a dead-end job (R); I can move up quickly in my present job; I have a good chance to move up in this organization. Alpha = .84.

Pay refers to the wage or salary received by employees for services rendered. We measured it as the number of Kenya shillings received by the employee from the work setting per month before taxes and other deductions. The variable was measured categorically with 22 categories. We assigned the category midpoints in shillings and used a Pareto estimate for the open-ended upper category.

Resource inadequacy refers to the degree of sufficiency in the resources (infrastructural, material, and equipment) that the employee needs to execute duties with the minimum of discomfort (La-Anyane 1985). We measured this with three items similar to those used by Halaby and Weakliem (1989), as follows: I have difficulties in getting enough help and equipment to get my job done; most times I cannot do my job because of lack of adequate transportation; I have enough support services to do my job (R). Alpha = .74.

Job security is the extent to which an employee is guaranteed his or her job as long as he or she performs at a minimal level of competence. We measured it using a three-item scale developed specifically for this study: I will be able to keep my present job as long as I wish; my job is not a secure one (R); I am secure in my job. Alpha = .81.

Supervisory support is the degree to which supervisors are friendly, helpful, and supportive to their subordinates (Michaels and Spector 1982; Mottaz 1985). We assessed it with the following items: When things get tough in my job I can rely on my supervisors for help; My supervisor is willing to listen to my job-related problems; my supervisor is helpful to me in getting my job done. Alpha = .74.

Work group cohesion is the degree to which
employees of an organization form close informal relations in their immediate work units (Price and Mueller 1986). We measured it with a three-item scale based on a scale developed by Price and Mueller (1981, 1986) to assess the extent to which employees have close friends in their immediate work units. Employees responded to three items: Individuals in my work group are very friendly; people in my work group take personal interest in me; I very much look forward to being with the people in my group each day. Alpha = .77.

Influence Opportunities

Autonomy is defined as the degree to which employees are offered the freedom, independence, and discretion to make decisions pertaining to the substantive and procedural aspects of their job, such as scheduling and determining the procedure to be used in executing the task (Hackman and Oldham 1975). We measured it by three items, as follows: I control the scheduling of my work; I influence the things that affect me on the job; I have inputs in deciding what tasks or parts of tasks I will do. Alpha = .85.

Stressors

Routine refers to the degree to which a job is repetitious and lacks variety (Hackman and Oldham 1975; Perrow 1967). We operationalized it with a three-item scale adapted from Price and Mueller (1981, 1986), as follows: My duties are repetitious in my job; my job has variety (R); I have the opportunity to do a number of different things in my job (R). Alpha = .90.

Workload refers to the degree of sufficiency in the resources (infrastructural, material, and equipment) that the employee needs to execute duties with the minimum of discomfort (La-Anyane 1985). We measured it using the following three items (see Rizzo, House, and Lirtzman 1970): I do not have enough time to get everything done in my job; I have to work very fast in my job to keep up with my work; my workload is too heavy in my job. Alpha = .87.

role ambiguity is the degree of discrepancy between the amount of information a person receives and the amount necessary to perform the role adequately (Kahn, Wolfe, and Schoek 1964). We measured it using three items, as follows (see Rizzo et al. 1970): I do not know exactly what my responsibilities are in performing my job; I know exactly what is expected of me in my job (R); I know how to get my job done. Alpha = .76.

role conflict is the degree to which incompatible demands are made on an individual by two or more persons (Kahn et al. 1964). We measured it using the following three items (see Rizzo et al. 1970): I get conflicting job requests from my administrator/supervisor; I get conflicting job requests from my co-workers; job requests from my administrator and co-workers are often conflicting. Alpha = .73.

Control Variables

We captured Past promotions by using the actual number of times the employee had experienced a promotion in the work organization.

Work motivation is the degree to which one views work as central to one’s life. We measured it using three items based on Kanungo (1982): Work is something people should get involved in most of the time; work should only be a small part of one’s life (R); work should be considered central in life. Alpha = .74.

Positive affectivity refers to one’s general positive outlook on life. We measured it with a scale developed by David Watson and used by Agbo, Price, and Mueller (1992) and Agbo, Mueller, and Price (1993). Employees responded to these items: It is easy for me to become enthusiastic about something I am doing; I often feel happy and satisfied for no particular reason; I always seem to have something pleasant to look forward to. Alpha = .83.

Negative affectivity was also measured with Watson items: Often I get irritated at little annoyances; my mood often goes up and down; I sometimes feel miserable. Alpha = .83.

We measured education by the employee’s number of years of formal schooling and training.

Performance was measured with a proxy variable about performance in school: The question was “What was your approximate overall academic performance in the training institute/college/university?” The scale ranges from 1 to 4, indicating low to high performance.

We measured firm-specific training with the following three-item scale: Doing my job depends on knowledge and skills learned while working for this organization; the skills and knowledge I acquired through formal education/training have been adequate for me to perform my job effectively in this organization (R); the skills I use to carry out my duties in my job only fit my present work setting. Alpha = .87.

Tenure was measured by the length of time (the number of years) the respondent had been employed by the current organization.

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**Charles W. Mueller** is professor of sociology at the University of Iowa. His research interests include inequality, labor markets and the sociology of work. He is currently studying gender differences in job satisfaction and commitment of clergy, organizational factors affecting sexual harassment, and factors underlying justice and legitimacy perceptions.

**Munyae M. Mulinge** is a senior lecturer of sociology at the University of Botswana in Gaborone, Botswana. His current research interests include job satisfaction, organizational attachment, labor markets, and social problems in sub-Saharan Africa.
Jennifer Glass is professor of sociology at the University of Iowa. Her research interests include work and family life, family policy, and organizational innovation and change. Currently, she is examining the effects of family responsive policies on mother’s wage growth over time and the quality of family relationships.