

**Gender-Biased Behavior at Work:
Exploring the Relationship Between Sexual Harassment and Sex Discrimination**

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Abstract

This paper examines survey-based reports of sexual harassment and sex discrimination in order to identify the stylized facts about the nature of the relationship between them. In particular, we are interested in assessing whether these concepts measure similar forms of gender-biased behavior and whether they have the same effect on workers' job satisfaction and intentions to leave their jobs. Our results provide little support for the notion that survey-based measures of sexual harassment and sex discrimination capture the same underlying behavior. Respondents do appear to differentiate between incidents of sexual harassment and incidents of sex discrimination in the workplace. There are gender differences in the consequences, however. Both sex discrimination and sexual harassment are associated with a higher degree of job dissatisfaction. However, women's intended job changes are more sensitive to experiencing sex discrimination, while men's are more sensitive to experiencing sexual harassment. Although exploratory, when taken together these results give us hope that in the future sufficiently detailed surveys could provide a useful foundation for quantifying the link between sexual harassment and sex discrimination. They also suggest that the best prospect for developing—and then testing—a conceptual framework of gender bias lies in adopting a multi-disciplinary approach incorporating the insights of disciplines such as sociology, psychology, and economics.

1. Introduction

Workplaces are rarely gender-neutral. Though gender differences in the terms and conditions of ones employment are almost never codified in firms' personnel policies or in employment law, women nonetheless frequently find that they are paid less, are promoted less often, and receive less training than their male colleagues (Blau, 1998; Blau, et al., 1998). Reports of sexual harassment are also common with many working women experiencing sexual harassment at some point in their careers (for example, Welsh, 1999; Schneider, et al., 1997; Fitzgerald and Omerod, 1993). The complex—and often ill-defined—nature of workplace sex discrimination and sexual harassment poses significant challenges for researchers wishing to assess the extent of gender bias in employment relationships.

Strong disciplinary roots have shaped the ways in which previous researchers have approached the issue of gender bias. The idiosyncrasies in conceptual frameworks, definitions, and research methodologies inherent in various academic disciplines have produced a dizzying array of results that, while individually enlightening, can be difficult to piece together to produce a comprehensive view of employment-related gender bias more generally. Economists, for example, typically define sex discrimination to be that portion of the gender gap in aggregate employment outcomes that is not attributable to productivity differentials and have largely been concerned with understanding how these disparities can best be measured (see Altonji and Blank, 1999). Until recently, however, economists have been almost silent on the issue of sexual harassment. A universally accepted definition of sexual harassment has not yet emerged for example (see Foulis and McCabe, 1997), though psychologists have made a great deal of progress in quantifying women's experiences of sexual harassment (see, Fitzgerald, 1997a; Schneider, et al., 1997). Still, with the exception of a few evolutionary psychologists,

psychologists have not been engaged in analyzing the psychological origins of sex discrimination as economists understand it.¹

These somewhat artificial disciplinary boundaries have not been helpful in enriching our understanding of the causes and consequences of employment-related gender bias. More progress is almost certain to be made by developing a conceptual framework that does not focus exclusively on either sexual harassment or sex discrimination in isolation, but rather which explicitly views these as alternative forms of gender bias and considers the links between them. For economists, the successful strategy is likely to involve incorporating the insights from disciplines such as psychology and sociology into economic models of labor market behavior. There are a number of ways in which we might proceed. Sociologists, for example, often have an understanding of sexual harassment that is rooted in the power structure in society more generally (Skaine, 1996). They argue, for example, it is the social power structure that frequently puts male employers in positions of authority over female employees which underlies sexual harassment. Of course this is the same social power structure that is implicit in many “taste-based” theories of sex discrimination in economics (see, for example, Becker, 1957). Similarly, legal scholars have spent the past two decades developing and then refining the argument that sexual harassment is sex discrimination (see Siegel, 2004; Skaine, 1996; MacKinnon, 1979). In particular, MacKinnon (1979) argues:

“Sexual harassment is discrimination ‘based on sex’ within the social meaning of sex, as the concept is socially incarnated in sex roles. Pervasive and ‘accepted’ as they are, these rigid roles have no place in the allocation of social and economic resources” (pg. 178).

Ideally, any conceptual model of employment-related gender bias would be multi-disciplinary, well grounded in the stylized facts, and take account of the complexities of workers’

¹ Kanazawa (2005) provides a review of the evolutionary psychology literature on sex discrimination.

experiences in the workplace. Sexual harassment and sex discrimination are surely related, but they are a long way from being the same thing despite the arguments of legal scholars.² Yet we have very little empirical evidence on the nature of the relationship between them. There is evidence that the negative consequences of unwanted sexual behavior at work can be greater for women who believe themselves to be sexually harassed (Antecol and Cobb-Clark, 2006), though psychologists often conclude that labeling unwanted sexual experiences as sexual harassment is unrelated to many subsequent employment outcomes (Munson, et al., 2001; Magley, et al., 1999). Moreover, previous research concludes that workers' perceptions of harassment and discrimination are closely related to their labor market behavior. Women experiencing sex discrimination and older workers experiencing age discrimination are more likely to separate from their employers for example (Johnson and Neumark, 1997; Neumark and McLennan, 1995), while women's labor supply behavior appears to be particularly sensitive to sexual harassment (Goldsmith, et al., 2004).

Our objective is to add to this very limited empirical literature on the relationship between two forms of gender-biased behavior—sexual harassment and sex discrimination—by using data drawn from the 2002 General Social Survey. While far from perfect, these are the only data of which we are aware that separately identify incidents of sexual harassment from incidents of sex discrimination. Consequently, they allow us to begin to understand the extent to which these forms of gender bias might be related and to consider their respective consequences in terms of employment outcomes (i.e., job satisfaction and intentions to change jobs). Specifically, we address the following questions. Do survey-based measures of sexual

² Drawing links between sexual harassment and sex discrimination is made more difficult by the fact that each is a complex phenomenon. Basu (2003), for example, argues “it would be unfortunate if the only way to establish sexual harassment was to categorize it as a form of discrimination” (pg. 151) because in doing so we ignore the reality that first, sexual harassment often occurs within gender and second, men are increasingly the victims of sexual harassment.

harassment and sex discrimination capture separate forms of gender bias or are they simply reflections of the same underlying behavior? Do they have similar consequences for workers' job satisfaction and intentions to remain in their current employment?

Our results provide little support for the notion that survey-based measures of sexual harassment and sex discrimination capture the same underlying behavior. Respondents do appear to differentiate between incidents of sexual harassment and incidents of sex discrimination in the workplace. There are gender differences in the consequences, however. Both sex discrimination and sexual harassment are associated with a higher degree of job dissatisfaction. However, women's intended job changes are more sensitive to experiencing sex discrimination, while men's are more sensitive to experiencing sexual harassment. Although exploratory, when taken together these results give us hope that in the future sufficiently detailed surveys could provide a useful foundation for quantifying the link between sexual harassment and sex discrimination. They also suggest that the best prospect for developing—and then testing—a conceptual framework of gender bias lies in adopting a multi-disciplinary approach incorporating the insights of disciplines such as sociology, psychology, and economics.

In what follows, we discuss some of the issues involved in using surveys to measure the incidence of sexual harassment and sex discrimination. Details of the GSS data used in this analysis and the incidence of sexual harassment and sex discrimination as well as the link between them are provided in Section 3. Following that evidence on the consequences of these forms of gender-biased behavior for job satisfaction and intentions to leave ones current employment are presented. Finally, our conclusions and suggestions for future research are discussed in Section 5.

2. Using Surveys to Study Sexual Harassment and Sex discrimination

While economists have a long history of quantifying sex discrimination as the portion of the gap in men's and women's outcomes that cannot be attributed to differences in observable, productivity-related characteristics, there is a recognition that sex discrimination is "unlikely to be completely captured by so crude a measure as a log-earnings regression" (Kuhn, 1990). Unfortunately, omitted variables, unobserved heterogeneity, and measurement error can all confound statistical, residual-based estimates of labor market discrimination. These econometric problems have led to an increased interest in using alternative strategies—including direct, survey questions—to measure women's perceptions of sex discrimination (e.g., Kuhn, 1987, 1990; Hampton and Heywood, 1993; Laband and Lentz, 1993; Hallock, et. al, 1998; Antecol and Kuhn, 2000). Not surprisingly, there has been an intense interest in understanding the relationship between self-reports and statistical, residual-based measures of discrimination. Some authors find that those women reporting the most sex discrimination, in fact, face the least statistical discrimination (Kuhn 1987, 1990; Barbezat and Hughes, 1990; Antecol and Kuhn, 2000). Others find that these measures are positively related implying that the wording of survey questions about discrimination may be important (Hampton and Heywood, 1993). There is less evidence about the ways in which self-reports of sex discrimination are related to other gender-biased behavior—like sexual harassment—that we might care about.

While the measurement of sex discrimination has historically relied upon statistical analysis of the disparity in men's and women's mean labor market outcomes, analysis of sexual harassment is based almost exclusively on surveys that ask directly about experiences of unwanted sexual behavior at work or in the classroom.³ Unfortunately, research has been

³ There are several excellent reviews of the issues in measuring sexual harassment using surveys. See in particular, Fitzgerald and Schullman, (1993), Arvey and Cavanaugh, (1995); and Welsh (1999).

hampered by the lack of a commonly accepted definition of and a standardized approach to measuring sexual harassment (see for example, Arvey and Cavanaugh, 1995). Welsh (1999), for example, concludes that the enormous disparity in the estimated proportion of women experiencing sexual harassment at some point in their lifetime (from 16 to 90 percent) is attributable in some part to survey measurement issues. Surveys often ask women to report on events that may have occurred in the distant past leading to potential recall bias. Moreover, there is a great deal of ambiguity about what constitutes sexual harassment making the exact phrasing of survey questions important.⁴ While many women report experiencing unwanted sexual behavior, they often do not label their experiences as sexual harassment per se (see, Marin and Guadagno, 1999; Magley, et al., 1999; Munson, et al., 2001; Antecol and Cobb-Clark, 2006). Not surprisingly, women are more likely than men to see unwanted sexual behavior at work as harassing, though training seems to be useful in altering men's views about "gray areas" including unwanted sexual behavior originating with co-workers rather than supervisors (Antecol and Cobb-Clark, 2003).

Despite their limitations, surveys are likely to be an increasingly important research tool in the study of gender bias because they have the potential to provide researchers with the flexibility to collect detailed, multi-disciplinary data on the vast range of gender-related experiences at work. There is a great deal of work to be done in refining our survey measures, however. For example, to our knowledge there is no evidence on the extent to which reports of unwanted sexual behavior and sexual harassment are linked to reports of sex discrimination more

⁴ Although we do not review it here, there is also a literature discussing the limitations of self-reported survey data due to differences in response scales of individuals within and across countries (see for example, van Soest et al. 2006 and Kapteyn et al. 2007). While this literature focuses on self-reported work disability, this limitation can easily be applied to self-reported discrimination. Specifically, differences in social norms for evaluating discrimination may lead one respondent to label a particular situation as discrimination while another respondent faced with the same situation would not label it as discrimination..

generally. Specifically, it is unclear whether survey-based measures of sexual harassment and sex discrimination identify separate forms of gender bias at work and whether they have different consequences for workers' job satisfaction and future career plans. Our goal is to begin to fill this gap in the literature. A deeper understanding of this issue will assist future data collection, provide a basis for developing a conceptual framework, and shed light on the causes and consequences of gender bias at work more generally.

3. Data

This paper uses data drawn from the 2002 General Social Survey (GSS).⁵ This data set is useful for our purposes because it is the only data set of which we are aware that includes detailed questions on overall job satisfaction, a respondent's intentions to quit their current job, and whether respondents have experienced sex discrimination and/or sexual harassment. Furthermore, the GSS also includes detailed demographic and work-environment variables, such as, age, education, region, tenure, hours worked, and occupation. Together these data items allow us to explore whether sexual harassment and sex discrimination are distinct forms of gender-biased behavior and whether the consequences of these gender-biased behaviors are similar in terms of reduced job satisfaction and heightened intentions to leave one's employment.

We restrict the sample to individuals between the ages of 18 and 65 who are employed. The latter restriction is necessary because the questions on job satisfaction, sex discrimination and sexual harassment, which are our outcomes of interest, were only asked of employed individuals. This leaves a final sample of 1,696 observations, with 874 women and 822 males with non-missing values for our variables of interest.

⁵ Ideally we would have liked to use data from all years of the GSS (i.e., 1972-2004), however the GSS only asked questions on job satisfaction, intentions to quit, sex discrimination, and sexual harassment in 2002.

Men and women in the sample were asked whether or not they have experienced sex discrimination. In particular, “Do you feel in any way discriminated against on your job because of your gender?” This question is nearly identical to the question in Kuhn’s (1987; 1990) data. Using this information, we create an indicator variable for sex discrimination which equals one for respondents who reported that they feel that they have been discriminated against due to their gender and zero otherwise. In this case, 11.4 percent of females and 3.3 percent of males indicated that they have been discriminated against due to their gender at work (see Table 1). Men and women were also asked if they experienced sexual harassment. Specifically, “In the last twelve months, were you sexually harassed by anyone while you were on the job?” We create an indicator variable for sexual harassment which equals one for respondents who reported that they have been sexually harassed and zero otherwise. This corresponds to what psychologists often refer to as a self-definition of sexual harassment (Fitzgerald, et al., 1997b). Using this definition, we find that while 7.2 percent of women felt that they had been sexually harassed at work, only 2.7 percent of males felt that they had been sexually harassed.⁶

Table 1 also reveals that of the 49 men who reported any gender bias, only 9 (roughly 18 percent) report both sexual harassment and sex discrimination. The proportion of women reporting both forms of gender bias is even less (i.e., approximately 15 percent). Moreover, the correlation between sex discrimination and sexual harassment, while statistically significant, is relatively low. Specifically, the correlation between these forms of gender bias is 0.27 for both males and females combined, 0.23 for females, and 0.35 for males. Thus, these simple statistics indicate that sexual harassment and sex discrimination are a much more important issue for

⁶ These values can be calculated by tabulating column percentages in Table 1.

working women, as opposed to men. At the same time, there is little evidence that our measures of sexual harassment and sex discrimination capture the same underlying behavior.

Table 1 here

4. The Effect of Gender-biased Behavior on Job Satisfaction and Intentions to Quit

Given that survey respondents appear to differentiate between incidents of sexual harassment and incidents of sex discrimination in the workplace, it is interesting to ask whether these alternative forms of gender bias have similar consequences for workers' job satisfaction and intentions to remain in their current employment. Understanding the effect of gender bias on job satisfaction is important because low job satisfaction is associated with increased absenteeism (Clegg 1983; Böckerman and Ilmakunnas, 2006), higher turnover (see, for example, Freeman, 1978; Clark et al., 1998; 2001; Kristensen and Westergård-Neilsen, 2004), lower worker productivity (Mangione and Quinn 1975), and an increased incidence of mental and physical health problems (see Faragher et al., 2005 for an overview). Gender bias is also likely to be particularly costly for both firms and employees if it results in higher levels of job turnover. Consequently, it is essential to understand the effect that incidents of gender bias have on workers' intentions to leave their jobs.⁷

4.1 Descriptive Analysis

We begin by assessing the unconditional relationship between our measures of gender bias on the one hand and job satisfaction and intentions to quit on the other. Specifically, respondents to the GSS were asked: "On the whole, how satisfied are you with the work you do—would you

⁷ Previous research indicates that workers' intentions to quit are related to future quitting behavior. For example, military personnel's stated intentions regarding reenlistment are highly predictive of actual reenlistment behavior (Chow and Polich, 1980; Rostker, et al., 1993).

say you are very satisfied, moderately satisfied, a little dissatisfied, or very dissatisfied?” Respondents were also asked about their plans for future job changes. In particular, “Taking everything into consideration, how likely is it you will make a genuine effort to find a new job with a different employer within the next year—very likely, somewhat likely, or not likely?” Indicator variables were created for each response to the questions on job satisfaction and intentions to quit.

Overall, job satisfaction amongst GSS respondents is high, with almost one in two men and women reporting that they are very satisfied with their jobs. More than sixty percent of employees report that they are not at all likely to search for new employment in the coming year. Given that women are approximately three times as likely as men to report gender bias on the job (see Table 2), it is striking that there is no evidence of gender differentials in either overall levels of job satisfaction or in intentions to quit.⁸ There do appear to be gender differences in the consequences of gender bias, however. While one third of women who report that they experienced sexual harassment also report that they are very satisfied with their jobs, only 4.5 percent of sexually harassed men reporting being very satisfied in their current employment. Sexually harassed men are also much less likely than sexually harassed women to report that they are not at all likely to attempt to find a new job in the next 12 months. It is interesting that, for both men and women, sex discrimination appears to have a weaker effect on job satisfaction and intentions to quit than does sexual harassment.

Table 2 here

⁸ The one is exception that men are 5 percentage points more likely to report they are somewhat satisfied with their job than are women.

4.2 Regression Analysis

Regression analysis allows us to investigate the relative importance of sexual harassment and sex discrimination in increasing job dissatisfaction and strengthening intentions to quit in more depth. We begin by assuming that reports of gender bias are exogenous to job dissatisfaction and intended job change. This assumption will be considered further below. Suppose J_i^* measures a propensity to report being dissatisfied with ones job, while Q_i^* captures the propensity to report the intention to look for new employment in the coming year. We can then model these propensities as:

$$\begin{aligned} J_i^* &= Z_i\gamma^d + H_i\delta^d + D_i\phi^d + H_iD_i\lambda^d + \eta_i^d \\ Q_i^* &= Z_i\gamma^q + H_i\delta^q + D_i\phi^q + H_iD_i\lambda^q + \eta_i^q \end{aligned} \quad (1)$$

where $\eta_i^d \sim N(0,1)$, $\eta_i^q \sim N(0,1)$, and i indexes individuals. In addition, Z_i is a vector of demographic, human capital, and job characteristics related to job dissatisfaction and the intention to quit ones job.⁹ Finally, H_j and D_j are the measures of sexual harassment and sex discrimination discussed in Section 3. We include an interaction term (H_iD_i) in the model to allow for the possibility that workers reporting both sexual harassment and sex discrimination suffer additional negative consequences from these events. Although the propensity to report job dissatisfaction or an intention to quit are unobserved, we create an indicator variable (D) that equals one for individuals reporting that they are either a little dissatisfied or very dissatisfied with their job, and zero otherwise. We also create an indicator variable (Q) that equals one for individuals who report being either very likely or somewhat likely to find new employment and

⁹ Information about the variables included in Z , including means and standard deviations, are provided in Appendix Table 1.

zero otherwise. The probabilities that an individual reports being dissatisfied with his or her job or to intend to look for new employment are then given by:

$$\begin{aligned} \Pr(J_i = 1) &= \Pr(Z_i\gamma^d + H_i\delta^d + D_i\phi^d + H_iD_i\lambda^d + \eta_i^d > 0) = \Phi(Z_i\gamma^d + H_i\delta^d + D_i\phi^d + H_iD_i\lambda^d) \\ \Pr(Q_i = 1) &= \Pr(Z_i\gamma^q + H_i\delta^q + D_i\phi^q + H_iD_i\lambda^q + \eta_i^q > 0) = \Phi(Z_i\gamma^q + H_i\delta^q + D_i\phi^q + H_iD_i\lambda^q) \end{aligned} \quad (2)$$

where Φ is the standard normal cumulative density function. The estimated probit marginal effects of sexual harassment and sex discrimination on job dissatisfaction and the intention to quit—as well as the associated standard errors and p-values—resulting from these models are reported in Table 3.¹⁰

Table 3 Here

Our results indicate that both men and women who experience sex discrimination are significantly more likely to be dissatisfied with their jobs. In particular, men who report that they experienced sex discrimination at work are 18.5 percentage points more likely than men experiencing no gender bias to be dissatisfied with their jobs, while similar women are 9.8 percentage points more likely to be dissatisfied. Given that only approximately one in ten workers in our sample overall reports being dissatisfied with their job, these are particularly large effects—especially for men. Sex discrimination is also associated with a higher probability (11.2 percentage points) that women intend to seek new employment. This effect, however, is relatively small in comparison to the more than 40 percent of women in the sample who are somewhat or very likely to look for new employment. Moreover, there is no significant relationship between sex discrimination and men’s intended job changes.

Incidents of sexual harassment are also positively related to the propensity to report job dissatisfaction, although this relationship is estimated somewhat less precisely. Men and women

¹⁰ The indicator variables capturing self-employment (n=2) or employment in the government sector (n=20) are set to zero when the underlying variable is missing. Job tenure is replaced with mean job tenure for two women who had missing values for this variable.

reporting that they experienced sexual harassment on the job are 16.1 and 10.2 percentage points more likely to say that they are dissatisfied with their current employment, respectively. The magnitude of this effect is strikingly similar to that associated with experiencing sex discrimination on the propensity to report job dissatisfaction. Although self-reported sexual harassment is associated with a slightly higher probability that women report that they intend to make a job change, this relationship is not significant. In contrast, men who report experiencing sexual harassment are 29.3 percentage points (75 percent) more likely to intend to leave their current job. On balance, gender bias seems more strongly related to job dissatisfaction than to the intention to quit.

There are no significant interactions between our two measures of gender bias. This is interesting, because reporting both sex discrimination and sexual harassment might be taken as evidence that a worker's experience of gender bias was particularly severe. Women, for example, who report experiencing both sexual harassment and sex discrimination are only slightly more likely (2.5 percentage points) to be dissatisfied with their jobs than women reporting only one form of gender bias. To some extent, the lack of a significant interaction may reflect the lack of precision with which we estimate this effect, especially for men. At the same time, it may be the case that it is incidents of gender bias generally, rather than their specific form or intensity, which are most closely related to job dissatisfaction. The intention to quit appears to be more sensitive to the form of gender bias with women reacting more strongly to sex discrimination and men reacting more strongly to sexual harassment. Moreover, the magnitude of the interaction effect is particularly large for men, suggesting that perhaps for them the intensity of gender bias is related to future career plans. Unfortunately, given our small sample sizes, we cannot estimate this effect precisely enough to be sure.

Other worker and job characteristics are related to job dissatisfaction and the intention to quit as expected. In particular, blacks are more likely to be planning to look for a new job, while black men are also much more likely (7.4 percentage points) to be dissatisfied with their current employment. Job dissatisfaction is higher amongst foreign-born workers and male immigrants are significantly more likely than their native-born counterparts to be planning a job change. In general, marital status and family structure are unrelated to either job dissatisfaction or intended job changes. The exception is that married women are significantly less likely than single women to intend to find new work, while men report less job dissatisfaction as the number of children they have increases.

Interestingly, the intention to change jobs is unrelated to a workers' educational level, despite the fact that job dissatisfaction is significantly higher amongst those workers not completing high school. In particular, women with a high school degree are 66.3 percent (8.1 percentage points) less likely to report being dissatisfied with their jobs than are women without a high school degree. Perhaps not surprisingly, individuals working full time are significantly less likely to indicate that they intend to seek new employment, while men working full-time report less job dissatisfaction. Finally, job satisfaction and the intention to quit are both related to the labor market sector. In particular, self-employed women report less job satisfaction, while men employed by the government are significantly less likely to be seeking new employment.

4.3 The Potential Endogeneity of Reported Sexual Harassment and Sex discrimination

Consistent with the most of the previous literature, our empirical strategy assumes that reports of gender bias are exogenous to reports of job satisfaction and intentions to quit. However, this may not be the case. As Antecol and Cobb-Clark (2006) note, heterogeneity in workers'

perceptions of, tolerance towards, or willingness to report unpleasant events in the workplace can potentially affect both reports of gender bias and satisfaction with (intentions to remain in) ones current job. The effect that this omitted variables problem would have on our estimates depends on the relationship between the underlying variables. If having a positive disposition or a high degree of tolerance for negative job situations reduces both the propensity to both report gender bias and job dissatisfaction then our estimates of the effect of gender bias on the probability of being dissatisfied are overstated (Antecol and Cobb-Clark, 2006). The primary approach to dealing with this problem has been the use of multivariate probit models that rely on exclusion restrictions for identification (see Shields and Wheatly Price, 2002; Antecol and Cobb-Clark, 2005, 2006). Unfortunately, our GSS data are not sufficiently detailed to provide us with sensible exclusion restrictions for estimating such a model. Consequently, we have maintained the assumption that reported incidents of gender bias are exogenous and suggest that our estimates are best thought of as upper bounds on the true effect of gender bias on job dissatisfaction and intentions to quit. To the extent that the degree and direction of omitted variable bias is similar for our two measures of gender bias, our conclusions regarding their relative effects on job dissatisfaction and the intention to quit would remain substantially the same.

5. Conclusions and Suggested Directions for Future Research

Despite the decades that have passed since Equal Opportunity legislation was first passed, gender bias persists in many workplaces. The complex, ill-defined nature of sex discrimination and sexual harassment, however, have made it difficult to develop a fuller understanding of the ways in which gender bias might affect workers' experiences, relationships and opportunities while on

the job. This paper adds to the very limited empirical evidence on this issue by using General Social Survey (GSS) data to explore the links between workers' perceptions of two gender-biased behaviors—sexual harassment and sex discrimination. Our objective has been to begin to understand the extent to which these forms of gender bias might be related and to consider the type of future data collections—and ultimately conceptual frameworks—that are likely to be the most useful in capturing the complexities of gender bias at work.

While far from perfect, the GSS provides the only data of which we are aware that separately identify incidents of sexual harassment and incidents of sex discrimination. Still, our results give us reason to be optimistic about the potential for using surveys to enhance our understanding of the ways in which gender bias intrudes on men's and women's working lives. When asked directly, men and women in the GSS do appear to discriminate between incidents of sex discrimination and incidents of sexual harassment. This is important because these events appear to have distinct effects on men's and women's satisfaction with and intentions to remain in their current jobs. In particular, both are linked to a substantially higher degree of job dissatisfaction, especially amongst men. Women experiencing sex discrimination are somewhat more likely to intend to look for new work, though men's future job changes are much more closely linked to incidents of sexual harassment. To the extent that reporting both sex discrimination and sexual harassment provides information about the intensity of gender bias a worker has experienced, it would seem that it is incidents—rather than the intensity—of gender bias that is important for understanding job dissatisfaction and the intention to quit.

At the same time, there is a great deal that the GSS cannot tell us. Specifically, the GSS restricts us to analyzing what psychologists refer to as a “self-definition” of sexual harassment (see Fitzgerald, et al., 1997b). While it is certainly important to understand what drives workers'

beliefs about whether they have been harassed given that the legal system relies on a reasonable victim standard to make determinations in sexual harassment cases (Prior, et al., 1997; Fitzgerald and Shullman, 1993), this is by no means the only definition of sexual harassment that is relevant. Psychologists have made compelling arguments that sexual harassment as a legal concept should be distinguished from the psychological experience (see Fitzgerald, et al., 1997b)—the consequences of which do not necessarily depend on workers’ being prepared to label their experiences as sexual harassment (see, Marin and Guadagno, 1999; Magley, et al., 1999; Munson, et al., 2001). Thus, it is imperative to collect information about the totality of workers’ experiences of unwanted sex-related behavior at work.¹¹ Moreover, sociological notions of sexual harassment often rest on the abuse of power or economic intimidation (Skaine, 1996). Consequently, evaluation of the sociology of sexual harassment requires detailed data on the social power structure within organizations. Developing richer surveys that allow for alternative notions of sexual harassment and sex discrimination to be identified is likely to be an important next step in deepening our understanding of gender bias in the workplace.

Moreover, the GSS data are not sufficiently detailed to provide us with sensible exclusion restrictions or instruments that would allow us to account for the potential endogeneity of reported sex discrimination and sexual harassment. Thus, in this paper we have been left to speculate about the role that omitted variable bias might play in estimating the causal effect of gender bias on employment outcomes such as job dissatisfaction and the intention to quit ones job. Economists’ strong preference for the identification of causal relationships rather than associations is likely to continue to limit their engagement in the study of sexual harassment

¹¹ In fact, Fitzgerald et al. (1999) argue that as it is impossible to determine who would meet legal criteria without a judicial review, a legal definition would be impractical for most research and policy purposes. Definitions based upon the filing of a complaint are also flawed because sexual harassment often goes unreported. See Arvey and Cavanaugh (1995) and Fitzgerald, et al. (1999) who discuss some of the issues in measuring sexual harassment.

unless survey instruments are developed that would collect data suitable for econometric modeling. Panel data would be particularly useful in isolating the effects of individual heterogeneity and in understanding the consequences of gender bias on subsequent employment outcomes. Moreover, some economists have recently begun advocating the use of anchoring vignettes as a method of correcting for the possibility that different groups may systematically use different response scales when answering questions about subjective outcomes (Kapteyn et al., 2007; van Soest et al., 2006; 2007). By providing anchors (or benchmarks), this approach is likely to prove very useful in furthering our understanding of the ways in which both the scope and severity of employment-related gender bias vary across different groups of workers.

There are certainly many challenges ahead of us in our efforts to quantify gender bias in its various guises. We believe, however, that such efforts will be important in paving the way for the development of a multidisciplinary, conceptual framework that explicitly considers sexual harassment and sex discrimination as alternative forms of gender bias and considers the links between them. A modeling strategy that incorporates the insights from psychology and sociology into economic models of labor market behavior would seem to be particularly promising. We are of course not the first economists to call for a multi-disciplinary approach to understanding complex social behavior. A number of others have made similar arguments with respect to the importance of evolutionary psychology in understanding market behavior (Cosmides and Tooby, 1994) and social psychology in understanding implicit (or unintentional) discrimination (Bertrand, et al., 2005). However, the complex, ill-defined nature of gender bias makes it difficult to imagine proceeding in any other way.

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**Table 1. Cross-Tabulations of Sexual Harassment and Gender Discrimination by Gender
(Frequency and Row Percentages)**

Panel A: Men			
Sexual Harassment	Gender Discrimination		
	Not Reported	Reported	Total
Not Reported	782	18	800
	97.75	2.25	100.00
Reported	13	9	22
	59.09	40.91	100.00
Total	795	27	822
	96.72	3.28	100.00
Panel B: Women			
Sexual Harassment	Gender Discrimination		
	Not Reported	Reported	Total
Not Reported	735	76	811
	90.63	9.37	100.00
Reported	39	24	63
	61.90	38.10	100.00
Total	774	100	874
	88.56	11.44	100.00

Table 2. Reports of Sexual Harassment, Gender Discrimination, Job Satisfaction, and Intentions to Find New Job

Panel A: Men								
	Reports of Behavior	Job Satisfaction				Intentions to Find New Job		
		Very Satisfied	Somewhat Satisfied	Not Too Satisfied	Not At All Satisfied	Very Likely	Somewhat Likely	Not At All Likely
		0.466 (0.499)	0.429 (0.495)	0.073 (0.260)	0.032 (0.175)	0.182 (0.386)	0.206 (0.404)	0.612 (0.488)
Sexual Harassment	0.027 (0.161)	0.045 (0.213)	0.591 (0.503)	0.182 (0.395)	0.182 (0.395)	0.500 (0.512)	0.273 (0.456)	0.227 (0.429)
Gender Discrimination	0.033 (0.178)	0.333 (0.480)	0.333 (0.480)	0.222 (0.424)	0.111 (0.320)	0.259 (0.447)	0.222 (0.424)	0.519 (0.509)
Panel B: Women								
	Reports of Behavior	Job Satisfaction				Intentions to Find New Job		
		Very Satisfied	Somewhat Satisfied	Not Too Satisfied	Not At All Satisfied	Very Likely	Somewhat Likely	Not At All Likely
		0.499 (0.500)	0.380 (0.486)	0.085 (0.279)	0.037 (0.188)	0.196 (0.397)	0.205 (0.404)	0.600 (0.490)
Sexual Harassment	0.072 (0.259)	0.333 (0.475)	0.365 (0.485)	0.175 (0.383)	0.127 (0.336)	0.381 (0.490)	0.159 (0.368)	0.460 (0.502)
Gender Discrimination	0.114 (0.318)	0.310 (0.465)	0.450 (0.500)	0.150 (0.359)	0.090 (0.288)	0.260 (0.441)	0.220 (0.416)	0.520 (0.502)

Number of observations are 822 and 874 men and women, respectively.

**Table 3. Determinants of Job Dissatisfaction and Intentions to Find a New Job
(Probit Marginal Effects)**

	Job Dissatisfaction		Intentions to Find New Job	
	Male	Female	Male	Female
Sexual Harassment (H)	0.161 (0.122)	0.102 (0.066)	0.293 (0.145)	0.066 (0.086)
Gender Discrimination (D)	0.185 (0.113)	0.098 (0.049)	-0.139 (0.102)	0.112 (0.065)
H*D	-0.036 (0.064)	0.025 (0.082)	0.366 (0.249)	0.040 (0.149)
Race				
Black	0.074 (0.039)	-0.009 (0.027)	0.151 (0.059)	0.158 (0.052)
Other	0.016 (0.042)	0.018 (0.047)	0.120 (0.079)	0.105 (0.077)
Immigrant	0.107 (0.049)	0.066 (0.044)	0.155 (0.067)	0.099 (0.063)
Age	-0.002 (0.001)	-0.001 (0.001)	-0.007 (0.002)	-0.005 (0.002)
Marital Status				
Married	0.020 (0.026)	-0.041 (0.027)	0.011 (0.050)	-0.097 (0.048)
Separated/Divorced/Widowed	0.034 (0.036)	0.007 (0.031)	0.055 (0.061)	-0.022 (0.054)
Number of Children Ever Had	-0.016 (0.008)	0.001 (0.009)	-0.004 (0.016)	-0.001 (0.015)
Education				
High School	-0.030 (0.030)	-0.081 (0.036)	-0.001 (0.062)	0.017 (0.066)
Associate/Junior College	-0.039 (0.029)	-0.075 (0.024)	0.023 (0.085)	-0.048 (0.082)
Bachelor's	-0.072 (0.022)	-0.048 (0.031)	0.062 (0.075)	0.014 (0.076)
Graduate	-0.070 (0.020)	-0.085 (0.022)	-0.095 (0.079)	-0.030 (0.089)
Full-Time	-0.074 (0.041)	-0.019 (0.026)	-0.135 (0.059)	-0.113 (0.043)
Self-Employed	-0.022 (0.026)	-0.074 (0.023)	-0.079 (0.053)	-0.117 (0.055)
Government Employee	0.001 (0.029)	-0.013 (0.027)	-0.130 (0.049)	-0.024 (0.049)
Job Tenure	-0.000 (0.002)	-0.002 (0.002)	-0.013 (0.003)	-0.018 (0.003)
Observations	822	874	822	874

Probit also includes indicator variables for region and SMSA.

Appendix Table 1. Sample Means by Gender

	Male		Female	
	Mean	St. Dev.	Mean	St. Dev.
Race				
White	0.810	0.392	0.762	0.426
Black	0.123	0.328	0.175	0.380
Other	0.067	0.250	0.063	0.243
Immigrant	0.097	0.297	0.101	0.301
Age	39.917	11.668	40.222	11.904
Marital Status				
Married	0.505	0.500	0.454	0.498
Separated/Divorced/Widowed	0.190	0.392	0.265	0.442
Single	0.305	0.461	0.280	0.449
Number of Children Ever Had	1.347	1.420	1.645	1.405
Education				
Less Than High School	0.103	0.305	0.082	0.275
High School	0.536	0.499	0.540	0.499
Associate/Junior College	0.084	0.277	0.095	0.293
Bachelor's	0.180	0.384	0.191	0.393
Graduate	0.096	0.295	0.092	0.289
Full-Time	0.882	0.323	0.749	0.434
Self-Employed*	0.140	0.347	0.112	0.316
Government Employee*	0.144	0.351	0.183	0.387
Job Tenure*	7.091	8.409	6.437	7.746
Region				
New England	0.060	0.237	0.059	0.237
Mid Atlantic	0.153	0.360	0.143	0.350
East North Central	0.163	0.370	0.161	0.368
West North Central	0.083	0.276	0.087	0.282
South Atlantic	0.189	0.391	0.190	0.392
East South Central	0.069	0.254	0.069	0.253
West South Central	0.090	0.286	0.093	0.290
Mountain	0.058	0.235	0.068	0.251
Pacific	0.135	0.342	0.130	0.337
SMSA	0.745	0.436	0.739	0.439
Number of Observations	822		874	

*Missing values coded as zero for self-employed (n=2) and government employee (n=20), respectively. Job tenure is replaced with mean job tenure for two women who had missing values for this variable.