WOMEN IN POWER:

Undoing or Redoing the Gendered Organization?

KEVIN STAINBACK
Purdue University, USA
SIBYL KLEINER
University of Calgary, CANADA
SHERYL SKAGGS
University of Texas–Dallas, USA

A growing literature examines the organizational factors that promote women’s access to positions of organizational power. Fewer studies, however, explore the implications of women in leadership positions for the opportunities and experiences of subordinates. Do women leaders serve to undo the gendered organization? In other words, is women’s greater representation in leadership positions associated with less gender segregation at lower organizational levels? We explore this question by drawing on Cohen and Huffman’s (2007) conceptual framework of women leaders as either “change agents” or “cogs in the machine” and analyze a unique multilevel data set of workplaces nested within Fortune 1000 firms. Our findings generally support the “agents of change” perspective. Women’s representation among corporate boards of directors, corporate executives, and workplace managers is associated with less workplace gender segregation. Hence, it appears that women’s access to organizational power helps to undo the gendered organization.

Keywords: gendered organizations; segregation; workplace; leadership; management

AUTHORS’ NOTE: The authors would like to thank Adia Harvey-Wingfield, Joya Misra, and anonymous reviewers for their comments and suggestions on previous drafts of this manuscript. This research was presented at the 2014 Annual Meeting of the American Sociological Association, San Francisco, CA. This research was supported by a collaborative grant from the National Science Foundation (SES-1061243 and SES-1061430). Correspondence concerning this article should be addressed to Kevin Stainback, Department of Sociology, Purdue University, 700 W. State Street, West Lafayette, IN 47907-2059; e-mail: stainback@purdue.edu.
Gender, organizations, and inequality scholars have long been interested in understanding the barriers women face in gaining access to positions of organizational power. The glass ceiling metaphor has been invoked to describe the largely invisible processes that continue to restrict women’s access to these positions. These processes of exclusion are critical to understanding the creation of “gendered organizations,” the perpetuation of “inequality regimes” (Acker 1990, 2006), and the broader maintenance of gender as a social structure (Martin 2004; Risman 2004). But what happens when women break the glass ceiling? Do women in powerful positions aid in undoing the gendered organization?

Twenty-five years ago, Joan Acker (1990) theorized that organizations are not merely gender-neutral sites where gender inequality is reconstituted, but that organizations themselves are gendered, reflecting and reproducing male advantage. Hence, all aspects of organizations, including rules, procedures, and hierarchies, while seemingly free of gender, actually reflect longstanding distinctions between men and women, masculinity and femininity, and power and domination in ways that aid in the reproduction and maintenance of gender inequality. Acker’s (1990) work helps explain the persistence of gender-linked inequality at work, yet it does not explain how change is possible. Identifying conditions that may assist in undoing the gendered organization remains an important piece in understanding how inequality regimes are dissolved (Britton 2000).

Following Britton (2000), we ask, what organizational characteristics might aid in undoing the gendered organization? In particular, how does women’s representation in high-level positions (i.e., corporate directors and executives, workplace managers) affect gender segregation—a key characteristic of gendered organizations—at lower levels of the organization? Although women continue to be underrepresented in managerial positions, some research suggests that when women are able to gain access to managerial and supervisory positions, they may gain greater power to reduce gender inequality among employees at lower organizational levels (Cotter et al. 1997; Ely 1995; Nelson and Bridges 1999). Women tend to occupy lower structural positions that reinforce the gender order (Martin 2003) and reproduce gender norms and expectations through day-to-day interactions (West and Zimmerman 1987). Their presence in leadership positions, on the other hand, may allow them to “rock the boat” and “disrupt the gender order” (Martin 2003). Women’s gains in access to these positions may very well challenge gendered ways of thinking and doing. It is possible, however, that even when women gain access to these authority positions, they have limited ability to influence inequality at levels below
them, either because they continue to be “willing to do gender in expected ways” (Martin 2003), or because their power to effect change is constrained by the strength of existing organizational and institutional norms (Acker 1990, 2006; also see Berrey 2014).

Although an extensive literature examines women’s access—or blocked access—to positions of power and authority (Baxter and Wright 2000; Hirsh 2009; Kalev, Dobbin, and Kelly 2006; Reskin and McBrier 2000), less attention has been devoted to examining gender segregation in work environments where women have greater representation in potentially powerful positions. In this article, we contribute to a growing stream of research examining the influence of women in top organizational positions on gender inequality among subordinates (e.g., Cohen and Huffman 2007; Huffman 2013; Huffman, Cohen, and Pearlman 2010).

Specifically, we study the influence of women’s representation in leadership positions on workplace gender segregation among nonmanagerial workers. We examine two distinct organizational levels simultaneously—the firm (corporation) and the establishment (workplace). Specifically, we investigate the potential relationship between nonmanagerial gender segregation and women’s representation in corporate board of director positions, corporate executive jobs, and workplace-level managerial positions. These leadership positions span the hierarchy between a firm’s corporate headquarters (e.g., Chase Bank) and corresponding corporate-owned establishments (e.g., individual Chase Bank branch locations). Using a unique multilevel sample of more than 5,500 work establishments nested within 81 Fortune 1000 firms, we test whether women’s representation at these two levels of analysis relate to gender segregation. Additionally, we also examine whether the association between women’s managerial representation and gender segregation among subordinates varies by women’s representation at the top of the corporate hierarchy.

THE SIGNIFICANCE OF WORKPLACE GENDER SEGREGATION

Gender segregation remains widespread in U.S. workplaces (Stainback and Tomaskovic-Devey 2012), perpetuated by a complex host of processes, such as in-group preference (Kanter 1977) and hegemonic gender beliefs about the relative abilities and skills of women and men (Gorman and Kmec 2009; Ridgeway and Correll 2004). These status beliefs result in lowered expectations for women, and a devaluing of women’s performance, even
when it is equal to men’s (Gorman and Kmec 2007; Ridgeway 2011). This tends to contribute to bias processes (in-group preferencing, stereotyping) and out-group exclusion, keeping women out of “male” (higher-status) jobs and occupations (Reskin 2003; Stainback, Tomaskovic-Devey, and Skaggs 2010). Although we do not examine these mechanisms in our study, they are important theoretically, as they highlight how discriminatory processes uphold gender segregation.

Numerous studies have established that gender segregation reduces women’s status in the workplace. When women dominate particular jobs and occupations, there is a financial devaluing of the position, regardless of the human capital it requires or the job’s utility to society (e.g., Mandel 2013; Tomaskovic-Devey 1993). This devaluing associated with segregation is large enough that the gender pay gap could be substantially reduced, and, according to Petersen and Morgan (1995), practically eliminated, if jobs became fully integrated.

The gender composition of jobs is also associated with the likelihood of experiencing gender-linked discrimination and harassment (Chamberlain et al. 2008; Stainback, Ratliff, and Roscigno 2011), as well as the likelihood of receiving work-related support from coworkers (Taylor 2010). Previous research shows that gender-integrated work settings tend to provide less discriminatory and more supportive environments for women. In contrast, highly segregated workplaces are experienced more negatively. For all of the reasons highlighted above, social, economic, and experiential, uncovering the factors that may promote integration is essential for undoing the “gendered organization.”

GENDER AND ORGANIZATIONAL POWER

Gender is a persistent system that produces, essentializes, and highlights differences between women and men, deeply embedding hierarchical power dynamics within societal institutions (Ridgeway 2011; Risman 2004; Scott 1986). Gender is interwoven within the very structure of work organizations (Acker 1990), and this is reflected in not only the gender segregation of workplaces but also the overrepresentation of men in positions of organizational decision making. This pertinacious structural arrangement is believed to be a strong barrier to generating equal opportunity (Cotter et al. 1997; Kanter 1977; Nelson and Bridges 1999). If women shared more equally in organizational power, perhaps this might subvert hegemonic status beliefs and reduce gender-linked workplace inequality among subordinates.
A small but rapidly expanding literature examines the influence of women in leadership positions on gender inequality among subordinates. These studies have examined how the share of women in leadership relates to the gender wage gap (Cohen and Huffman 2007; Hultin and Szulkin 1999, 2003; Penner and Toro-Tulla 2010; Penner, Toro-Tulla, and Huffman 2012), women’s access to authority positions (Cohen, Broschak, and Haveman 1998; Skaggs, Stainback, and Duncan 2012), equitable hiring (Gorman 2005; Gorman and Kmec 2009), the provision of career-related support (Maume 2011), harassment and discrimination experiences (Stainback, Ratliff, and Roscigno 2011), and gender segregation (Huffman, Cohen, and Pearlman 2010). Interestingly, these studies have mixed results. Most find an ameliorating effect of women leaders on gender inequalities, but a few (e.g., see, Penner and Toro-Tulla 2010; Penner, Toro-Tulla, and Huffman 2012) report null findings, while others have shown that inequality outcomes may be heightened under women leaders (Maume 2011).

In this article, we utilize Cohen and Huffman’s (2007) conceptualization of women leaders as either “change agents” or “cogs in the machine” to examine competing theoretical expectations regarding the association between women in leadership positions and gender segregation. We specifically ask if women’s representation in more powerful decision-making jobs simply re-creates gendered organizations by maintaining the status quo or if they function as “agents of change” by challenging inequality regimes and reducing gender segregation below. Although our study cannot test the precise mechanisms by which women or men might effect change, we describe these mechanisms to flesh out the prior theoretical and empirical literature upon which our study builds.

**Women Leaders as “Change Agents”**

A number of theories suggest that women in positions of organizational power may erode gender-linked inequality among subordinates. Chief among these explanations is the erosion of the causal influence of in-group preference on hiring and promotion decisions. Kanter’s (1977) pioneering study *Men and Women of the Corporation* revealed that men in high-level corporate positions tended to hire other men into high-level management positions, a process she called homosocial reproduction. Increasing women’s representation in these decision-making positions may benefit women in part because women decision makers may also engage in in-group preferencing. Similarly, social closure perspectives, which tend to emphasize conscious exclusionary practices, would also
suggest that women’s greater presence in leadership positions would reduce gender inequality (e.g., Reskin 1988; Tomaskovic-Devey 1993). Whereas including only one or two “token” women in leadership positions constrains their level of influence (Kanter 1977), larger numbers of women leaders would be expected to increase their relative power compared to male decision makers and allow them to have greater claims on organizational resources. Gender equality with regard to hiring, promotion, and retention is expected to be greater when more women are present in decision-making positions (e.g., see Gorman 2005). Therefore, more women in leadership positions may be associated with lower gender segregation.

Women’s representation in positions of organizational power may also provide enhanced social networking and mentoring opportunities that could further women’s career prospects (Ibarra 1993; Konrad, Kramer, and Erkut 2008), again resulting in lower gender segregation. Others have suggested that women’s representation among leadership positions reduces gender-linked stereotypes about women’s abilities throughout the organization (Ely 1995). Such an effect could have far-reaching implications for better integrating workplaces, by affecting the judgments and practices of organizational decision makers, both women and men.

Women Leaders as “Cogs in the Machine”

The interactional dynamics previously mentioned—including in-group preference, out-group exclusion, networking and mentoring opportunities, and the withering of gender-linked stereotypes—all suggest that women in positions of organizational power should promote gender equality in the workplace. Other research cautions that these processes may not offer symmetrical effects for men and women. Because the system of gender is laden with power dynamics that benefit men, it may not be the case that women leaders are able to promote the interests of other women. The strategies for change known or available to women in power may not be effective, particularly in this context of organizational inertia and traditional male dominance (for the example of academia, see Brink and Benschop 2012).

Under hegemonic systems, even the disadvantaged tend to adopt the perspective of those in power. Women, too, may be more likely to hold lowered expectations for themselves and for other women, and devalue their own performance, as well as the performance of other women. Some previous research suggests that the gender system and organizational cultures that embody it may influence women leaders to maintain the status
quo or even worsen women’s workplace opportunities (Maume 2011; Penner and Toro-Tulla 2010). Maume, for example, suggests that women in leadership positions “are either not powerful enough to affect the careers of their subordinates or they have been selected to their managerial positions because they identify with powerful men at the apex of firms, a selection process that comes at the expense of female subordinates” (Maume 2011, 289). In addition, because stereotypes about job tasks and responsibilities often make women’s advancement more difficult, women who have reached the highest levels may be inclined to distance themselves from subordinate women workers, particularly when it comes to issues related to gender equality (e.g., work and family leave, child care benefits, fair training opportunities, etc.), and/or avoid outward support of other women’s advancement (see Rhoton 2011). It is also a possibility that women leaders may not know the best strategies to promote gender equity, even if they had the power and desire to address gender inequality. For these reasons, we might expect to find that women’s representation either has no effect on or is associated with greater gender segregation.

The Question of Hierarchy

Few studies have examined the influence of women at different levels of organizational power on gender inequality, yet there may be strong distinctions between women’s ability to effect change, depending on their hierarchical position (e.g., see Cohen and Huffman 2007). Women who gain access to power at top corporate levels are likely to be exceptional. They have encountered, and resisted, numerous gender stereotypes to achieve their positions and may be particularly well-equipped to effect change as their numbers grow. Research shows that women at the upper echelons have the potential to influence inequality, both indirectly and directly. Indirect change, disconnected from conscious action, may come about as women’s representation in higher-level positions reduces gender stereotypes throughout the organization (Ely 1995). More direct action may come in the form of setting broad policy (Hultin and Szulkin 2003) or consciously acting to promote the opportunities for women. Cohen and Huffman’s (2007) research using industry-occupation cells to approximate jobs suggest that women’s access to higher levels of organizational power may be particularly important for reducing gender-linked inequality.

This suggests that the decision-making power and overall influence of women at the highest ranks can have a positive impact on the gender structure of jobs and occupations across corporately linked workplaces.
To our knowledge, only Skaggs, Stainback, and Duncan (2012) explore the relationship between women among the corporate elite and gender inequality. They found that having a greater share of women on corporate boards was associated with greater women’s representation in lower-level managerial positions.

Women who fill leadership positions in specific workplace locations (i.e., managers) are likely to have power over the allocation of local organizational resources, making decisions about who to hire or promote, when to give an employee a raise, and who to retain or dismiss (Hultin and Szulkin 1999, 2003). However, this opportunity to effect change at the local level may depend in part on opportunities higher in the organizational hierarchy. As previous research suggests, corporate women leaders may reduce gender-linked inequality in organizations because their presence may reduce stereotypes that influence decision making (Ely 1995), they may help implement broad policies that lower-level women managers can draw on to equalize workplaces (Hultin and Szulkin 1999, 2003), or they may actively work to promote women’s opportunities (e.g., mentoring). For this reason, we also suspect that the negative association of women’s representation in workplace-level managerial positions with gender segregation is stronger in organizations with a greater percentage of women in the corporate structure.

METHODS

Data for this project were collected using three sources, including the U.S. Securities and Exchange Commission (SEC), Fortune magazine, and the Equal Employment Opportunity Commission’s (EEOC) EEO-1 reports. The first two data sources allowed us to identify Fortune 1000 firms and provide organizational characteristics measured at the firm (corporate) level, while the EEOC data provide establishment-level (specific workplace location) information. Combining these unique data allows for nesting specific workplace locations within their firm context.

We used the U.S. Securities and Exchange Commission (SEC) EDGAR electronic filings database (http://www.secinfo.com) and conducted Internet searches of corporate websites to identify Texas-headquartered Fortune 1000 companies for the year 2005. Given the labor-intensive nature of such data collection, we elected to pursue a convenience sample. We selected Texas given that one of the authors was located in Texas and had a working knowledge of these firms. We limited our study to
Texas-based firms that provide a sound starting point to address the issues outlined in this article.

_Fortune_ produces the annual list of America’s top companies and consists of firms ranked by corporate revenues. Eligible companies must be incorporated within the United States and make revenues publicly available. In 2005, a total of 89 of the _Fortune_ 1000 firms were based in Texas. Through these searches, we also collected corporate-level data, including the gender composition of executive officers and corporate board of directors, as well as year of the firm’s founding.

After identifying and obtaining the firm-level data based on corporations headquartered in the state of Texas, we then extracted all affiliated establishments (physical workplace locations across all U.S. states) associated with these firms from 2005 EEO-1 information reports. This yielded 86 Texas-based firms and 5,730 workplaces across the United States. These data, collected annually by the U.S. EEOC, contain employment counts of men and women distributed across nine occupational categories at the workplace level.\(^2\) Annually, private employers with 100 or more employees or federal contractors with 50 or more employees (or first-tier federal subcontractors involving agreements worth $50,000) are required to provide these reports. Firms do not include data for temporary or casual employees, but do include information for leased and part-time employees.\(^3\) The final sample used in the analyses yielded 5,679 workplaces and 81 firms.\(^4\)

A key strength of this data set compared to those used in previous studies is the ability to nest establishments (workplace locations) within their firm (corporate) context, allowing for an examination of the effects of women’s representation within the corporate elite, as well as their influence at the more proximate interactional environment—the workplace. Hence, it is possible to examine both establishment-level (e.g., gender composition of management) and firm-level characteristics (percentage women corporate directors and executives). While our sample is based on Texas-headquartered _Fortune_ 1000 firms, their associated establishments/workplaces are located throughout the United States.

The data offer a unique opportunity to examine multilevel associations; however, they also present some limitations. For example, we cannot generalize beyond Texas-based _Fortune_ 1000 firms. We suspect that _Fortune_ firms are likely to create an institutional environment that shapes organizational behavior much like previous research has shown for industries (McTague, Stainback, and Tomaskovic-Devey 2009) and legal environments (Hirsh 2009; Skaggs 2008). Future research will need to further
examine *Fortune* firms headquartered in other U.S. states to determine whether the results presented here are similar to other *Fortune* firms. In addition, the data do not permit us to observe specific organizational hiring and promotion policies and practices or individual-level skills and experience, both of which may play a role in the sorting of women and men into jobs (e.g., see Madden 2012). Hence, skill-based explanations for gender segregation cannot be addressed in this article.

Our dependent variable is establishment-level (referred to interchangeably as workplace-level) gender segregation. We measure segregation using the index of dissimilarity (D). Because we are interested in estimating the effect of women corporate directors and executives, along with establishment-level managers, on the gender segregation of nonmanagerial workers, the index is computed within workplaces across the eight nonmanagerial occupational categories (also see Huffman, Cohen, and Pearlman 2010). The nonmanagerial occupational categories include professionals, technicians, sales workers, office and clerical workers, craft workers, operatives, laborers, and service workers. The index of dissimilarity is calculated as follows:

\[
\frac{1}{2} \sum_{i=1}^{8} |M_i - W_i| \times 100
\]

where \( M_i \) and \( W_i \) are the proportion of men and women in the \( i \)th occupation-workplace category, respectively. These eight occupational gender distributions are then summed within each establishment. The index ranges from 0 (complete integration) to 100 (total segregation). The index can be interpreted as the percentage of women or men that would have to change jobs to create a gender-integrated workforce. Hence, negative coefficients indicate factors that are associated with lower levels of gender segregation, and positive coefficients indicate the factors associated with higher levels of gender segregation. Following Stainback and Tomaskovic-Devey (2012), we adjust the observed gender segregation index prior to estimating our models using the Gibbs-Martin heterogeneity index (see online Appendix A for details).

Theoretically, we expect that women in managerial positions within the workplace may reduce gender segregation. Thus, we include percentage women managers in our models. We measure women managers as a percentage of total managers who are women within the establishment/workplace. Because previous research has demonstrated nonlinear associations between women in managerial positions and gender inequality
(e.g., Cohen and Huffman 2007; Huffman, Cohen, and Pearlman 2010), we also test for potential nonlinear effects by including a quadratic term (percentage women managers, squared).

Much of the organizational literature on inequality suggests that internal practices are often a product of size (total number of employees at the workplace level). As size increases, so too does the propensity for organizations to have formalized human resource management (HRM) structures, which tend to reduce capricious decision making among organizational actors (but see Huffman and Velasco 1997). Studies of gender segregation conducted at the workplace level conclusively find lower segregation in larger workplaces (e.g., Baron, Mittman, and Newman 1991; Huffman, Cohen, and Pearlman 2010; Tomaskovic-Devey et al. 2006). To account for variation based on workplace size, we include a variable measured as the natural logarithm of total establishment employment.

At the firm, or corporate, level (level-2), we include a measure of the percentage of women on a firm’s board of directors. Data for this measure were obtained through corporate websites and SEC filings. To capture the influence of women in top corporate leadership positions on workplace gender segregation, we include a similar measure of the percentage of women in executive positions. The data were obtained from corporate websites. As with women board members, we anticipate that the ability of women executives to increase women’s managerial representation will follow their greater representation in these top positions. Based on previous research examining women in leadership positions on gender inequality (Cohen and Huffman 2007; Huffman, Cohen, and Pearlman 2010), we also estimate quadratic terms for both women’s corporate board and executive role representation.

Firm age was computed by subtracting the founding year from the study year (2005). Data for this measure were obtained from corporate websites or through general Internet searches of company information. Following the work of Baron, Mittman, and Newman (1991), we anticipate that younger firms will be associated with decreased gender segregation among the nonmanagerial workforce.

We include the firm’s 2005 Fortune 1000 ranking as an indicator of public firm visibility. The Fortune 1000 list contains the largest U.S. companies based on annual revenues and ranges from 1 (greatest revenue) to 1000 (least revenue). We utilize this measure of financial visibility for two important reasons. First, it provides consistency with the method used by Fortune in establishing corporate rankings. Second, while some firms may have a relatively small number of employees, their
large annual revenues heighten their overall visibility. For ease of interpretation, we reverse coded the measure so that larger numbers denote increased visibility.

To control for industrial variation in women’s managerial representation, we include three dummy variables representing the corporation’s primary industry. Possible categories are (1) wholesale/retail trade, (2) professional services/healthcare/hospitality, and (3) information. The category of manufacturing/construction/transportation/utilities/petroleum production serves as the reference category. Descriptive statistics are provided in Table 1.

The primary question addressed in this article is whether women’s representation on boards of directors, in corporate executive positions, and in workplace-level managerial positions is associated with gender segregation. Because we are interested in how both firm- and establishment-level factors influence gender segregation, we estimate a two-level random effects model (also known as a linear mixed model, a multilevel model). The structure of our data, in which establishments are nested within firms, makes this a particularly appropriate statistical approach for examining our research questions.

Compared to ordinary least squares (OLS) regression, the random effects model estimates a different establishment-level model for each firm/corporation. Because of the nested nature of the data, it would be inappropriate to estimate these models using OLS regression. A key assumption of OLS is that observations are independent of one another. Clearly, this is not the case in our data. Many establishments are tied together through a common firm (corporate) structure. The use of a random effects model estimates both firm- and workplace-level error components, which accounts for the nonindependence of observations by allowing for dependence, or correlation, of responses that belong to the same firm. This avoids downwardly biased standard errors, which may produce inaccurate statistical associations. We use the statistical software package Stata 12 to estimate maximum likelihood random effects models that examine nonmanagerial gender segregation as a function of both workplace- and corporate- (firm)-level predictors, and allow the intercept to vary by firm. This is represented by the basic equation:

\[ Y_{ij} = \beta_0 + \beta_1 X_{1ij} + \beta_2 X_{2ij} + \beta_3 X_{3ij} + \beta_4 X_{4j} + \ldots + \beta_k X_{kj} + z_j + e_{ij} \]

where \( Y_{ij} \) is the index of dissimilarity (\( D \)) among nonmanagers in establishment \( i \) in firm \( j \). \( \beta_0 \) represents the estimated intercept, \( \beta_{1ij} \) through \( \beta_{3ij} \)
are effects of establishment-level (subscript $ij$) predictors, and $\beta_{kj}$ denote the net effects of firm-level (subscript $j$) predictors. The total residual or error is represented by both $Z_j$ (the firm-specific error component) and $e_{ij}$ (the workplace-specific error component).

For ease of interpretation, all level 1 variables except percentage women managers are centered on their grand means. Thus, the constant ($\beta_0$) is interpreted as the average nonmanagerial gender segregation for an establishment with no women managers, but average on all other characteristics, within an average firm.

**TABLE 1: Descriptive Statistics**

<table>
<thead>
<tr>
<th>Key outcome</th>
<th>$M$</th>
<th>$SD$</th>
<th>Min</th>
<th>Max</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace-level nonmanagerial gender segregation</td>
<td>32.21</td>
<td>30.12</td>
<td>0</td>
<td>100</td>
<td>5,679</td>
</tr>
</tbody>
</table>

| Key independent variables                        |        |        |     |     |     |
| % women corporate board of directors             | 9.87   | 9.25   | 0   | 35.29 | 81 |
| % women corporate executives                      | 9.30   | 10.20  | 0   | 53.85 | 81 |
| % women workplace managers                        | 32.69  | 26.47  | 0   | 100  | 5,679 |

| Workplace characteristics                        |        |        |     |     |     |
| Establishment size (ln)                          | 213.40 | 491.18 | 50  | 14994 | 5,679 |

| Firm-level control variables                     |        |        |     |     |     |
| Firm age                                         | 54.46  | 42.45  | 3   | 163 | 81 |
| Firm visibility                                  | 532.36 | 303.33 | 8   | 996 | 81 |
| Wholesale/retail trade                           | .14    | .34    | 0   | 1   | 81 |
| Information                                      | .09    | .28    | 0   | 1   | 81 |
| Manufacturing/construction/transportation/utilities/petroleum | .59    | .49    | 0   | 1   | 81 |
| Professional services/healthcare/hospitality      | .19    | .39    | 0   | 1   | 81 |

*Note: Manufacturing is the omitted comparison for firm-level industry. $M =$ mean; $SD =$ standard deviation; $Min =$ minimum; $Max =$ maximum; $Obs =$ observed.*

WOMEN IN POWER AND GENDER SEGREGATION

The results from the linear random intercept models are presented in Table 2. First, we estimate a baseline level of nonmanagerial gender segregation for an average workplace in an average firm (Model 1). As indicated by the intercept (62.48), in the average workplace, approxi-
### TABLE 2: Multilevel Regression Coefficients for Establishment-Level Gender Segregation

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>% women corporate board of directors</td>
<td>-.555**</td>
<td>-.401*</td>
<td>-.614***</td>
<td>-.607***</td>
<td>-.599***</td>
</tr>
<tr>
<td>% women corporate board of directors(^2)</td>
<td>.033**</td>
<td>.033**</td>
<td>.033**</td>
<td>.033**</td>
<td>.033**</td>
</tr>
<tr>
<td>% women corporate executives</td>
<td>-.304+</td>
<td>-.135</td>
<td>-.314*</td>
<td>-.313*</td>
<td>-.438**</td>
</tr>
<tr>
<td>% women corporate executives(^2)</td>
<td>.013*</td>
<td>.013*</td>
<td>.011+</td>
<td>.011+</td>
<td>.011+</td>
</tr>
<tr>
<td>% women managers</td>
<td>-.104***</td>
<td>-.084***</td>
<td>-.151***</td>
<td>-.150***</td>
<td>-.184***</td>
</tr>
<tr>
<td>% women managers(^2)</td>
<td>.001***</td>
<td>.001***</td>
<td>.001***</td>
<td>.001***</td>
<td>.001***</td>
</tr>
<tr>
<td>Firm age (ln)</td>
<td>1.334</td>
<td>1.287</td>
<td>1.299</td>
<td>1.168</td>
<td>1.168</td>
</tr>
<tr>
<td>Firm visibility</td>
<td>.004</td>
<td>.006</td>
<td>.005</td>
<td>.006</td>
<td>.006</td>
</tr>
<tr>
<td>Professional services /healthcare/hospitality</td>
<td>-18.840***</td>
<td>-17.610***</td>
<td>-17.710***</td>
<td>-16.560***</td>
<td></td>
</tr>
<tr>
<td>Establishment size (ln)</td>
<td>-4.959***</td>
<td>-4.771***</td>
<td>-4.753***</td>
<td>-4.740***</td>
<td></td>
</tr>
<tr>
<td>% women corporate board of directors × % women managers</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>% women corporate executives × % women managers</td>
<td>.005***</td>
<td>.005***</td>
<td>.005***</td>
<td>.005***</td>
<td>.005***</td>
</tr>
<tr>
<td>Intercept</td>
<td>62.480***</td>
<td>64.970***</td>
<td>65.370***</td>
<td>61.920***</td>
<td>61.870***</td>
</tr>
<tr>
<td>Workplace observations</td>
<td>5679</td>
<td>5679</td>
<td>5679</td>
<td>5679</td>
<td>5679</td>
</tr>
<tr>
<td>Number of corporations</td>
<td>81</td>
<td>81</td>
<td>81</td>
<td>81</td>
<td>81</td>
</tr>
<tr>
<td>Variation within corporations (SD)</td>
<td>13.580</td>
<td>13.430</td>
<td>13.030</td>
<td>13.020</td>
<td>13.000</td>
</tr>
<tr>
<td>Interclass correlation</td>
<td>.595</td>
<td>.507</td>
<td>.392</td>
<td>.352</td>
<td>.352</td>
</tr>
<tr>
<td>AIC</td>
<td>46044.930</td>
<td>45891.470</td>
<td>45532.300</td>
<td>45515.510</td>
<td>45517.190</td>
</tr>
<tr>
<td>BIC</td>
<td>46064.870</td>
<td>45981.470</td>
<td>45612.300</td>
<td>45615.510</td>
<td>45617.190</td>
</tr>
</tbody>
</table>

**Note:** Unstandardized metric coefficients. Segregation in all models refers to the gender segregation of nonmanagerial workers. N = 5,679. SD = standard deviation; AIC = Akaike information criterion; BIC = Bayesian information criterion.  
\(\dagger p < 0.10, \ast p < 0.05, \ast\ast p < 0.01, \ast\ast\ast p < 0.001 \) (two-tailed tests).
mately 62 percent of women (or men) would have to change jobs to achieve gender integration. The intraclass correlation coefficient shows that about 60 percent (59.5) of the overall variation in gender segregation, from workplace to workplace, is due to differences between firms, while the remaining 40 percent is due to variance within firms. Therefore, more than half of the variation in workplace-level gender segregation is due to differences between firms. This means that within our sample, workplaces are somewhat more similar in their segregation levels to other workplaces owned by the same corporation, compared to workplaces outside the parent corporation.

Model 2 shows the associations between women’s representation in leadership at different levels of the organizational hierarchy and nonmanagerial gender segregation in the workplace. Overall, the findings from this model generally support the agents of change perspective. Each measure of women’s representation in leadership is negatively associated with nonmanagerial gender segregation. In other words, women’s greater representation in these corporate- and workplace-level positions of power are all significantly associated with less gender segregation.

In order to control for other aspects of firms and workplaces that might account for our initial findings, Model 3 includes firm and establishment control variables. With these control variables included, the relationship between women’s representation in leadership positions and nonmanagerial gender segregation is reduced compared to Model 2, but remains significant for women’s representation on corporate boards and among managers. For corporate board representation, the association with nonmanagerial segregation is modest. Having 10 percent more women on corporate boards is associated with 4 percent fewer men or women who would have to change jobs to achieve equal numbers in the workplace. Women’s representation in managerial leadership is also associated with lower levels of gender segregation, but this relationship is substantively quite small. For example, each additional 10 percent of women represented in local management is associated with only 1 percent fewer men or women who would have to change jobs to achieve an integrated work setting. The relationship between women in corporate executive positions and nonmanagerial gender segregation is nonsignificant in Model 3, although the relationship remains negative.

We also test for the possibility of nonlinearity in how women’s representation in leadership relates to workplace gender segregation (Model 4). Here, we introduce squared terms for women’s representation on corporate boards, in executive positions, and in managerial jobs. We find that all three measures of women’s leadership representation are again both negative and statisti-
cally significant. The lower fit statistics (Akaike information criterion and Bayesian information criterion) of this model indicate that allowing for nonlinear effects provides a better fit to the data. The squared terms are statistically significant and positive, which means that the link between women’s leadership and gender segregation is smaller when the percentage of women in these positions is larger. We provide visual depictions of the nonlinear associations between women’s leadership representation and non-managerial gender segregation in Figures 1 to 3.

Figure 1 focuses on women’s corporate board membership, showing the predicted levels of gender segregation as women’s board membership increases. Women’s corporate board representation is associated with lower segregation, but this relationship flattens as women approach 20 percent of board members. Because of women’s low representation among corporate leaders, we do not predict segregation levels beyond 20 percent representation.

A similar association is shown in Figure 2 for women corporate executives, although the nonlinear effect is less pronounced than the observed association in Figure 1. Segregation is lower with higher percentages of women corporate executives, but this relationship declines and becomes imperceptible when women represent 20 percent of corporate executives. Again, a very similar pattern is also observed for the association between women managers and nonmanagerial workplace segregation (Figure 3), although here the relationship declines as the percentage of women man-

![Figure 1: Predicted gender segregation levels by percentage women corporate board of directors (95 percent confidence intervals).]
FIGURE 2: Predicted gender segregation levels by percentage women executives (95 percent confidence intervals)

FIGURE 3: Predicted gender segregation levels by percentage women managers (95 percent confidence intervals)
In theory, a larger share of women in corporate leadership might lead to policies that empower women managers and give them more leverage. Therefore, we test whether there is an interaction effect between the share of women at the corporate level and the share of women at the managerial level. Model 5 first explores the interaction between women’s representation on corporate boards and women in workplace-level managerial jobs. The interaction is zero, and nonsignificant.

In Model 6, we test for an interaction between percentage women corporate executives and percentage women managers. The coefficient for this interaction effect is positive and significant, but quite small. The effect of including this interaction is plotted in Figure 4. As illustrated, there is a noticeable relationship between women’s managerial representation and nonmanagerial gender segregation for each of the levels of corporate leadership plotted (0, 5, 10, 15, and 20 percent of corporate executives). We showed previously that this relationship tapers as the share of women managers approaches 80 percent (Figure 3). However, the tapering is slightly greater with higher levels of corporate representation. When 20 percent of corporate executives are

![Figure 4: Predicted gender segregation levels by percentage women managers by percentage women executives](image-url)
women, the relationship between share of women managers and the level of workplace segregation is nearly flat when women represent approximately 65 percent of managers.

**CONCLUSION**

This article explores the role of women across a range of leadership positions in reducing gender segregation among subordinates within a sample of *Fortune* 1000 companies. The previous literature suggests that women in these positions might reduce gender-linked inequality, yet other research has suggested that women in these positions may have little to no influence on eradicating inequality. We investigated the potential effects of women at both the corporate level and the level of the establishment or workplace. This approach allowed us to investigate women’s influence at the level of policy-setting decisions (corporate directors and executives), as well as at the proximal level of face-to-face interactions with employees (workplace-level managers). We asked whether women’s representation within these distinct positions of power is associated with reductions in gender segregation among subordinates. Previous research has not considered, or modeled, these hierarchies of women’s potential influence simultaneously, nor have researchers attended to the potential influence of corporate women leaders more generally on workplace desegregation.

Our results show that women in positions of leadership at both levels of analysis are associated with lower levels of gender segregation among nonleadership positions, lending some support to the proposition that women leaders serve as “agents of change,” and that they do so across the organizational hierarchy. At the corporate board and executive level, women leaders may have the power to influence gender equity policies. Corporate boards, in particular, may also be heavily influenced by the external institutional pressures regarding gender diversity, equity, and inclusion emerging from investors, stockholders, and established industry norms (see Rose and Bielby 2011). We found that greater proportions of women on corporate boards and in executive positions are associated with lower levels of nonmanagerial segregation in the workplace. At the corporate level, corporate boards and executives often serve as a source of key advice for the overall direction of the company and can influence broad corporate policies, affecting numerous establishments. Thus, the representation of women on these boards and in executive positions gives potential voice and power to other women leaders.
Firms lacking gender diversity on corporate boards and in executive positions are associated with the highest levels of workplace-level gender segregation, and, according to our estimates, any number of women on corporate boards and in executive positions is associated with lower levels of segregation. However, these relationships are smaller when the proportion of women is higher. This may be due in part to data limitations. For example, only a tenth of the firms in our sample report a leadership composition of greater than 20 percent women on their corporate boards. On the other hand, our data likely represent the reality that few women are able to gain a voice when they serve on corporate boards, and few corporate boards expand women’s representation beyond one “token” woman. It is possible that as more women are appointed to corporate boards, issues of gender representation and segregation will be less of a problem—both to the men on the board and to the women. In our data, greater than 20 percent women on a corporate board translates to (on average) three or more women board members. Qualitative research suggests that when three women are represented on a corporate board, they are able to achieve rapport with each other, garner more respect from men on the board, feel more comfortable, and speak out to a greater extent during board meetings (Konrad, Kramer, and Erkut 2008). It is possible that although the power of numbers allows women to feel more comfortable and gain a greater voice in decision making, it may at times obscure the issue of gender-linked equal opportunity, providing a false sense of security. Castilla and Benard (2010) document this empirically, whereby perceptions of meritocracy in the organization lead to lowered sensitivity or attentiveness to counteracting gender bias.

Establishments within a corporate entity also have their own set of leadership positions, and these managers often make key employment decisions. We find that a greater proportion of women managers in a given work establishment is associated with lower levels of nonmanagerial gender segregation, suggesting that women at this most proximate level have at least some ability and motivation to ensure greater employment opportunities. In all, our findings show that women’s influence at both the corporate and establishment level are associated with reductions in gender segregation.

Our study has several limitations. First is the lack of detail regarding women’s positions as corporate leaders. Greater attention to these positions through more fine-grained analysis, and particularly through qualitative studies on the dynamics of interaction among corporate leaders, would shed light on when and how processes at the top of corporations
do—or do not—help reduce gender inequality across associated workplaces. Similarly, greater detail on the status of women leaders might show that women’s representation among top-level managers/executives is differentially related to gender desegregation than women’s representation among mid- and lower-level managers (Cohen and Huffman 2007; Hultin and Szulkin 2003; Stainback and Kwon 2012).

A more important limitation is that this study captures corporate and workplace characteristics at only one point in time. Examining these issues with panel data could shed additional light on the patterns shown in these analyses and could begin to untangle issues of bidirectional causation and simultaneously control for unobserved heterogeneity (e.g., see Huffman, Cohen, and Pearlman 2010). For instance, some corporate cultures may be successful in reducing gender segregation by bringing women into traditionally male occupations, thereby increasing women’s representation in leadership, as well as nonleadership, positions. Furthermore, there may be reverse causality, such as more integrated workplaces producing more opportunities for women’s promotion within the organization and corporation. However, it may be that the momentum behind initial efforts to reduce gender segregation may nonetheless stem in part from women in key positions who perceive gender inequity and have the power to do something about it. Regardless of causality, however, the relationship between women’s leadership and greater workplace integration illustrates how integrated workplaces are tied to the gender composition of leadership, and paves the way for future studies. A final limitation to our data is that it does not contain information at the individual level. Future research using longitudinal individual-level data could examine the tension between women leaders’ efforts to effect change over time and the retention of women leaders.

Over the past three decades, two articles have stood out as having a revolutionary impact on gender scholarship in sociology. The first, West and Zimmerman’s (1987) “Doing Gender,” was transformative in that it modified the way gender scholars thought about gender. Increasingly, scholars began to recognize how actors at the interactional level perform gender in “appropriate” ways. That is, agency exists, but actors are accountable to other actors to perform gender in a manner that is normatively appropriate in a given context. On a more macro-level, Acker’s (1990) “Hierarchies, Jobs, Bodies: A Theory of Gendered Organizations” made a strong case for the ways in which gender is embedded in the very structure of organizations. In other words, in stark contrast to Max Weber’s impersonal and rational
bureaucracy, gender gets into the blueprint of organizations and is reflected in organizational structures and hierarchies, policies, job descriptions, practices, and the like. Even aspects of organizations that appear gender-neutral are beholden to the power of the gender system.

These theoretical perspectives are complementary and have been highly influential, as they help explain the persistence of the gendered organization. While individuals and groups may sometimes challenge prevailing expectations for gendered performances, and organizations may sometimes implement feminist agendas to minimize gender-linked inequalities, most of the time the gender system remains intact and attendant inequalities are reproduced. In order to advance the feminist project of bringing about a more egalitarian society, however, it is necessary to understand what forces and what type of leadership might effect change.

In this article, we sought to contribute to and push the perspective on gendered organizations by identifying characteristics that may “undo” the gendered organization. In particular, we examined the association between women’s access to positions of organizational power and gender segregation among subordinates. We explored women’s representation in top corporate positions (corporate directors and executives) and among workplace-level managers, and how their presence in these positions related to the gender segregation of workers they theoretically have the power to hire, fire, and promote. We found that, in general, women’s access to the top of organizational hierarchies and managerial jobs within specific workplaces is associated with less gender segregation among subordinates.

In closing, we would like to encourage researchers to focus on understanding outlier organizations (e.g., organizations with relatively strong women’s managerial representation and low segregation) to further develop theoretical understandings on gendered organizations, as well as degendering organizations. Practically all qualitative research examining women and men at work has shown the reproduction of gender at work and how privilege and domination are actively recast and maintained by women and men rather than challenged—even in contexts where it appears the gender system could be challenged (e.g., Henson and Rogers 2001; Irvine and Vermilya 2010; Padavic 1991). Hence, the feminist project of challenging gendered organizations cannot start with just any workplace as a source for understanding how and where change is possible. The data set used here could provide a rare opportunity to identify cases that are unique for comparative case study. One could identify workplaces where inequality is low and a comparatively similar organization where inequality is high, and
explore what produces the difference. Hence, it becomes feasible to identify where and how change occurs in hopes of identifying practices that may challenge the gender system and undo the gendered organization. Identifying and understanding the cases where gender is less salient in generating inequality will be a big step forward in working to promote equal opportunity in U.S. workplaces.

NOTES

1. Corporate data were collected through Internet searches conducted in 2005 and 2006.
2. The occupational categories are officials/managers, professionals, technicians, sales, office/clerical, craft, operatives, laborers, and service.
3. The matching process between the 89 firms and the EEO-1 reports yielded a total of 81 firms and 5,679 establishments.
4. To accurately distinguish firms from establishments, firm-level cases reported as establishments were omitted. Additionally, firms with only one associated establishment were omitted from the data file to allow for firm-level variation.
5. We also estimated the unadjusted segregation measure controlling for occupational heterogeneity. These models revealed endogeneity issues with the occupational heterogeneity index. Because of these concerns, we also estimated unadjusted segregation models that did not control for occupational heterogeneity. Additionally, we examined an instrumental variables approach. The models we present and the other solutions to the endogeneity issue avoided any endogeneity bias and yielded identical substantive conclusions.
6. Because of the small number of women CEOs, we include them in the measure of women executives. To rule out potential bias introduced by the inclusion of women CEOs, we estimated models with an alternative measure that excluded these few cases. Our results did not differ substantively from those presented.
7. We also examined other linear and nonlinear measures of women’s board and executive representation. The results of models incorporating nonlinear measures consistent with Kanter’s (1977) research on skewed groups failed to substantiate this type of relationship.
8. We also examined measures of the natural log of age, as well as age squared and age cubed. None of these variables were statistically significant in the analysis.
9. In analyses not shown, we examined different combinations of industry categories, which produced similar results. The decision to utilize a few broad industry groups rather than more detailed groups was primarily based on our relatively small number of firms (N = 81) and lack of industrial diversity.
REFERENCES


Acker, Joan. 2006. Inequality regimes: Gender, class, and race in organizations. *Gender & Society* 20:441-64.


Gorman, Elizabeth H., and Julie A. Kmec. 2007. We (have to) try harder: Gender and required work effort in Britain and the United States. *Gender & Society* 21:828-56.


Kevin Stainback is an Associate Professor in the Department of Sociology at Purdue University. His research examines gender and racial inequality in organizations. He is author (with Donald Tomaskovic-Devey) of *Documenting Desegregation: Racial and Gender Segregation in Private Sector Employment since the Civil Rights Act* (Russell Sage Foundation, 2012).

Sibyl Kleiner is Postdoctoral Scholar at the University of Calgary. Her research covers various subfields in sociology, including medical sociology, work, family, gender, and social psychology. Her recent work appears in the *Journal of Health and Social Behavior, Social Science Research, and Social Forces*.

Sheryl Skaggs is Professor of Sociology at the University of Texas–Dallas. Her research examines workplace diversity addressing issues of gender and racial/ethnic disparities in promotions and authority, earnings, and recruitment, as well as job- and occupational-level segregation across organizations and industries.