Getting to Diversity: What Work and What Doesn't

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Online Methodological Appendix

This book is based on a research project using two principal methods. We employ quantitative analysis of a large survey-based dataset from a representative sample of U.S. companies, combined with administrative data from the Equal Employment Opportunity Commission on workforce diversity at those companies. Using these data we draw generalizations about diversity program effects. We also analyze in-depth interviews with a smaller sample of firms with experience with diversity programs, from which we learn about processes and mechanisms leading to program success or failure. This appendix describes the data and methods used for quantitative and qualitative analyses.

1: QUANTITATIVE ANALYSIS OF DIVERSITY INITIATIVES AND MANAGERIAL DEMOGRAPHICS

We conducted a fixed-effects analysis of longitudinal data on the workforce composition of 806 establishments to assess changes in their managerial composition after the adoption of series of diversity innovations, personnel programs and work-life supports. The data in the main analysis cover the period between 1971 and 2002, and an additional analysis examines the stability of results through 2015. Fixed-effect models compare managerial diversity before and after program adoption, while accounting for a series of observed organizational features and for unobserved features that do not vary over time and that may affect diversity.

DATA SOURCES

The data come from two main sources: EEO-1 reports from 1971 to 2015 on workforce demographics, submitted annually by medium and large employers to the U.S. Equal Employment Opportunity Commission (EE0C), and a retrospective survey on the work structures and personnel policies of over 800 establishments that we sampled from the EEO-1 database. We obtained additional data on industry and state workforce composition from the Current Population Survey and Bureau of Labor Statistics.

EEOC Data: EEO-1 Workforce Composition Reports

The Civil Rights Act of 1964, as amended, requires private employers with more than 100 employees and government contractors with more than 50 employees and contracts worth $50,000 to file annual EEO-1 reports. These reports detail the race, ethnicity and gender of employees in nine broad occupational categories. The analyses in the book focus on white, Black, Latinx and Asian American men and women in management jobs. The EEO-1 forms include information on some groups, such as Native Americans, that hold too few jobs to assess in our statistical models.

We obtained the data for the years 1971 to 2015 from the EEOC through an Intergovernmental Personnel Act (IPA) agreement. We retained company names in the

dataset only in early stages of the research, for the purpose of contacting respondents for the survey and interviews, as detailed below. We subsequently removed company names and addresses from the dataset and kept them separately.

There are no better data on workforce composition that span companies, industries and decades. Some argue that the data may not be consistent over time, because employers can reclassify jobs, moving women and minorities into management categories to improve their federal reports (Smith and Welch 1984). Such reclassification would result in sudden changes in the share of groups in occupations at different levels, but that pattern has not been found by other researchers (Leonard 1990). We examined our data for such sudden changes. In our sample, few firms show sudden increases for women or people of color in management, but we checked results for robustness by eliminating these cases, and the results did not change.

Broad occupational categories may conceal segregation within management, where women and people of color are relegated to the lower rungs. We examine the share of women and people of color in all management jobs. Our findings, therefore, may overestimate the degree of progress on diversity. Yet, as other studies have shown (Cohen et al. 1998) diversity begets diversity, and the entrance of women and people of color into lower-level managerial jobs is a first step toward diversifying the higher ranks of management.

EEO1 reports began to report demographic data on lower to middle managers, and on top officials, separately in 2007. To maintain consistency over time, we collapse those two categories after 2006. Yet, we examined the correlation between the representation of different groups in lower and higher management in the post-2006 EEO-1 dataset. We found a strong positive correlation, suggesting that an increase in the share of women and people of color in lower ranks of management is strongly associated with an increase in their share in higher ranks of management.

While EEO-1 forms provide rich and reliable workforce composition data, they include little information about employers and their diversity innovations. To get this information on companies we surveyed a sample of firms that submit EEO-1 reports.

Organizational Survey Data

Data on employer practices come from our own retrospective survey of workplace personnel, diversity, work-life, and harassment policies and structures. Data on other organizational features also come from our survey.

Sample characteristics — We drew a random sample of establishments from the EEO-1 database. We constructed a dataset comprising all EEO-1 reports for the years 1971 to 2002, interpolating data for years where all reports were missing, 1974, 1976, and 1977, and for years in which individual establishment reports were missing. Establishments enter the dataset when they begin filing EEO-1 reports. To ensure that we would be able to follow establishments over time, and to ensure variation in establishment age, we chose half of the sample from establishments that had been in the dataset since 1980 and half from those that had been in the dataset since 1992. We also stratified the sample by size, selecting 35 percent of establishments with fewer than 500 employees in 1999, and by industry to represent the manufacturing, service, and trade sectors. We sampled from food manufacturing, chemicals,

computer equipment, transportation equipment, wholesale trade, retail trade, insurance, business services, and health services. Because the sample over-represents establishments from the manufacturing sector relative to the U.S. economy, we constructed sampling weights based on the inverse probability that an establishment would be sampled. All findings reported in the book were replicated using appropriate weights.

Corporate diversity can be influenced by acquisitions, spin-offs, and plant closings, so we sampled establishments, selecting no more than one per parent firm. In 90 percent of cases, respondents reported that policies were uniform across the entire company, rather than unique to the responding establishment.

Survey procedures — We conducted a retrospective survey of employment practices at each establishment, with a small team of interviewers we had trained in collaboration with the Princeton Survey Research Center. We drew on the experiences of others who had conducted organizational surveys of employment practices (particularly Kalleberg et al. 1996; Kelly 2000; Osterman 1994, 2000).

In preparation for the survey, we conducted 41 in-person interviews with HR managers from randomly sampled organizations in four different regions, and 20 pilot phone surveys. These pilot interviews and surveys increased our confidence that HR managers are able to respond to retrospective questions. During our in-person pilot interviews, respondents routinely pulled out manuals with copies of policies and lists of adoption and revision dates. Data from the pilot surveys are not included in the analyses reported in the book. Data from some interviews are included as quotes from Kelly and Kalev (2006).

We began the main stage of the survey by writing to the HR director at each establishment. We followed up with a phone call and email or fax. We asked for permission to conduct a phone interview and for the name of the person who could best answer questions about the establishment's history of HR practices. The typical interviewee was an HR manager with 11 years of tenure. We scheduled phone interviews at the convenience of the interviewees, and explained in advance the nature of the information needed. Most interviews lasted between 30 and 120 minutes, depending on the extent of policies and programs the establishment had in place. Employers were contacted by phone an average of 12.6 times to complete the survey, from a minimum of 1 to a maximum of 84 times.

In the survey we asked whether the establishment had ever used each personnel program, when it was adopted, and whether and when it had been discontinued. Program discontinuation was rare. We asked about a series of personnel policies and diversity programs, as well as other workplace characteristics known to affect workforce composition, such as unionization and layoffs. When a respondent could not answer a question, we sent a copy of that question by email or fax, asked that they consult company records and colleagues, and called back to fill in the blanks.

Upon completion of the survey, we matched survey data for each establishment with the annual EEO-1 records for that establishment, creating a dataset with annual establishment-year data cells. We completed 833 interviews. After excluding 10 cases for which EEO-1 data was available for fewer than 5 years, and 17 cases with excessive numbers of missing values for EEO-1 or survey data, our final dataset for the analysis reported in the book

included 806 cases and 18,291 establishment-year observations, with a median of 25 years of data per establishment, a minimum of 5 years, and a maximum of 32 years.

To assess the stability of program effects over time we extended the dataset through 2015. We merged in new workforce composition data from each establishment's EEO-1 files and extended the survey data to that year as well. The extended dataset does not include information on new programs adopted during the extension period. As shown below (Tables 1 and 2), program effects remain stable for the vast majority of the programs we examined.

Data Quality Measures

Response rate — The survey response rate was 67 percent and the cooperation rate was 72%. These compare favorably with the response and cooperation rates of other organizational surveys: 65% in the National Organizations Survey of 1991 (Kalleberg et al. 1996); 66% in Osterman's (1994) HR structures survey (Osterman 1994); 58% in Osterman's (2000) follow up survey; and 56% in Kelly and Dobbin's retrospective survey (Kelly 2000). Using a logistic regression, we examined whether the likelihood of responding was associated with industry, establishment status (headquarters, sub-unit or stand-alone organization), size, federal contractor status and managerial diversity. Responding establishments were larger and had a larger proportion of white men in their managerial ranks than non-responding organizations. Thus, our sample is not biased toward firms with more diverse workforces. Finally, sampled establishments form the different industries were about equally likely to participate in the survey, with the exception of business services establishments, which were less likely to participate. In models paralleling those used in the book we included predicted values from the logistic regression estimating the probability of response (Heckman 1979). This did not change our results, which suggests that the results are not shaped by survey response bias. We also constructed weights based on the inverse probability that an establishment from each sample stratum (industry by size and by time in the EEO-1 dataset) would complete the survey. We replicated all reported analyses using weights, and the results were robust. We report unweighted results (Winship and Radbill 1994).

Missing data: Missing survey data due to unknown years of adoption of programs were interpolated using OLS regression with industry, size and age of the establishment. For most of the key independent variables, the percent of missing data ranged between 3% and 6%, with none exceeding 9%. The results we discuss in the book do not change interpolated data are excluded.

Labor Market Data

We supplemented the dataset with state and industry employment data for each of the demographic groups from the Bureau of Labor Statistics. Because state employment data were only reported from 1978, we used the 1970 Census as a baseline for a linear interpolation of these data for the years 1971-1977.

METHOD OF ANALYSIS

Dependent Variable – Managerial Diversity

The dependent variables in all reported analyses are the proportion of white men, white women, Black men, Black women, Latinx men, Latinx women, Asian-American men and Asian-American women among managers in the focal establishment and year, as calculated from the EEO-1 data. Because there are large differences in the absolute magnitude of the change in management shares across groups - for example white women grew from 19 to 27 percent during the period while Black women grew from 1 to 5 percent - we used the log odds of each group in management rather than the proportion.

Log odds are defined as Logit (Gi)=Log (Pi/1-Pi), where Pi is the proportion of group i among managers. Because the logit is undefined when Pi=0 or Pi=1, we substituted Pi=0 with 1/2Nj, and Pi=1 with 1-1/2Nj, where Nj is the number of managers in establishment j (Hanushek and Jackson 1977; Reskin and McBrier 2000). The results were robust to different strategies for zero substitution. We chose the one that kept the distribution uni-modal and closest to normal. We include a dummy variable that equals 1 when there were no managers from the focal group. The results are not sensitive to whether this variable is included.

Independent Variables – Corporate Diversity Programs

In the analyses reported in the book, we use binary variables to represent the absence or presence of each of the diversity program we examine in a certain establishment and year. The key independent variables are diversity training for all, harassment training for all, mandatory legalistic diversity training for managers, mandatory cultural inclusion diversity training for managers, harassment training for managers, job tests for managers, performance evaluations, civil rights grievance procedures, harassment grievance procedures, targeted recruitment, referral incentive program, mentoring program, self-managed work teams, elite problem-solving teams, employee resource group, skill training, management training, nomination of women and people of color for management training, cross training, flextime policy, parental leave policy, childcare referral program, onsite childcare centers, childcare vouchers, diversity manager, diversity taskforce, and workforce diversity goals.

For each program, we asked whether the organization had ever had the program (say, a targeted recruitment program), when it was first adopted, and when (if ever) it was discontinued. Each program variable is coded 0 in years when the program was not in place and 1 in years where the program was in place.

For the diversity training variables, we followed up with questions about the content of training and when it was first and last offered. If an employer had gone for 3 years without training, we treated the program as defunct.

For the manager harassment training variable, we asked separately for sexual harassment and general harassment programs. The correlation between the two variables was very high and in the analysis we use the variable covering more types of harassment: general harassment programs.

Control Variables

The statistical analyses include a series of variables that measure other time-varying organizational features that may affect managerial diversity. Non-time varying factors are implicitly accounted for by the establishment fixed effects specification, as discussed below.

Controls for other personnel programs or diversity initiatives: A series of personnel programs were included in the analysis to account for any direct or indirect effects they may have on our outcomes of interest. Due to space limitations we did not discuss these additional personnel programs and diversity innovations in the book. We also did not discuss cases where we did not have enough statistical power to be convinced by the results (for example when programs were too rare, such as paid maternity leave). These additional programs are: voluntary diversity training for managers, diversity performance evaluations, diversity bonuses, diversity consultant, HR consultant, internal job posting, pay grade systems, hiring guidelines, promotion guidelines, discharge guidelines, diversity policy, HR department, compressed workweek, paid maternity leave, dependent care expense account, early parental leave (prior to 1993).

Legal environment: We use three variables to account for variance that stems from legal influences on company diversity behavior. These are: a variable indicating whether the establishment is a federal contractor subject to affirmative action regulations, based on the EEO-1 reports; a variable from the survey that captures whether the establishment has faced a Title VII lawsuit or EEOC charge; and a survey variable that captures whether the establishment has experienced an affirmative action compliance review. Each of these variables is coded 1 from the year the establishment first had a federal contract, charge/lawsuit, or review. Earlier years are coded 0.

Organizational characteristics: Organizational size and availability of managerial jobs are measured using EEO-1 data on the total number of employees in the establishment and proportion of all jobs that are managerial. We logged the number of employees in order to reduce the skewness of the distribution. Unionization is coded 1 when the establishment has at least one contract. Substituting with a measure of core job unionization does not alter the results. Legal counsel is measured with two binary variables for the presence of a legal department and the presence of an attorney on retainer. Top management team diversity is measured with the percentage of the top 10 positions held by women and/or African Americans, based on survey data. We asked about the percentage at 10-year intervals and interpolated values for the intervening years. These two variables are not included in the 2015 analysis. As mentioned above, we also include a binary variable denoting whether there was no manager from the focal group in the establishment in the previous year.

Labor pools — The diversity of the establishment's internal labor pool is measured as the percent of the focal group in non-managerial jobs, based on the EEO-1 reports. Diversity of the establishment's external labor pool is captured with variables describing the industry and state labor forces from the Current Population Survey. Industry employment variables are logged. Economic conditions are measured with the annual state unemployment rate, and industry size is measured as total annual industry employment, both from the Current Population Survey. These are not included in the 1971-2015 analysis. In the 1971-2015 analysis, industry and state workforce demographic composition are measured using the

universe of EEO-1 reports for the focal industry. The 1971-2002 results are not sensitive to the choice of data source for these measures.

All the independent variables in the analysis, including the main variables of interest and the control variables, with the exception of the proportion of managerial jobs, are lagged; that is, they are measured in the year before the dependent variables are measured. Because the program measures are binary, coded 1 for all the years the program is in place, program effects are estimated for the entire period after adoption (not merely for the year after initiation).

Estimation

We use pooled cross-sectional time-series models, with fixed effects for both establishment and year (Hicks 1994; Hsiao 1986). Establishment fixed effects allow us to account for stable unobserved company characteristics, such as organizational culture, that may affect managerial diversity. We achieve this specification by subtracting the values of each observation from the establishment mean (Hsiao 1986:31). To capture environmental changes, such as legal and cultural shifts, we use fixed effects for each year, achieved by including a binary variable for each year. Together the establishment and year fixed effect specification strengthens our causal inferences about the effects of diversity innovations. The large number of parameters involved in estimating fixed-effects models renders them less efficient than other estimators. However, we prefer these to alternative models because they provide more stringent tests of program effects. The establishment and year fixed effects also offer an efficient means of dealing with nonconstant variance of the errors (heteroskedasticity) stemming from the cross-sectional and temporal aspects of the pooled data.

Because our dependent variables (the share of managers from 8 demographic groups) are measured as parts of the same whole (the whole being management jobs), we expect their error terms to be correlated. In such situations, ordinary least squares produce unbiased and consistent, but inefficient, estimators. We thus use seemingly unrelated regression, which takes into account covariance between the errors and produces unbiased, efficient estimators (Felmlee and Hargens 1988; Greene 1997; Zellner 1962). This is achieved with the SUREG command in Stata. We verified the robustness of the standard errors for within-unit serial correlation using ordinary least squares regression (XTREG, robust in Stata. The option is not available in SUREG).

Conditional effects of programs: To examine the effect of a program under a certain condition, for example targeted recruitment in companies with employee resource groups, or mentoring in high skill industries, we use an interaction specification, wherein we add a variable that represents the multiplication of the conditioned and the conditioning variables. The coefficient for this interaction variable represents the added effect of the presence of the condition. The total effect of the conditioned program, when the condition is present, is estimated as the linear combination of the program coefficient and interaction coefficient. To calculate these total effects, we used the LINCOM command in Stata, which takes into account the linear combination of the standard errors as well.

Robustness Tests

A key challenge in analysis of non-experimental data is to account for heterogeneity that stems from nonrandom selection into the "treatment" (in our case, adopting a program). Heterogeneity may bias casual inference. Our model specification, with fixed effects for each year and each establishment and with control variables measuring a wide range of organizational structures, labor pool composition, and economic and legal environmental factors, is designed to minimize this possibility.

We conducted three additional robustness tests. First, we added a proxy variable as a binary measure for unspecified, unobserved events (such as an impending lawsuit, local news coverage, or a new CEO) that may have led both to the adoption of a new diversity program and to changes in the share of women and people of color in management. We created such proxy variables for each of the programs reported in the book. If coefficients for these variables are significant in the same direction as our program variables, this suggests that a pre-adoption trend might have affected our results. We re-ran the analyses for each program, with proxies measured at 2 and 3 years before program adoption in models that use pre-adoption data and are otherwise parallel to those presented here. The results of these analyses support the conclusions we report in the book. This adds to our confidence that the observed relationships between diversity programs and managerial diversity are not spurious (Heckman & Hotz, 1989, p. 866).

Second, program adopters may be different from nonadopters in ways that are not absorbed by the establishment fixed effects. Perhaps adopters change faster than nonadopters in terms of adaptation to management fads and workforce churn. We therefore re-ran the analyses reported in the book, each time only with establishments that ever adopted a particular program. If the effects we report are attributable to differences between adopters and nonadopters, then program effects should disappear when we exclude nonadopters. The results of our "adopters only" analyses are substantively similar to those reported in the book.

Finally, while the fixed effects specification accounts for stable unobserved factors, we consider the possibility that unobserved workplace-specific time varying characteristics might be related to program adoption, for example increased worker pressure to adopt work life supports and reduce gender inequality. To account for this possibility, we re-ran our models adding an interaction between our establishment fixed effects and a linear time trend. We find the same pattern of results in these models.

Results

In Tables 1 and 2 (appearing at the end of the document) we report full results from the models of managerial diversity presented in the book and for the models examining the stability of the program effects until 2015. Each dependent variable is the (natural) log odds of managers being from a certain group. To transform the coefficient β from representing change in log odds to representing change in odds, it should be exponentiated: $[\exp(\beta) - 1]*100$. Once exponentiated in this way the coefficient represents the average percentage change in the odds that managers are from a certain group, associated with a change in the independent variable (program adoption) for the period after adoption. Simply multiplying the coefficients by 100 provides a close approximation.

2. QUALITATIVE ANALSYIS OF INTERVIEW DATA ON PROGRAM IMPLEMENTATION

We conducted 103 in-depth interviews in 92 workplaces, with chief executive officers, human resources managers, diversity managers and line managers, in firms from five industries and four cities. The goal of the interviews was to gain a better understanding of the processes and mechanisms shaping the implementation and effects of corporate diversity innovations and work life supports.

Sample Characteristics

We sampled establishments from the universe of firms that submit annual EEO-1 reports to the Equal Employment Opportunity Commission and existed in the EEO-1 data since at least 1995. In order to capture broad variation in diversity management strategy and implementation, we interviewed single and multi-establishment companies, and both corporate headquarters and branch establishments. We sampled firms from four distinct labor markets: Atlanta, Boston, Chicago and San Francisco, and five industries: healthcare, electronics manufacturing, food manufacturing, business services, and insurance firms.

Our sampling strategy for the interviews was not designed to represent all U.S. employers. Rather, we sampled companies in different sorts of industries, with different sorts of labor forces. We also chose to sample organizations with experience in diversity management, so as to learn about the processes that explain the success and failures we explored in the quantitative analysis. Therefore, to be included in the study, firms had to have one or more of the following diversity practices: annual goal setting plans (affirmative action plans), diversity staff persons, and diversity committees or taskforces. About a third of the companies interviewed had one or more full-time diversity staff members, a third had HR managers overseeing diversity efforts on a part-time basis, and the final third had affirmative action plans with no formalized diversity efforts.

Interview Procedures

We first contacted firms by mail, with a letter explaining the research project in broad terms and requesting an interview. The letter was then followed up by a phone call for screening and scheduling an interview. We initially conducted in-person interviews in all four geographical locations but at later stages we offered respondents the option of skype and phone interviews to increase cooperation.

For each firm, we interviewed the diversity manager, the HR manager charged with diversity initiatives, or the HR manager who oversaw the affirmative action plan. In a small number of cases, interviews included both a diversity and HR manager, or several HR managers working part-time on diversity related efforts. We interviewed multiple individuals in the same session when respondents told us that the topics covered would require different personnel. At the end of each interview we asked to interview a line manager as well. Also if neither diversity nor HR personnel were available we interviewed a line manager. Overall we interviewed 25 line managers, 11 of them as the second interview at their firm. Interviews

ranged from twenty-five minutes to two hours, averaging about an hour, depending in large part on the range of diversity initiatives present at a firm (Kalev 2014; Vican 2012).

The interviews were conducted by a team of graduate students research assistants, Shawna Vican, Dan Schrage, Jessica Welburn, Lauren Rivera, Kim Pernell, Jeff Denis, and Marta Filipski. Interviewers were trained using mock interviews with us, and we conducted frequent debriefings during the interview process.

In developing the interview schedule we relied on an earlier interview project (Kelly and Kalev 2006), on the findings from our quantitative analysis, and on four pilot interviews.

The interviews began with a brief series of questions about the company and the employment history of the respondent, both at their current organization and in previous jobs. In several cases this part grew longer as the diversity manager spent additional time speaking candidly about their decision to pursue diversity management. The main part of the interview included questions about the presence of various diversity practices or routines. For each initiative, we asked a series of questions on program adoption, implementation and assessment of challenges, and successes. These were the core questions:

- Tell me a bit about how the program works. For instance, for a mentoring program, is it open to the whole workforce or just to some groups, how are mentors assigned, how many participate?
- Who is in charge of the program?
- How do you inform managers about the program?
- How have managers/employees reacted to this program?
- What are some aspects of the program that you feel have worked particularly well? In what sense have they worked well?
- What are some aspects of the program that you feel could be improved?

We added questions related to each specific program we discussed (for example, the goals and timeline of a diversity taskforce, the content of diversity training, the roles and everyday activities of the diversity manager).

In addition to the programs and policies implemented specifically as diversity innovations, we asked about a range of other human resources and workforce related initiatives. We asked more general questions about the organizational climate and commitment to diversity, both with regard to top leadership and line managers. The interviews were semi-structured, allowing for exploration of other topics as they arose. At the end of each interview we asked if there were any other elements of diversity management we did not cover (Vican 2012).

Analytic Strategy

All interviews were transcribed and subsequently coded using the qualitative analysis software Atlas.ti. The first round of coding was based on the questions asked in the interview. It highlighted the firm's diversity programs and policies, formal diversity goals, and key challenges and solutions mentioned. Subsequent rounds of coding identified themes inductively, based on respondent answers. We used multiple iterations between the data and literature in this deductive-inductive coding. For several interviews we constructed "case studies" in order to get a fuller picture of processes.

For the most part respondents were open and talkative. They shared their insights and experiences candidly, gave examples and often provided lengthy details about processes and events. They often seemed to gain additional insights about their work from the interview process. For us, as researchers, this presented an opportunity to learn about the challenges of implementing diversity policies. Thus, the interviews provided more than simply "the company line" about diversity programs. Rather, the interviews uncovered implementation challenges, experiments with solutions, and reflections about their effectiveness.

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TABLES

Table 1 Fixed Effects Estimates of the Log Odds of White, Black, Latinx and Asian American Men and Women in Management, 1971-2002 - Main Variables

	White Men	White Women	Black Men	Black Women	Latinx Men	Latinx Women	Asian American Men	Asian American Women
Chapter 1: Rethink Diversity and Harassment Training								
Diversity training for all	-0.018	0.014	0.022	0.013	-0.004	-0.066**	0.012	0.013
	(0.028)	(0.028)	(0.026)	(0.024)	(0.026)	(0.023)	(0.026)	(0.023)
Harassment training for all	-0.028	-0.041*	0.013	-0.035*	-0.018	-0.021	-0.035*	-0.004
	(0.016)	(0.016)	(0.015)	(0.014)	(0.015)	(0.013)	(0.015)	(0.013)
Legalistic diversity training for managers	0.052	-0.114***	-0.054*	-0.138***	-0.017	0.028	-0.069**	-0.058**
	(0.027)	(0.027)	(0.025)	(0.023)	(0.025)	(0.022)	(0.025)	(0.022)
Cultural inclusion diversity training for managers	-0.113**	0.069	0.101*	-0.006	0.128**	0.009	0.082*	0.011
	(0.044)	(0.044)	(0.041)	(0.038)	(0.040)	(0.036)	(0.041)	(0.036)
Harassment training for managers	-0.016	0.054***	-0.019	0.038**	0.015	0.031*	0.021	0.026*
	(0.015)	(0.016)	(0.015)	(0.013)	(0.014)	(0.013)	(0.014)	(0.013)
Chapter 2: Don't Count on Rules to Stop Bias and Harassment								
Job test for managers	-0.029	-0.056*	-0.102***	-0.086***	-0.045*	-0.100***	-0.050*	-0.126***
	(0.024)	(0.025)	(0.023)	(0.021)	(0.022)	(0.020)	(0.023)	(0.020)
Performance evaluations	0.013	-0.069***	0.010	-0.016	-0.014	-0.017	-0.032*	-0.019
	(0.017)	(0.017)	(0.016)	(0.014)	(0.015)	(0.014)	(0.015)	(0.014)
Civil rights grievance procedure	-0.001	-0.034*	-0.082***	-0.042**	-0.042**	-0.030*	-0.093***	-0.022
	(0.016)	(0.017)	(0.015)	(0.014)	(0.015)	(0.014)	(0.015)	(0.014)
Harassment grievance procedure	-0.046**	0.020	0.007	-0.037**	-0.070***	-0.044***	-0.037**	-0.059***
	(0.014)	(0.015)	(0.014)	(0.013)	(0.013)	(0.012)	(0.013)	(0.012)
Chapter 3: Democratize Recruitment								
Targeted recruitment	-0.038	0.055**	0.108***	0.102***	0.027	0.037*	0.086***	0.067***
	(0.019)	(0.020)	(0.018)	(0.017)	(0.018)	(0.016)	(0.018)	(0.016)
Referral incentive program	-0.040**	0.007	0.035*	0.056***	0.065***	0.022	0.055***	0.043***
	(0.015)	(0.015)	(0.014)	(0.013)	(0.014)	(0.012)	(0.014)	(0.012)
Chapter 4: Open Networks Up								
Mentoring programs	-0.000	0.000	0.037	0.137***	0.062*	0.179***	0.132***	0.180***
	(0.032)	(0.032)	(0.030)	(0.028)	(0.030)	(0.027)	(0.030)	(0.026)
Self-managed work teams	-0.090***	0.058**	0.036*	0.038*	-0.019	0.004	-0.031	0.028
	(0.019)	(0.019)	(0.018)	(0.016)	(0.017)	(0.016)	(0.018)	(0.016)
Elite problem solving teams	0.039**	-0.012	-0.016	-0.023	-0.054***	-0.028*	-0.014	-0.054***
	(0.014)	(0.014)	(0.013)	(0.012)	(0.013)	(0.012)	(0.013)	(0.012)
Employee resource groups	-0.082**	0.085***	-0.078***	-0.009	0.086***	0.000	0.042	0.001
	(0.025)	(0.026)	(0.024)	(0.022)	(0.023)	(0.021)	(0.024)	(0.021)
Chapter 5: Democratize Training								
Skill training	0.014	-0.005	-0.003	0.010	0.040**	0.001	0.069***	-0.007
	(0.015)	(0.016)	(0.014)	(0.013)	(0.014)	(0.013)	(0.014)	(0.013)
Management training	-0.005	0.044**	0.017	0.003	0.035**	0.001	0.047***	-0.014
	(0.015)	(0.015)	(0.014)	(0.013)	(0.013)	(0.012)	(0.014)	(0.012)
Nomination of women and people of color for management training	-0.117***	0.130***	-0.066**	0.046*	-0.016	-0.031	0.013	-0.026
	(0.022)	(0.023)	(0.021)	(0.019)	(0.020)	(0.018)	(0.021)	(0.018)
Cross training	-0.053***	0.047***	0.034**	0.032**	-0.039**	0.001	0.068***	0.042***
	(0.014)	(0.014)	(0.013)	(0.012)	(0.013)	(0.012)	(0.013)	(0.011)
Chapter 6: Work-Life Help for Everyone								
Flextime policy	-0.078***	0.047*	0.045*	0.049**	0.108***	0.035*	0.066***	0.091***
	(0.019)	(0.020)	(0.018)	(0.017)	(0.018)	(0.016)	(0.018)	(0.016)
Parental Leave Policy	-0.089**	0.085**	-0.001	0.052*	0.068**	0.034	0.128***	0.043
	(0.028)	(0.028)	(0.026)	(0.024)	(0.026)	(0.023)	(0.026)	(0.023)
Childcare referral program	-0.028	0.048*	0.097***	0.062***	0.050**	0.067***	0.078***	0.078***
	(0.020)	(0.020)	(0.019)	(0.017)	(0.018)	(0.017)	(0.019)	(0.017)
Onsite childcare center	-0.024	0.019	-0.027	0.068**	-0.004	0.076**	0.042	0.135***
	(0.028)	(0.028)	(0.026)	(0.024)	(0.026)	(0.023)	(0.026)	(0.023)
Childcare vouchers	0.062	-0.013	0.162***	0.123***	0.008	0.164***	0.012	0.106**
	(0.042)	(0.043)	(0.040)	(0.037)	(0.039)	(0.035)	(0.040)	(0.035)
Chapter 7: Bake In Systems Change								
Diversity manager	-0.025	0.089**	0.168***	0.114***	-0.004	0.160***	0.094***	0.126***
	(0.029)	(0.029)	(0.027)	(0.025)	(0.026)	(0.024)	(0.027)	(0.024)
Diversity taskforce	-0.099***	0.146***	0.073**	0.174***	0.105***	0.111***	0.234***	0.178***
	(0.027)	(0.027)	(0.025)	(0.023)	(0.024)	(0.022)	(0.025)	(0.022)
Workforce diversity goals	-0.055***	0.037*	0.040**	0.011	0.077***	0.030*	0.056***	0.009
	(0.016)	(0.016)	(0.015)	(0.014)	(0.015)	(0.013)	(0.015)	(0.013)

Table 1 Continued: Fixed Effects Estimates of the Log Odds of White, Black, Latinx and Asian American Men and Women in Management, 1971-2002 - Variables from Interaction Analysis

	White Men	White Women	Black Men	Black Women	Latinx Men	Latinx Women	Asian American Men	Asian American Women
Chapter 3: Democratize Recruitment								
Targeted recruitment in organizations with no ERGs	-0.048* (0.020)	0.061** (0.021)	0.091*** (0.019)	0.092*** (0.018)	0.020 (0.019)	0.025 (0.017)	0.086*** (0.019)	0.046** (0.017)
The added effect of targeted recritment due to ERGs	0.084 (0.045)	-0.051 (0.045)	0.137** (0.042)	0.123** (0.039)	0.074 (0.041)	0.121** (0.037)	0.039 (0.042)	0.161*** (0.037)
The total effect of targeted recritment in organizations with	0.036 (0.043)	0.010 (0.044)	0.228*** (0.041)	0.215*** (0.038)	0.093** (0.040)	0.147*** (0.036)	0.124*** (0.040)	0.207*** (0.036)
Referral incentive program organizations with no ERGs	-0.043** (0.015)	0.004 (0.016)	0.020 (0.014)	0.044*** (0.013)	0.056*** (0.014)	0.004 (0.013)	0.029* (0.014)	0.020 (0.013)
The added effect of referral incentive program due to ERGs	0.094* (0.038)	-0.018 (0.039)	0.113** (0.036)	0.087** (0.033)	0.102** (0.035)	0.147*** (0.032)	0.206*** (0.036)	0.197*** (0.032)
The total effect of referral incentive program in organizations with ERGs	0.051 (0.037)	-0.014 (0.038)	0.133*** (0.035)	0.131*** (0.032)	0.158*** (0.340)	0.151*** (0.031)	0.236*** (0.034)	0.217*** (0.031)
Chapter 4: Open Networks Up								
Mentoring programs excluding chemical and electronics firms	0.054 (0.035)	-0.068 (0.036)	-0.033 (0.033)	0.062* (0.031)	0.084* (0.033)	0.177*** (0.030)	0.123*** (0.033)	0.166*** (0.029)
The added effect of mentoring programs in chemical and electronics firms	-0.252*** (0.070)	0.315*** (0.071)	0.328*** (0.066)	0.346*** (0.061)	-0.102 (0.065)	0.009 (0.059)	0.042 (0.066)	0.064 (0.058)
The total effect of mentoring programs in chemical and electronics firms	-0.198** -(0.064)	0.247*** -(0.065)	0.295* -(0.060)	0.409*** (0.056)	-0.017 -(0.058)	0.186*** (0.052)	0.165** (-0.06)	0.231*** (0.053)

Table 1 Continued: Fixed Effects Estimates of the Log Odds of White, Black, Latinx and Asian American Men and Women in Management, 1971-2002 - Control Variables

	White Men	White Women	Black Men	Black Women	Latinx Men	Latinx Women	Asian American Men	Asian American Women
Other Personnel Programs:								
Voluntary diversity training	0.016	-0.072	0.146***	-0.033	0.055	0.023	0.137***	0.151***
	(0.040)	(0.041)	(0.038)	(0.035)	(0.037)	(0.034)	(0.038)	(0.033)
Diversity performance evaluations	0.035	0.034	-0.082***	-0.006	0.040	0.028	-0.067**	0.014
	(0.026)	(0.026)	(0.024)	(0.022)	(0.024)	(0.021)	(0.024)	(0.021)
Diversity bonus	0.062	0.064	0.113**	-0.045	0.153***	0.108**	0.121**	0.097**
	(0.045)	(0.046)	(0.042)	(0.039)	(0.042)	(0.038)	(0.042)	(0.037)
Diversity consultant	-0.064**	0.063**	0.031	0.035	0.045*	0.042*	0.057**	0.025
	(0.024)	(0.024)	(0.022)	(0.021)	(0.022)	(0.020)	(0.022)	(0.020)
Human resources consultant	-0.016	0.079***	0.006	0.043*	0.027	0.045**	0.030	0.053***
	(0.019)	(0.020)	(0.018)	(0.017)	(0.018)	(0.016)	(0.018)	(0.016)
Internal job posting	-0.002	0.048**	-0.020	0.008	0.015	0.038**	-0.028*	-0.007
	(0.015)	(0.015)	(0.014)	(0.013)	(0.014)	(0.013)	(0.014)	(0.013)
Pay grade system	0.005	-0.005	0.041**	0.003	0.006	0.033*	0.003	0.035**
	(0.016)	(0.016)	(0.015)	(0.014)	(0.015)	(0.013)	(0.015)	(0.013)
Hiring guidelines	-0.037*	0.029	-0.020	-0.070***	0.008	-0.029*	0.012	-0.008
	(0.016)	(0.017)	(0.015)	(0.014)	(0.015)	(0.014)	(0.015)	(0.013)
Promotion guidelines	0.056**	-0.043*	-0.023	-0.002	0.008	0.002	-0.025	-0.053***
	(0.020)	(0.020)	(0.018)	(0.017)	(0.018)	(0.016)	(0.018)	(0.016)
Discharge guidelines	0.069***	-0.010	-0.016	0.016	-0.011	-0.008	-0.009	0.010
	(0.017)	(0.017)	(0.016)	(0.015)	(0.016)	(0.014)	(0.016)	(0.014)
Diversity policy	0.032	-0.011	0.020	-0.014	-0.057***	-0.038*	0.005	-0.047**
	(0.018)	(0.019)	(0.017)	(0.016)	(0.017)	(0.015)	(0.017)	(0.015)
HR department	-0.029	-0.053**	-0.056**	-0.046**	-0.054**	-0.059***	-0.098***	-0.075***
	(0.019)	(0.019)	(0.018)	(0.017)	(0.017)	(0.016)	(0.018)	(0.016)
Compressed workweek	0.115***	-0.094***	0.012	0.004	-0.025	0.018	-0.021	0.024
	(0.020)	(0.021)	(0.019)	(0.018)	(0.019)	(0.017)	(0.019)	(0.017)
paid maternity leave	-0.056***	0.044**	-0.008	-0.006	-0.022	0.042**	0.020	0.012
	(0.016)	(0.016)	(0.015)	(0.014)	(0.014)	(0.013)	(0.015)	(0.013)
Dependent care expense account	-0.068***	0.078***	-0.003	0.024	-0.042**	0.014	0.007	0.040***
	(0.014)	(0.015)	(0.014)	(0.013)	(0.013)	(0.012)	(0.013)	(0.012)
Early maternity leave (prior to 1993)	0.011	-0.063***	-0.020	-0.019	-0.004	-0.048***	-0.022	-0.011
	(0.015)	(0.015)	(0.014)	(0.013)	(0.014)	(0.012)	(0.014)	(0.012)
Legal Environment								
Federal contractor	0.032	0.013	-0.013	-0.044**	-0.052***	-0.040**	-0.047**	-0.027
	(0.017)	(0.017)	(0.016)	(0.015)	(0.016)	(0.014)	(0.016)	(0.014)
EEOC charge/Title VII lawsuit	-0.073***	0.081***	0.016	0.002	0.046***	0.021	0.031*	0.007
	(0.014)	(0.014)	(0.013)	(0.012)	(0.013)	(0.011)	(0.013)	(0.011)
Affirmative action compliance review	-0.035	0.028	0.074***	0.003	0.008	0.018	0.100***	0.058***
	(0.018)	(0.019)	(0.017)	(0.016)	(0.017)	(0.015)	(0.017)	(0.015)
Organizational Characteristics								
Establishment size (log)	-0.029**	-0.070***	-0.529***	-0.687***	-0.574***	-0.707***	-0.646***	-0.723***
	(0.011)	(0.011)	(0.011)	(0.010)	(0.010)	(0.009)	(0.010)	(0.009)
Proportion managers in establishment	-0.718***	-0.036	-3.447***	-3.924***	-3.302***	-3.996***	-3.659***	-3.860***
	(0.105)	(0.108)	(0.099)	(0.091)	(0.096)	(0.087)	(0.097)	(0.086)
Union agreement	-0.043	-0.047	-0.061*	-0.015	0.028	0.030	0.021	0.012
	(0.032)	(0.032)	(0.030)	(0.028)	(0.029)	(0.026)	(0.030)	(0.026)
Legal department	-0.078***	0.149***	0.027	-0.014	0.010	0.002	0.055**	-0.003
	(0.022)	(0.023)	(0.021)	(0.019)	(0.021)	(0.019)	(0.021)	(0.018)
Attorney on retainer	0.036*	-0.049**	-0.002	-0.048**	-0.020	-0.072***	-0.050**	-0.076***
	(0.017)	(0.017)	(0.016)	(0.015)	(0.016)	(0.014)	(0.016)	(0.014)
Proportion minorities in top management	-0.002	-0.001	0.011***	0.007***	0.001	-0.003*	-0.003*	-0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Proportion women in top management	0.000	0.001	-0.002**	0.001*	0.001	0.000	-0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
No manager from focal group	-0.634***	-0.595***	-0.637***	-0.684***	-0.233***	-0.257***	-0.267***	-0.284***
	(0.071)	(0.017)	(0.012)	(0.012)	(0.008)	(0.008)	(0.008)	(0.009)

Table 2 Fixed Effects Estimates of the Log Odds of White, Black, Latinx and Asian American Men and Women in Management, 1971-2015 - Main Variables

	White Men	White Women	Black Men	Black Women	Latinx Men	Latinx Women	Asian American Men	Asian American Women
Chapter 1: Rethink Diversity and Harassment Training								
Diversity training for all	-0.053**	0.019	0.054**	-0.010	-0.079***	-0.085***	-0.071***	-0.070***
	(0.019)	(0.019)	(0.017)	(0.016)	(0.016)	(0.015)	(0.017)	(0.015)
Harassment training for all	-0.012	-0.028*	-0.001	-0.011	0.007	-0.012	0.002	-0.006
	(0.014)	(0.014)	(0.013)	(0.012)	(0.012)	(0.011)	(0.012)	(0.011)
Legalistic diversity training for managers	0.063**	-0.073***	-0.050**	-0.054**	-0.010	0.021	-0.058**	-0.030
	(0.021)	(0.021)	(0.019)	(0.017)	(0.018)	(0.016)	(0.018)	(0.016)
Cultural inclusion diversity training for managers	-0.073*	0.052	0.070**	0.031	0.139***	0.032	0.173***	0.037
	(0.029)	(0.029)	(0.026)	(0.024)	(0.025)	(0.022)	(0.025)	(0.022)
Harassment training for managers	-0.042**	0.051***	-0.014	0.011	-0.013	-0.018	0.003	-0.013
	(0.014)	(0.014)	(0.012)	(0.012)	(0.012)	(0.011)	(0.012)	(0.011)
Chapter 2: Don't Count on Rules to Stop Bias and Harassment								
Job test for managers	-0.009	-0.079***	-0.127***	-0.114***	-0.061***	-0.113***	-0.076***	-0.137***
	(0.020)	(0.021)	(0.018)	(0.017)	(0.018)	(0.016)	(0.018)	(0.016)
Performance evaluations	0.024	-0.070***	0.046***	-0.012	-0.040**	-0.015	-0.045***	-0.006
	(0.015)	(0.015)	(0.014)	(0.013)	(0.013)	(0.012)	(0.013)	(0.012)
Civil rights grievance procedure	-0.017	-0.002	-0.086***	-0.065***	-0.075***	-0.071***	-0.101***	-0.068***
	(0.014)	(0.015)	(0.013)	(0.012)	(0.012)	(0.011)	(0.013)	(0.011)
Harassment grievance procedure	0.042**	-0.044***	0.012	-0.018	-0.081***	-0.033**	-0.059***	-0.029**
	(0.013)	(0.013)	(0.012)	(0.011)	(0.011)	(0.010)	(0.012)	(0.010)
Chapter 3: Democratize Recruitment								
Targeted recruitment	-0.015	0.082***	0.068***	0.127***	0.035*	0.065***	0.102***	0.075***
	(0.016)	(0.016)	(0.015)	(0.014)	(0.014)	(0.013)	(0.014)	(0.013)
Referral incentive program	-0.020	-0.003	0.033**	0.068***	0.036***	0.046***	0.012	0.029**
	(0.012)	(0.012)	(0.011)	(0.010)	(0.010)	(0.009)	(0.011)	(0.009)
Chapter 4: Open Networks Up								
Mentoring programs	-0.042	0.060*	0.072**	0.156***	0.121***	0.195***	0.168***	0.161***
	(0.025)	(0.025)	(0.022)	(0.021)	(0.021)	(0.019)	(0.022)	(0.019)
Self-managed work teams	-0.061***	0.009	0.007	0.011	-0.059***	-0.026*	-0.024	0.007
	(0.015)	(0.015)	(0.014)	(0.013)	(0.013)	(0.012)	(0.013)	(0.012)
Elite problem solving teams	0.054***	-0.008	-0.030**	-0.024*	-0.034**	-0.032***	-0.044***	-0.055***
	(0.012)	(0.012)	(0.011)	(0.010)	(0.010)	(0.009)	(0.011)	(0.009)
Employee resource groups	-0.066***	0.072***	-0.088***	-0.034*	0.037*	-0.005	0.022	0.025
	(0.019)	(0.019)	(0.017)	(0.016)	(0.017)	(0.015)	(0.017)	(0.015)
Chapter 5: Democratize Training								
Skill training	0.023	0.007	0.033**	0.033**	0.077***	0.018	0.063***	0.018
	(0.013)	(0.014)	(0.012)	(0.011)	(0.012)	(0.010)	(0.012)	(0.011)
Management training	-0.034**	0.050***	0.005	-0.004	0.005	-0.014	-0.015	-0.039***
	(0.013)	(0.013)	(0.011)	(0.011)	(0.011)	(0.010)	(0.011)	(0.010)
Nomination of women and people of color for management training	-0.128***	0.104***	-0.013	0.028	-0.051**	-0.017	0.010	-0.031*
	(0.019)	(0.019)	(0.017)	(0.016)	(0.016)	(0.015)	(0.017)	(0.015)
Cross training	-0.053***	0.043***	0.009	0.036***	-0.012	0.013	0.044***	0.034***
	(0.012)	(0.012)	(0.011)	(0.010)	(0.010)	(0.009)	(0.010)	(0.009)
Chapter 6: Work-Life Help for Everyone								
Flextime policy	-0.095***	0.089***	0.024	0.066***	0.066***	0.052***	0.047***	0.078***
	(0.016)	(0.016)	(0.014)	(0.013)	(0.013)	(0.012)	(0.014)	(0.012)
Parental Leave Policy	-0.035	0.056*	0.009	0.019	0.012	0.019	0.030	-0.011
	(0.023)	(0.023)	(0.021)	(0.019)	(0.020)	(0.018)	(0.020)	(0.018)
Childcare referral program	-0.011	0.026	0.067***	0.018	0.031*	0.049***	0.041**	0.028*
	(0.016)	(0.016)	(0.014)	(0.013)	(0.014)	(0.012)	(0.014)	(0.013)
Onsite childcare center	0.039	-0.016	0.007	0.114***	0.014	0.098***	0.128***	0.159***
	(0.022)	(0.023)	(0.020)	(0.019)	(0.019)	(0.017)	(0.020)	(0.018)
Childcare vouchers	-0.033	0.138***	0.138***	0.170***	0.052	0.121***	0.205***	0.172***
	(0.033)	(0.033)	(0.029)	(0.027)	(0.028)	(0.025)	(0.029)	(0.026)
Chapter 7: Bake In Systems Change								
Diversity manager	-0.054*	0.106***	0.083***	0.101***	0.019	0.086***	0.123***	0.120***
	(0.024)	(0.024)	(0.021)	(0.020)	(0.020)	(0.018)	(0.021)	(0.019)
Diversity taskforce	-0.064***	0.116***	0.045**	0.147***	0.105***	0.111***	0.213***	0.170***
	(0.019)	(0.019)	(0.017)	(0.016)	(0.016)	(0.015)	(0.017)	(0.015)
Workforce diversity goals	-0.062***	0.013	0.059***	-0.043***	0.042***	0.015	0.018	-0.017
	(0.014)	(0.014)	(0.013)	(0.012)	(0.012)	(0.011)	(0.012)	(0.011)

Table 2 Continued: Fixed Effects Estimates of the Log Odds of White, Black, Latinx and Asian American Men and Women in Management, 1971-2015 - Variables from Interaction Analysis

	White Men	White Women	Black Men	Black Women	Latinx Men	Latinx Women	Asian American Men	Asian American Women
Chapter 3: Democratize Recruitment								
Targeted recruitment in organizations with no ERGs	-0.023 (0.017)	0.068*** (0.017)	0.063*** (0.015)	0.110*** (0.014)	0.029* (0.015)	0.046*** (0.013)	0.101*** (0.015)	0.068*** (0.013)
The added effect of targeted recritment due to ERGs	0.056 (0.034)	0.071* (0.034)	0.024 (0.031)	0.098*** (0.029)	0.033 (0.029)	0.112*** (0.026)	-0.000 (0.030)	0.041 (0.027)
The total effect of targeted recritment in organizations with	0.033 (0.033)	0.139*** (0.033)	0.088** (0.029)	0.208*** (0.028)	0.063* (0.028)	0.158*** (0.025)	0.101*** (0.029)	0.109*** (0.026)
Referral incentive program organizations with no ERGs	-0.042*** (0.013)	0.004 (0.013)	0.029** (0.011)	0.061*** (0.011)	0.027* (0.011)	0.030** (0.010)	-0.012 (0.011)	0.004 (0.010)
The added effect of referral incentive program due to ERGs	0.150*** (0.029)	-0.034 (0.029)	0.039 (0.026)	0.073** (0.024)	0.068** (0.025)	0.127*** (0.023)	0.195*** (0.026)	0.198*** (0.023)
The total effect of referral incentive program in organizations with ERGs	0.109*** (0.028)	-0.030 (0.028)	0.068* (0.025)	0.134*** (0.024)	0.095*** (0.024)	0.157*** (0.022)	0.183*** (0.025)	0.202 (0.022)
Chapter 4: Open Networks Up								
Mentoring programs excluding chemical and electronics firms	0.000 (0.028)	-0.031 (0.028)	0.014 (0.025)	0.054* (0.023)	0.088*** (0.024)	0.145*** (0.021)	0.085*** (0.024)	0.095*** (0.022)
The added effect of mentoring programs in chemical and electronics firms	-0.230*** (0.053)	0.378*** (0.053)	0.230*** (0.047)	0.398*** (0.044)	0.119** (0.045)	0.157*** (0.041)	0.307*** (0.046)	0.226*** (0.041)
The total effect of mentoring programs in chemical and electronics firms	-0.229*** (0.047)	0.347*** (0.048)	0.244*** (0.043)	0.451*** (0.040)	0.207*** (0.041)	0.302*** (0.037)	0.392*** (0.042)	0.321 (0.037)

Table 2 Continued: Fixed Effects Estimates of the Log Odds of White, Black, Latinx and Asian American Men and Women in Management, 1971-2015 - Control Variables

	White Men	White Women	Black Men	Black Women	Latinx Men	Latinx Women	Asian American Men	Asian American Women
Other Personnel Programs:								
Voluntary diversity training	-0.054	-0.014	0.113***	0.031	0.161***	0.076***	0.132***	0.146***
	(0.029)	(0.029)	(0.026)	(0.025)	(0.025)	(0.023)	(0.026)	(0.023)
Diversity performance evaluations	-0.051*	0.126***	-0.045*	-0.001	0.051**	0.069***	-0.039*	-0.018
	(0.020)	(0.020)	(0.018)	(0.017)	(0.017)	(0.015)	(0.018)	(0.016)
Diversity bonus	-0.001	0.062*	0.249***	0.098***	0.145***	0.092***	0.126***	0.204***
	(0.031)	(0.031)	(0.028)	(0.026)	(0.026)	(0.024)	(0.027)	(0.024)
Diversity consultant	-0.077***	0.085***	0.051***	0.050***	0.056***	0.052***	0.069***	0.044***
	(0.017)	(0.017)	(0.015)	(0.014)	(0.015)	(0.013)	(0.015)	(0.013)
Human resources consultant	-0.041*	0.093***	-0.014	0.042**	0.064***	0.033*	0.043**	0.043**
	(0.017)	(0.017)	(0.016)	(0.015)	(0.015)	(0.013)	(0.015)	(0.014)
Internal job posting	-0.026	0.067***	0.018	0.045***	0.080***	0.066***	0.042***	0.037***
	(0.014)	(0.014)	(0.012)	(0.012)	(0.012)	(0.011)	(0.012)	(0.011)
Pay grade system	0.026	0.000	0.019	0.011	-0.031**	0.001	-0.037**	-0.001
	(0.014)	(0.014)	(0.012)	(0.012)	(0.012)	(0.011)	(0.012)	(0.011)
Hiring guidelines	-0.009	0.013	-0.041**	-0.062***	-0.033**	-0.012	-0.001	0.006
	(0.014)	(0.014)	(0.013)	(0.012)	(0.012)	(0.011)	(0.013)	(0.011)
Promotion guidelines	0.072***	-0.064***	-0.042**	-0.008	0.013	-0.016	-0.022	-0.062***
	(0.017)	(0.017)	(0.015)	(0.014)	(0.014)	(0.013)	(0.015)	(0.013)
Discharge guidelines	0.083***	-0.013	0.006	-0.015	-0.025	0.014	-0.011	0.004
	(0.015)	(0.015)	(0.014)	(0.013)	(0.013)	(0.012)	(0.013)	(0.012)
Diversity policy	0.041**	-0.012	0.030*	-0.021	-0.043***	0.004	0.015	-0.009
	(0.015)	(0.015)	(0.013)	(0.012)	(0.013)	(0.011)	(0.013)	(0.011)
HR department	-0.013	-0.059***	-0.087***	-0.056***	-0.049***	-0.067***	-0.078***	-0.067***
	(0.017)	(0.017)	(0.015)	(0.014)	(0.015)	(0.013)	(0.015)	(0.013)
Compressed workweek	0.051**	-0.041*	0.010	0.016	0.036**	0.007	-0.021	-0.006
	(0.016)	(0.016)	(0.014)	(0.013)	(0.014)	(0.012)	(0.014)	(0.013)
paid maternity leave	-0.134***	0.042	0.021	-0.060*	-0.016	-0.029	0.018	0.015
	(0.028)	(0.028)	(0.025)	(0.023)	(0.024)	(0.021)	(0.024)	(0.022)
Dependent care expense account	-0.087***	0.091***	0.012	0.017	-0.038***	0.009	0.025*	0.043***
	(0.012)	(0.012)	(0.011)	(0.010)	(0.011)	(0.010)	(0.011)	(0.010)
Early maternity leave (prior to 1993)	0.033*	-0.107***	-0.004	-0.012	-0.010	-0.072***	-0.024*	-0.004
	(0.013)	(0.013)	(0.012)	(0.011)	(0.011)	(0.010)	(0.012)	(0.010)
Legal Environment								
Federal contractor	-0.034*	0.062***	-0.042**	-0.056***	-0.073***	-0.062***	-0.058***	-0.049***
	(0.015)	(0.015)	(0.014)	(0.013)	(0.013)	(0.012)	(0.014)	(0.012)
EEOC charge/Title VII lawsuit	-0.042***	0.069***	-0.015	-0.010	0.029**	0.030**	-0.021	0.004
	(0.012)	(0.012)	(0.011)	(0.010)	(0.011)	(0.010)	(0.011)	(0.010)
Affirmative action compliance reviev	-0.036*	0.013	0.073***	-0.017	0.017	0.046***	0.053***	0.039**
	(0.016)	(0.016)	(0.015)	(0.014)	(0.014)	(0.013)	(0.014)	(0.013)
Organizational Characteristics								
Establishment size (log)	-0.009	-0.126***	-0.635***	-0.765***	-0.707***	-0.840***	-0.738***	-0.836***
	(0.008)	(0.008)	(0.007)	(0.006)	(0.007)	(0.006)	(0.007)	(0.006)
Proportion managers in establishment	-0.805***	-0.398***	-4.390***	-5.002***	-4.600***	-5.441***	-4.668***	-5.190***
	(0.070)	(0.072)	(0.064)	(0.059)	(0.061)	(0.055)	(0.062)	(0.055)
Union agreement	0.014	-0.068**	0.020	-0.040	0.006	0.018	-0.045*	-0.039
	(0.026)	(0.026)	(0.023)	(0.022)	(0.022)	(0.020)	(0.023)	(0.020)
Legal department	-0.070***	0.161***	-0.012	-0.035*	-0.013	-0.028	-0.000	-0.023
	(0.019)	(0.019)	(0.017)	(0.016)	(0.016)	(0.015)	(0.017)	(0.015)
Attorney on retainer	0.034*	-0.073***	-0.009	-0.053***	-0.031*	-0.043***	-0.057***	-0.056***
	(0.015)	(0.015)	(0.013)	(0.012)	(0.013)	(0.011)	(0.013)	(0.012)
Proportion minorities in top management	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Proportion women in top management	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
No manager from focal group	-0.680***	-0.848***	-0.925***	-0.953***	-0.922***	-0.918***	-0.936***	-0.892***
	(0.047)	(0.014)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)

Labor Market and Economic Environment								
Proportion of focal group in non managerial jobs	1.368*** (0.047)	1.073*** (0.049)	1.395*** (0.094)	1.019*** (0.081)	0.914*** (0.047)	0.754*** (0.057)	3.865*** (0.143)	3.119*** (0.132)
Proportion of group in industry labor force (log):								
White men	0.092** (0.035)	-0.119*** (0.035)	-0.017 (0.032)	-0.055 (0.030)	-0.052 (0.030)	0.033 (0.027)	0.019 (0.031)	0.016 (0.028)
White women	-0.198*** (0.052)	0.572*** (0.052)	0.186*** (0.046)	0.152*** (0.043)	0.035 (0.044)	-0.037 (0.040)	0.043 (0.045)	0.079 (0.040)
Black men	0.039 (0.045)	0.169*** (0.046)	-0.173*** (0.041)	-0.002 (0.038)	-0.072 (0.039)	-0.083* (0.035)	-0.154*** (0.040)	-0.025 (0.036)
Black women	-0.090* (0.040)	-0.115** (0.041)	0.129*** (0.036)	0.055 (0.034)	0.072* (0.035)	0.127*** (0.031)	0.131*** (0.036)	0.040 (0.031)
Latinx men	-0.249*** (0.029)	0.302*** (0.029)	0.220*** (0.026)	0.112*** (0.025)	0.127*** (0.025)	0.037 (0.023)	0.095*** (0.026)	0.025 (0.023)
Latinx women	0.198*** (0.028)	-0.197*** (0.028)	-0.137*** (0.025)	-0.107*** (0.024)	-0.097*** (0.024)	-0.047* (0.022)	-0.121*** (0.025)	-0.045* (0.022)
Proportion of group in state labor force (log):								
White men	1.259*** (0.082)	-0.716*** (0.083)	0.426*** (0.073)	-0.333*** (0.069)	-0.607*** (0.070)	-0.658*** (0.064)	-0.559*** (0.073)	-0.748*** (0.065)
White women	-0.835*** (0.067)	1.085*** (0.067)	-0.328*** (0.060)	-0.262*** (0.056)	-0.247*** (0.057)	-0.347*** (0.052)	-0.170** (0.059)	-0.311*** (0.053)
Black men	0.105** (0.036)	-0.101** (0.036)	-0.292*** (0.032)	-0.211*** (0.030)	-0.047 (0.031)	0.023 (0.028)	-0.014 (0.032)	-0.007 (0.028)
Black women	-0.119** (0.043)	0.127** (0.043)	0.316*** (0.038)	0.149*** (0.036)	0.048 (0.037)	-0.037 (0.033)	0.047 (0.038)	-0.017 (0.033)
Latinx men	-0.141*** (0.027)	0.113*** (0.028)	0.102*** (0.025)	0.141*** (0.023)	-0.012 (0.023)	-0.004 (0.021)	-0.017 (0.024)	0.008 (0.021)
Latinx women	0.064* (0.028)	-0.078** (0.029)	-0.118*** (0.026)	-0.169*** (0.024)	-0.116*** (0.024)	-0.152*** (0.022)	-0.074** (0.025)	-0.104*** (0.022)
R-sq	0.386	0.379	0.411	0.499	0.471	0.560	0.507	0.571

Note: Data shown are coefficients from seemingly unrelated regression with standard errors in parentheses. The analyses include establishment and year fixed effects. All independent variables are lagged by one year, excluding proportion of managerial jobs. N (organization-year; organizations)= 26,888; 814.

** p<0.01; * p<0.05; (two tailed test)