A central assumption of much of the previous research on race differences is that the process by which Blacks and Whites advance in the workplace is race blind so that if Blacks and Whites had the same amount of education and job experience and were located across the same bureaucratized structures, the gap in Black-White attainment in the workplace would disappear. The authors argue that to understand the systematic differences in Black-White outcomes in the workplace, we need to reexamine this assumption. The authors develop a theoretical argument for the existence of race-specific models of attainment that builds on Kanter's concept of "homosocial reproduction." They then test this argument by estimating whether the determinants of promotion differ by race, using a nationally representative sample of U.S. workers and their employing organizations. Their findings indicate that the determinants of promotion systematically differ for Blacks and Whites.

Do the Determinants of Promotion Differ for Blacks and Whites?

Evidence From the U.S. Labor Market

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Although some recent research has documented a narrowing of the racial gap in the workplace over the past two decades (Cancio, Evans, & Maume, 1996; Farley, 1983; Farley & Allen, 1987; King, 1992), Blacks continue to earn less than their White counterparts (Beggs, 1995; Bridges & Villemez, 1994; Tomaskovic-Devey, 1993), to hold jobs with less task complexity and authority (Kaufman, 1986; Mueller, Parcel, & Tanaka, 1989),

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and to be promoted at slower rates (Greenhaus, Parasuraman, & Wormley, 1990; Nkomo & Cox, 1990). Past research usually has explained the differences in these Black-White outcomes in terms of differences in human capital (Arrow, 1972; Becker, 1975), differences in socioeconomic status (SES) (Blau & Duncan, 1967; Featherman & Hauser, 1976), or segregation across labor market sectors (Edwards, 1979; Kaufman, 1986) or firms (Baron, Davis-Blake, & Bielby, 1986; Baron & Newman, 1990). A central assumption of much of this research is that a single system of workplace attainment operates for both Blacks and Whites so that if Blacks and Whites had the same amount of education and job experience and were located across the same bureaucratized structures, the gap in Black-White attainment in the workplace would disappear. These approaches suggest that the process by which Blacks and Whites advance in the workplace is race blind.

We argue that to understand the systematic differences in Black-White outcomes in the workplace, we need to question the implicit assumption that the process of attainment is the same for Blacks and Whites. Specifically, recent work from the field of management using Kanter's (1977) concept of "homosocial reproduction" suggests that existing theories of workplace stratification that assume a single system of attainment for both Blacks and Whites may miss crucial aspects of the process by which inequality is generated. Instead, there may be race-specific models of workplace attainment in which the determinants of advancement systematically differ for Black and White workers. In this article, we develop a theoretical argument for the existence of race-specific models of attainment that builds on Kanter's concept. We then test this argument by estimating whether the determinants of promotion systematically differ by race, using a nationally representative sample of U.S. workers and their employing organizations.

Although most of the research on racial differences at work has used either income or hiring decisions as the dependent variable (Bills, 1988; Kilbourne, England, & Beron, 1994; Merritt & Reskin, 1992; Neckerman & Kirschenman, 1991; Parcel, 1979), scholars have argued that promotion is a strategic site at which to study workplace racial inequality because it is the stage at which discrimination is most likely to persist and employers are less at risk of litigation (Greenhaus et al., 1990; Nkomo & Cox, 1990). In many organizations, promotion decisions are less open to scrutiny than hiring decisions because criteria tend to be more subjective (Reskin, in press). For example, promotion assessments often include something called "potential" that is rated by supervisors or managers. The subjective nature of the promotion process implies that there is greater probability that discrimination can occur in more subtle ways, often difficult to detect. Thus, promotion is a particularly

pertinent stage at which to examine whether the determinants of workplace advancement systematically differ for Blacks and Whites.

THEORETICAL BACKGROUND

Research on racial differences in the workplace traditionally has explained unequal Black-White outcomes in terms of either differences in human capital, differences in SES, or segregation across different labor market sectors or firms. Human capital theorists (Arrow, 1972; Becker, 1957, 1975) have argued that individual workers invest in specific skills, such as education and work experience, for the sake of some future reward because they believe that their investments will yield future benefits that outweigh the costs. Employers see human capital investments as an indicator of greater productivity and/or firm commitment and tend to reward workers with greater levels of it. Human capital theorists have explained race differences in workplace attainment as a result of differences in the amount of human capital that Black and White workers tend to bring to the workplace. Historically, Black workers have been disadvantaged in terms of access to and quality of education and training (Farley & Allen, 1987; Jaynes & Williams, 1989), and these lower levels of human capital have been translated into worse outcomes for Black workers relative to White workers.

Status attainment models of stratification (Blau & Duncan, 1967; Featherman & Hauser, 1976; Hauser & Featherman, 1974) extended human capital's supply-side focus on education and work experience to include parental SES and background aspirational characteristics. Although it improved on purely economic models of race stratification, status attainment retained human capital's central assumption of a supply-side single system of stratification. Specifically, by documenting a narrowing of the racial gap over time, status attainment put special emphasis on the role of achieved variables (e.g., education, work experience) over ascribed ones (e.g., race, sex) in explaining differences in the attainment process.

Although human capital and status attainment theories remain useful for understanding workplace racial inequality because they highlight the extent to which differences in education, work experience, and family background can account for some of the differences in Black-White outcomes, much recent research has shown the limitations of these approaches (England, 1992; Tomaskovic-Devey, 1993). According to the criticisms leveled against human capital and status attainment approaches, regardless of human capital or family background, Blacks and Whites experience different outcomes as a result of differential locations across bureaucratized structures including

labor markets, economic sectors, and organizations (Baron & Bielby, 1980; Baron & Newman, 1990; Bibb & Form, 1977; Hodson, 1978; Kaufman, 1986).

The work on segmented labor markets developed as a demand-side response to human capital and status attainment theories in an attempt to elucidate the role of structural location across different labor markets on Black-White outcomes. Segmented labor market theorists argue that in an attempt to "divide and conquer" the working class, employers developed several labor markets in which they sort out workers according to race and sex (Edwards 1979; Hodson & Kaufman, 1982; Kaufman, 1986). Although there is some debate as to how many labor markets have evolved over time (Baron & Bielby, 1984; Kaufman, Hodson, & Fligstein, 1981; Tolbert, Horan, & Beck, 1980), proponents of a labor market approach agree that Black workers tend to be concentrated in a peripheral labor market comprised of jobs that offer few of the advantages associated with bureaucratization (Bridges & Villemez, 1994). This is important because bureaucratized procedures tend to reduce subjectivity in the assessment of performance and increase fairness in the allocation of rewards (Edwards, 1979), features that should have a positive effect on getting ahead at work.

The shift from a labor market approach toward one focusing on economic segmentation (Baron & Bielby, 1980, 1984; Baron et al., 1986; Baron & Newman, 1990) puts even greater emphasis on the importance of characteristics of the firm and of the environment in which firms operate to account for the racial gap in the workplace. According to this work, firms sharing the same characteristics in terms of size, age, market competition, government regulation, and the presence of bureaucratic procedures (e.g., internal labor market, on-the-job training, personnel department) will tend to develop similar reward systems (Althauser, 1989; Baron & Bielby, 1980, 1984; Baron et al., 1986; Bridges & Villemez, 1994). To the extent that minorities are overrepresented in firms operating in environments that offer few of the advantages of standardized bureaucratic procedures, they will be less likely to get ahead (Baron & Bielby, 1980; Baron & Newman, 1990).

Although the labor market and economic segmentation perspectives improve on the individual-level explanations of human capital and status attainment theories in terms of clarifying our understanding of the role of race in the workplace, they still operate on the assumption that the processes of attainment are similar for Blacks and Whites. Firm and environmental characteristics are believed to structure the attainment process of Blacks and Whites in similar ways so that if members of both races were in similar jobs in similar firms and were operating in similar environments, the Black-White differences in attainment would disappear. Instead, we believe that the

persistent findings of unequal Black-White outcomes in the workplace may be better explained by race-specific models of workplace attainment in which the *determinants* of advancement—in our study, promotion—differ for Blacks and Whites.

Sociologists seldom have used Kanter's (1977) work to understand race differences in the workplace. Although her book, *Men and Women of the Corporation*, is well known by sociologists, its central argument of homosocial reproduction and incorporation into workplace networks rarely is applied to studies of the *race* gap in the workplace. Yet, her theory of homosocial reproduction is one of the first to suggest the possible existence of race-specific models of attainment. Although Kanter developed her argument as an attempt to explain *sex* differences in attainment at work, recent studies in the management literature have begun to apply it to race differences in promotions (Greenhaus et al., 1990; Nkomo & Cox, 1990). In particular, the "relational demography" literature has examined the extent to which same-demographic characteristics (e.g., race, sex, education) in supervisor-subordinate dyads affect ratings of performance by supervisors (Tsui & O'Reilly, 1989; Tsui, Xin, & Egan, 1995).

Kanter (1977) argued that sponsorship is a crucial mechanism in an organization's opportunity structure for career advancement and documented that sponsorship tends to be "homosocial"; that is, people tend to establish sponsorship ties with people like themselves in terms of social background. Thus, because managers were overwhelmingly men, they tended to sponsor other men, leaving little opportunity for women to advance. Her theory of homosocial reproduction implies the existence of sex-specific models of workplace attainment in which men get ahead through a "sponsorship" model, whereas women can get ahead only through a "contest" model (Turner, 1960). A sponsorship model implies an informal system of promotion through homosocial mentoring, whereas a contest model implies a system in which one advances only through formal qualifications and formalized bureaucratic procedures because of exclusion from homosocial mentoring networks.

Greenhaus et al. (1990) and Nkomo and Cox (1990) applied Kanter's (1977) theory of homosocial reproduction to explain race differences in promotion in the workplace. They argued that because managers/sponsors are overwhelmingly White, they are very likely to associate with and sponsor other people like themselves in terms of both *color* and social background. This implies that Whites will be more likely than Blacks to be promoted. Although these two studies document a negative effect of being Black on (a) sponsorship ties and (b) promotion, they fail to fully consider their findings' implications—that Whites get ahead mostly through informal spon-

sorship as the result of belonging to mostly White workplace networks, whereas Blacks get ahead only through formal bureaucratic mechanisms because of their exclusion from such networks.

This theoretical argument leads us to expect different effects of individual and firm characteristics for Black and White workers. For example, under a system of sponsorship promotion for Whites, the effects of formal human capital qualifications should be negligible because of the importance of informal and personal ties for advancement. On the other hand, under a system of contest promotion for Blacks, the effects of formal human capital qualifications should be significant. Similarly, the effects of firm minority composition and location across bureaucratized structures also should differ by race because of their association with the possibility of forming sponsorship ties between White managers and White workers. In the rest of this article, we test this argument by estimating an interaction model that identifies to what extent the effects of human capital, racial composition of the firm, and location across bureaucratized structures on promotions differ between Blacks and Whites.

DATA AND MEASURES

Our data source for this research is the matched 1991 General Social Survey (GSS) and the 1991 National Organizational Study (NOS) of the University of Illinois (Kalleberg, Knoke, Marsden, & Spaeth, 1991).[1] The NOS used multistaged sampling to identify its sample of organizations. It began by using the 1991 GSS, which included a set of questions dealing with work including questions about organizational commitment, work attitudes, autonomy, and supervisory responsibilities. In addition, the GSS asked for the names, addresses, and phone numbers of the respondents' employers. Because only about 60% of the 1,500 GSS respondents or their spouses were employed in 1991, the topical module generated a national sample of 900 establishments selected with a probability proportional to the size of their labor forces. Interviewers from the University of Illinois conducted telephone interviews with informants at each of these 900 establishments—generally owners of small establishments or personnel managers of larger establishments—about workforce composition, personnel practices, workplace policies, organizational environments, and job structures. This resulted in the NOS data set in which the unit of analysis is the organization itself. The data set matching individuals and employers is the first data set that contains information on a representative sample of U.S. workers and their employing organizations.

We excluded individuals who worked in organizations employing just one worker on the assumption that they had no opportunities for being promoted.[2] Also, because we had no GSS information on the respondents' spouses who were employed, we deleted them from the analysis.[3] Finally, we excluded self-employed individuals because we are interested in conditions under which employers promote employees. Consequently, our results are based on a nationally representative sample of 396 individuals employed in organizations having at least two workers. We recoded missing data to the mode for ordinal variables and to the mean for continuous ones. There were no missing data on the dependent variable.

Due to the dichotomous nature of the dependent variable, our results are based on logistic regression using a maximum likelihood estimation procedure. We use a simple exponential transformation of the logistic coefficients to obtain odds ratios of the likelihood of being promoted in one category of a given independent variable versus another category.

DEPENDENT VARIABLE

Our dependent variable is promotion. Promotion previously has been identified as a key reward in work organizations (Baron, 1984; DiPrete & Soule, 1988; Kalleberg & Reskin, 1993). Aside from the intrinsic benefits, promotion usually is associated with greater autonomy and an increase in pay (Bureau of Labor Statistics, 1994; Harlan, 1989). We measure promotion by the question, "Have you received any promotions while working for your present employer?" (1 = *yes*, 0 = *no*).

INDIVIDUAL-LEVEL VARIABLES

We measure the race of the respondent by the variable *Black* (coded 1 for *Black*, 0 for *White*). The respondent's sex is measured by the variable *male* (coded 1 if the GSS respondent is a *male*, 0 if a *female*).[4]

Human capital theorists customarily use years of formal education, labor force experience, firm seniority, and number of hours worked as indicators of the amount of human capital that workers bring to the market (Becker, 1975; Cain, 1976; Filer, 1989). In this study, *education* is measured by the highest year of school completed by the GSS respondent. *Pre-promotion firm experience* is computed by subtracting the number of years worked in the current job from the number of years worked for the current firm for individuals who had been promoted. For the respondent who did not receive a promotion, pre-promotion firm experience equals the number of years worked for the current firm. Furthermore, because there is evidence that the

return to job experience on subsequent promotion declines over time (Rosenbaum, 1979), we include a squared term for pre-promotion firm experience. *Pre-firm labor force experience* is computed by subtracting pre-promotion firm experience from the total number of years the respondent has worked for pay. Again, because we expect a declining effect of pre-firm experience on promotion, we include a squared term. *Full-time employment*, is a dichotomous variable contrasting individuals who worked 35 hours or more a week (coded 1) to those who worked less than 35 hours (coded 0).

FIRM- AND ENVIRONMENTAL-LEVEL VARIABLES

Consistent with recent work on the effects of organizational structure on workplace inequality (Baron, 1984; Bielby & Baron, 1986; Bridges & Nelson, 1989; Bridges & Villemez, 1994; Strang & Baron, 1990), we include variables that capture the central aspects of a firm's bureaucratic structure and the environment in which it operates.

On-the-job training, the existence of a *personnel department*, whether the *firm is part of a larger organization*, and whether the firm is *private* all are coded 1 for *yes* and 0 otherwise from questions asked directly of respondents' employers. We measure the presence of a *firm internal labor market* by an eight-item scale (Cronbach's alpha = .84) based on three types of questions (see Marsden, Cook, & Knoke, 1994, p. 901). Either *yes* or *no* answers were requested from the following: "Do you sometimes fill vacancies with people already employed at [your establishment]?" and "Are there different levels of [occupation]?" (asked for GSS, core, and managerial occupations). Answers ranging from *not at all* to *very often* were requested from the following: "Is it possible for [occupation] to be promoted to a level above [occupation]? How often does this happen?" (asked for GSS and core occupations). *Union presence* is measured by a scale made up of four items (Cronbach's alpha = .82) based on the following questions (see Marsden et al., 1994, p. 907): "Is any of the formal training offered because of union contracts?" "How important are union negotiations for determining the earnings of [occupation] here?" (asked for GSS and core occupations), and "Over the next 3 years, how big a problem will relations with unions be for [your establishment]?"

To assess the group effects of female and minority presence (Baron & Newman, 1990; Blalock, 1982), we include two measures of the demographic composition of the firm: the *percentage of full-time women* in the firm and the *percentage of full-time minorities* in the firm.[5]

Firm size is measured by the natural logarithm of the total number of full- and part-time employees in the firm. Logging is justified by the fact that we do not expect the effect of size on promotion to be linear (see, e.g., Kalleberg &

Van Buren, 1996). *Firm age* is measured by subtracting the year in which the firm was established from the year of the NOS survey.

Finally, we include four measures that indicate the amount of control firms have over the environments in which they operate. The level of *market competition* in the firm's industry is measured by a 4-point scale (ranging from *none* to *a great deal*) to the question, "How much competition would you say there is in the organization's main market or service area?" *Market scope* is coded 1 if the firm's market area expands beyond its state line and 0 otherwise. The amount of *government regulation* on a firm's operation is measured by a 5-point scale (ranging from *not at all* to *almost completely*) to the question, "How much are the firm's operations regulated by government agencies?" *Outside review* is measured by a dummy variable indicating whether the firm is subject to periodic review by an outside accreditation or licensing organization (coded 1 for *yes* and 0 otherwise). These four questions were asked directly to the respondents' employers.

RESULTS

We report the means and standard deviations of all the variables for Blacks and Whites as well as *t* tests for differences in group means in Table 1. Compared to Whites, Black workers tend to have significantly fewer years of formal education and tend to work in firms that are larger, employ a higher percentage of minority workers, have significantly more governmental regulation, and are more subject to periodic review by an outside accreditation organization. These results suggest that Black and White workers continue to differ not only in terms of educational achievement but also in the types of firms for which they work.

Table 2 reports the results of two logistic regression models using promotion as the dependent variable.[6] Equation 1 in the table regresses promotion on race, sex, full-time employment status,[7] education, labor force and pre-promotion firm experience, and firm and environmental characteristics. This equation presents the traditional non-race-specific attainment model that most studies of workplace racial inequalities estimate (Eliason, 1995; Tomaskovic-Devey, 1993). We include it here so that we can compare the consequences of models that assume race-neutral and race-specific determinants of promotion. Consistent with past studies, the results in Equation 1 indicate that Black workers with comparable education, experience, and training, and who work in similar types of firms in terms of both internal and environmental characteristics, are almost half as likely as their White counterparts to have been promoted (odds ratio = .51). In addition, male workers

TABLE 1: Descriptive Statistics (means and standard deviations) and *t* Tests for Differences in Group Means, by Race

			Black		*White*	
Variable	*Mean*	SD	*Mean*	SD	*Mean*	SD
Promoted	.462	.499	.366	.488	.473	.500
Male	.480	.500	.390	.494	.490	.501
Full-time employment	.780	.415	.805	.401	.778	.417
Years of education	13.606	2.615	12.951	2.133	13.682*	2.657
Pre-promotion firm experience	6.236	7.324	6.737	7.276	6.178	7.338
Pre-firm labor force experience	12.995	9.635	11.726	9.481	13.142	9.655
On-the-job training	.790	.408	.756	.435	.794	.405
Personnel department	.568	.496	.610	.494	.563	.497
Firm is part of a larger organization	.631	.483	.610	.494	.634	.482
Private sector	.596	.491	.561	.502	.600	.491
Firm internal labor market	.000	4.738	.411	4.973	−.048	4.716
Union presence	.000	2.581	.528	2.168	−.061	2.620
Percentage of full-time minorities in firm	22.838	26.027	49.694	28.612	19.736*	23.878
Percentage of full-time women in firm	51.725	28.921	57.806	27.493	51.023	29.036
Size of firm (logged)	4.732	2.105	5.329	1.837	4.663†	2.126
Age of firm	43.017	36.264	40.203	32.760	43.342	36.675
Market competition	3.437	.820	3.390	.802	3.442	.823
Market scope	.439	.497	.390	.494	.445	.498
Government regulation	3.543	1.189	3.829	1.093	3.510†	1.196
Outside review	.624	.485	.756	.435	.609†	.489
N	396		41		355	

†$p \leq .05$ (one-tailed test).
*$p \leq .05$ (two-tailed test).

are almost twice as likely to have been promoted as are comparable female workers (odds ratio = 1.96). Full-time employment has a positive effect on promotion, with full-time workers being about 2.5 times more likely than part-time workers to have been promoted.

Whereas pre-promotion firm experience does have a significant effect on promotion, overall labor force experience does not. Coefficients for both firm experience and firm experience squared have significant effects on promotion, confirming our hypothesis that the relationship between experience and promotion is nonlinear with experience having a smaller effect at higher levels of experience. Workers with firm experience up to 17.5 years[8] are more likely to be promoted than are other workers. This supports the argument that

TABLE 2: Logistic Regression of Promotion on Individual, Firm, and Environmental Characteristics: Race-Neutral and Race-Specific Models ($N = 396$)

	Equation 1		*Equation 2*	
Independent Variable	b	*Odds Ratio*	b	*Odds Ratio*
Black	−.667†	.514	−7.280*	.001
	(.410)		(3.523)	
Male	.671*	1.955	.632*	1.881
	(.275)		(.284)	
Full-time employment	.911*	2.487	.984*	2.675
	(.326)		(.337)	
Education	.024	1.024	.003	1.003
	(.046)		(.049)	
Pre-promotion firm experience	.140*	1.151	.142*	1.152
	(.043)		(.045)	
Pre-promotion firm experience squared	−.004*	.996	−.004*	.996
	(.001)		(.002)	
Pre-firm labor force experience	.044	1.045	.036	1.037
	(.037)		(.039)	
Pre-firm labor force experience squared	−.001	.999	−.001	.999
	(.001)		(.001)	
On-the-job training	−.387	.679	−.431	.650
	(.329)		(.342)	
Personnel department	.612*	1.845	.687*	1.988
	(.294)		(.304)	
Firm is part of larger organization	.399	1.490	.379	1.460
	(.254)		(.264)	
Private sector	.515†	1.674	.576†	1.779
	(.290)		(.300)	
Firm internal labor market	.100*	1.105	.130*	1.139
	(.031)		(.034)	
Union presence	−.045	.956	−.045	.956
	(.050)		(.051)	
Percentage full-time minorities in firm	.002	1.002	.006	1.006
	(.005)		(.005)	
Percentage full-time women in firm	.001	1.001	.001	1.000
	(.005)		(.005)	
Firm size (logged)	−.085	.919	−.097	.907
	(.087)		(.089)	
Firm age	−.004	.996	−.003	.997
	(.003)		(.004)	
Market competition	.007	1.007	−.011	.989
	(.146)		(.151)	
Market scope	−.232	.793	−.192	.825
	(.268)		(.275)	

(continued)

TABLE 2 Continued

	Equation 1		*Equation 2*	
Independent Variable	b	*Odds Ratio*	b	*Odds Ratio*
Government regulation	.150	1.162	.155	1.168
	(.113)		(.115)	
Outside review	−.488†	.614	−.464†	.629
	(.263)		(.271)	
Black * Percentage of full-time minorities in firm			−.030†	.971
			(.016)	
Black * Education			.612*	1.844
			(.265)	
Black * Firm internal labor market			−.350*	.705
			(.101)	
Constant	−2.601*		−2.370*	
−2 log likelihood	466.409*		443.919*	
Model χ^2	80.289*		102.779*	
Model χ^2 improvement	80.289*		22.490*	
Degrees of freedom	22		25	

NOTE: Standard errors are in parentheses.
†$p \leq .05$ (one-tailed test).
*$p \leq .05$ (two-tailed test).

a worker who has been repeatedly passed over for promotion within a firm eventually may be seen as unpromotable (Rosenbaum, 1979). This model also indicates that education does not have a significant effect on promotion. Education may be used as an inexpensive screening device at job entry but does not appear to affect subsequent firm mobility, possibly because more direct measures of the worker's productivity are then available (Bills, 1988; Kalleberg & Reskin, 1993).

At the organizational level, workers in firms with personnel departments, with internal labor markets, or in the private sector are significantly more likely to be promoted than are other workers. On the other hand, workers in firms that are subject to periodic review by outside agencies are about 40% less likely to be promoted than are other workers (odds ratio = .61). It is possible that outside licensing organizations complicate the process of evaluation by insisting on detailed rules and procedures that increase the costs of promotions to firms or make their implementation cumbersome, thus reducing their likelihood. Overall, these results show that race differences in promotion exist that cannot be accounted for by differences in human capital, firm composition, or location across different bureaucratized structures.

DO THE DETERMINANTS OF PROMOTION DIFFER BY RACE?

Although the model presented in Equation 1 of Table 2 is suggestive regarding the role of race in promotion decisions, by itself it is unable to directly address our central concern of whether the determinants of promotion systematically differ by race. This issue is addressed with a model including multiple race interactions. Equation 2 of Table 2 presents results of a model including interaction terms between (a) Black and education, (b) Black and the presence of a firm internal labor market, and (c) Black and the percentage of full-time minorities in the firm.[9] First, our results indicate that promotion likelihoods differ significantly between Black and White workers with increased minority presence in the firm (the significant negative effect of the interaction term). Percentage of full-time minorities has a negative effect for Black workers but no effect for White workers. This indicates that as minority presence increases in a firm, Black workers are penalized in terms of promotion opportunities, whereas White workers are not.[10] The second interaction term, that between Black and education, is positive and significant, indicating not only that education increases promotion likelihoods only for Black workers (the effect of education for Whites is not significant) but also that the effect of human capital investment differs by race. The third and final interaction included, that between Black and the presence of a firm internal labor market, also is significant, but its effect is negative. This finding suggests that only White workers benefit from the presence of a firm internal labor market, whereas Black workers are penalized by it, possibly because of greater barriers faced by Blacks to access the formal bureaucracy (Federal Glass Ceiling Commission, 1995, pp. 64-83).

Net of the race interactions, being male, being employed full-time, having firm experience up to 17.5 years, being employed in a firm that is in the private sector, and being employed in a firm that has a personnel department each has a positive effect on promotion outcomes. On the other hand, being Black and being employed in a firm that is subject to outside review each negatively affects promotion outcomes. Thus, all the variables that were significant in Equation 1 of Table 2 remain significant in this model.

More important, however, these results indicate that the determinants of promotion differ for Blacks and Whites and provide support for our argument that race-specific models of promotion exist in a cross section of U.S. firms. The rules to get ahead differ for Black and White workers. In terms of promotion opportunities, Black workers are harmed from being in a firm with a high percentage of minority employees or in a firm with an internal labor market. However, they do benefit from having more education. On the other hand, White workers do not appear to be affected in any way by either a high percentage of minority employees or more education. Rather, it is location in

a firm with an internal labor market that increases their promotion likelihoods.

Although our analyses cannot test directly whether White workers get ahead through an informal sponsorship system and Black workers through a more formal contest system without data on workplace networks and mentorship ties, they are overall consistent with this argument. The presence of an effect of education only for Blacks suggests that formal criteria for promotion are less likely to be applied to Whites than to Blacks. In addition, the significant negative effect of increased minority presence only for Blacks may reflect some sort of group threat process (see Blalock, 1982; Blumer, 1958) that results from the difficulty of White managers in mostly minority worker firms to establish sponsorship ties with people like themselves (i.e., also White). It is possible that in disproportionately minority firms, managers, who are overwhelmingly White, attempt to protect White employees by reducing promotion opportunities for Blacks.

Finally, the opposite effects of a firm internal labor market for Blacks and Whites may reflect another attempt by employers to protect White workers by segregating Black workers into jobs not located on promotion ladders. There is evidence that Blacks face greater barriers than do Whites in accessing formal bureaucratic channels in the workplace (Federal Glass Ceiling Commission, 1995, pp. 64-83), and it is likely that their exclusion from jobs located on promotion ladders stems from a combination of (a) the lack of informal contacts within the firm at the recruitment stage (Braddock & McPartland, 1987), (b) the downgrading of minority credentials at job entry (Braddock & McPartland, 1987), and (c) the tendency by White supervisors to give Black subordinates lower performance ratings than their White counterparts (Tsui & Egan, 1994). Unfortunately, we cannot test this explanation because of the unavailability of pre-promotion job-level information in our data set. Overall, the addition of these three race interactions significantly improves the model's ability to predict promotion likelihood (χ^2 change = 22.49, $p < .001$).

DISCUSSION

At the beginning of this article, we argued that past studies of workplace stratification that assumed a single system of attainment for both Blacks and Whites may have missed crucial aspects of the attainment process. Building on Kanter's (1977) theory of homosocial reproduction, we suggested that there may be race-specific models of workplace attainment in which the determinants of advancement systematically differ for Blacks and Whites as

a result of sponsorship mechanisms. Our findings tend to support this argument by documenting two systems of promotion determinants—one for Whites and one for Blacks.

Above all, our results indicate that the direct effect of race persists. Black workers are significantly less likely to be promoted than are White workers with similar levels of education and work experience and in firms with similar characteristics and organizational environments. In addition, not only are Black workers disadvantaged in the promotion process because of the color of their skin, but they also are treated unequally relative to Whites in terms of payoff for education, the benefits of working in a firm with an internal labor market, and the effect of an increased minority presence within a firm.

The positive effect of education for Blacks but not for Whites suggests that different criteria may be applied when assessing the "promotability" of Black and White workers. Supervisors may use a sponsorship model for Whites in which education is used only as a screening device at job entry (but has little relevance for future advancement) and use a contest model for Blacks in which education is seen as a prerequisite for getting ahead in a firm. In addition, the negative effect of increased minority presence in a firm only for Blacks may indicate some type of group threat process at work in which White managers who see White workers as being in scarce supply attempt to protect them by reducing promotion opportunities for Blacks. Finally, the opposite effect of a firm internal labor market for Blacks and Whites also suggests that Black workers are more likely than White workers to be segregated into jobs not located on promotion ladders, probably as the result of different means of accessing the formal bureaucracy. It is likely that Blacks are excluded from jobs located on promotion ladders because of different recruitment methods by organizations, the downgrading of their credentials at job entry, and low performance ratings by White supervisors.

CONCLUSION

What do our findings suggest for the future of racial equality in the workplace? The picture we paint here offers little hope for improvement in the near future. There is little doubt that Blacks continue to be treated differently than Whites by their employers in terms of promotion chances. More disconcerting, however, is that the meaning of race seems to be taking on a new significance in a context where direct discrimination may have become more difficult for employers as a result of government scrutiny (Pettigrew & Martin, 1987). It is possible that the direct negative effect of

race in the workplace eventually may disappear, but our results suggest that it will likely be replaced by more pernicious, less overt forms of racial inequality operating indirectly through the existence of sponsorship systems.

Our finding of a negative effect of increased minority presence on promotion for Blacks may be of special interest to those favoring governmental pressures to increase the hiring of Blacks so as to redress or eliminate racial discrimination at the hiring stage. Our results indicate that firms that discriminate less in hiring may increase their percentages of minority employees but that as this representation increases, Blacks may be penalized in terms of promotion opportunities. We suggest that greater emphasis be placed on ensuring that all firms, but especially those increasing their representation of minority workers, establish clear criteria for promotions subject to governmental scrutiny. Such a measure would limit the amount of discretion employers hold beyond the initial hiring stage.

In sum, our findings offer evidence of the existence of race-specific models of attainment in which the determinants of promotion systematically differ for Blacks and Whites. More important, our results suggest that studies attempting to explain the race gap in attainment in terms of a single model for both races miss crucial aspects of the process by which inequality is generated. Because this study represents a first step toward conceptualizing the process of attainment in terms of race-specific models, it raises important questions for future research.

Specifically, future studies should attempt to clarify our findings regarding the racial differences in the effects of education, access to bureaucratized structures, and minority composition of the firm by (a) specifying the extent to which different criteria in the evaluation of credentials and performance are applied to Blacks and Whites, (b) elucidating the role of different recruitment methods in the allocation of Blacks and Whites to organizational positions, and (c) investigating the processes by which increasing minority presence in a firm leads to feelings of group threat on the part of White managers. In addition, future research should attempt to collect detailed data on workers' current jobs as well as pre-promotion jobs to better assess the effects of job-level characteristics on workplace attainment.

Future studies also should try to collect information on workplace networks and mentorship ties to specify the type of sponsorship systems that exist in the workplace. Finally, researchers might want to determine the extent to which race-specific models of attainment can explain the race gap in other workplace outcomes such as wages and hiring as well as address the issue of whether specific models of attainment have developed along gender or other ethnic lines.

NOTES

1. For a complete discussion of the NOS, see Kalleberg, Knoke, Marsden, and Spaeth (1996).

2. Because excluding single-employee firms could potentially bias the estimation of the firm size effect and of other firm-level variables correlated with firm size, we also conducted the analyses with single-employee firms included. The results were similar.

3. The NOS data collected information on the employers of both the respondents and their spouses if both were employed at the time of the GSS. However, the GSS collected demographic and socioeconomic information only for the respondent.

4. We originally included *marital status*, *age*, and *number of children* as demographic control variables. However, because none of their effects was significant, we deleted them from the models presented for the sake of parsimony.

5. We would have liked a measure of the percentage of Black workers in the firm, but this information was not asked in the survey.

6. Collinearity diagnostics revealed no problem with multicollinearity among our variables. Although one condition index was above the conventional cutoff point of 30 (38.114), only one variable in that row had variance proportions greater than .50. (See Belsley, Kuh, & Welsch, 1980, for a discussion of this procedure for detecting multicollinearity.)

7. Although it is reasonable to assume that full-time employment is a determinant of promotion, it is possible that the worker was promoted into a full-time position. If this were the case, we should expect the exclusion of the full-time variable from the model to change the overall results. We ran both models (Equations 1 and 2) with and without full-time employment and did not observe significant changes in the results.

8. A plot of the relationship between firm experience and promotion (not shown) reveals that the effect of firm experience is positive up to that point, after which it becomes negative.

9. We also tested interactions of Black with male, firm experience, on-the-job training, personnel department, private sector, firm size, firm age, and union presence (results not shown). Because none of these interactions were significant, we excluded them from Equation 2 to simplify the interpretation of multiple interactions.

10. We also tested the possibility that the effect of percentage of full-time minorities on promotion for Blacks is nonlinear by including squared terms for the percentage of full-time minorities and for Black * percentage of full-time minorities in firm and by adding them to the model presented in Equation 2 as a block. The observed improvement in chi-square was not significant, suggesting that the effect of percentage of full-time minorities on promotion for Blacks is indeed linear.

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