

## **ABSTRACT**

WRIGHT, DELMAR ANTHONY. Access to Authority and Promotions: Do Organizational Mechanisms Affect Workplace Outcomes Differently for Blacks and Whites? (Under the direction of Dr. Donald Tomaskovic-Devey.)

In this study I examine the effects of two organizational mechanisms on the race gap in promotions and authority attainment. Previous work in the area has treated promotions as a means to obtaining authority invested positions, while the present research examines promotions and authority simultaneously, and as conceptually distinct. This research also examines the effects of both social closure and homosocial reproduction on promotions and authority, something previous research has failed to accomplish. Using the North Carolina Employment and Health Survey (NCEHS), I examine the effect that social closure through training time may have on Black's relative chances of having authority, and the influence of homosocial reproduction by linking the racial composition of jobs with the likelihood of receiving a promotion and having authority. Results from these analyses indicate that Blacks are more likely to receive promotions and authority positions in jobs with a higher percentage of Black employees. The results also indicate that Black employees with increased education also increase their likelihood of being promoted, and Blacks have less authority in private sector jobs, both conclusions showing support for the particularistic mobility thesis. This analysis provides empirical support for homosocial reproduction.

**ACCESS TO AUTHORITY AND PROMOTIONS: DO ORGANIZATIONAL  
MECHANISMS AFFECT WORKPLACE OUTCOMES DIFFERENTLY FOR  
BLACKS AND WHITES?**

by  
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## **BIOGRAPHY**

Delmar A. Wright was born in New Orleans, Louisiana on November 20, 1978. He is well traveled, having lived in six states and two countries. No, his parents are not in the military, but he did live with his aunt for a few years, and she is in the military. Delmar attended three high schools in four years, and graduated from a “Blue Ribbon” high school in Pennsylvania, which was located on the outskirts of the city of “Brotherly Love”. He then went on to the greatest university in the world, none other than the University of Pittsburgh, where he dual majored in Communications-Rhetoric and Sociology of course. After four of the longest years of his life he graduated from Pittsburgh with a Bachelor of Arts in 2000.

Outside of graduate school, you can find Delmar at your local watering hole sampling the tasty new beverages on the market. If there is a football game on he is more than likely watching it, and if the University of Pittsburgh is playing anything, he is all over it. His long term goal is to become the first Delmar Wright, and he plans this by completing the requirements for the Doctor of Philosophy degree in Sociology from North Carolina State University, sometime before the next presidential election.

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## INTRODUCTION

Promotions to positions of authority are signs of upward mobility and organizational achievement. Traditionally African Americans have not obtained promotions to positions of authority at rates comparable to their White counterparts. African Americans employees are more likely to experience close supervision, have less complex tasks, have less managerial authority, and have less supervisory responsibility (Baldi & McBrier, 1997; Tomaskovic-Devey, 1993a) than white employees. While some researchers argue that the income gap significantly narrowed between Blacks and Whites at least through the late 1970s (Wilson, 1978), others argue that inequalities in the workplace persist (Baldi & McBrier, 1997; Cancio et. al., 1996; Hughes & Thomas, 1998; Tomaskovic-Devey, 1993a). The persisting difference in earnings between Blacks and Whites, professionals and non-professionals supports the notion that Blacks and Whites do not have the same opportunities inside the labor force (Cancio, Evans, & Maume, 1996; Kaufman, 1983; Thomas 1995; Thomas, Herring, & Horton, 1994). Previous research has focused on human capital explanations for the race gap in promotions and authority, but has been less explicit when it has come to exploring the actual internal labor market mechanisms that contribute to race differences in promotion. In this paper I focus on two mechanisms internal to organizations that may be important sources of the race gap in promotions and attainment of authority invested positions.

I explore Tomaskovic-Devey's (1993a) theory of social closure and Kanter's (1977) homosocial reproduction theory to explain the race gap in promotions and positions of authority. Weber (1968) originally proposed that social relationships may be closed in order to monopolize economic and social opportunities or resources. This

monopolization of resources is strong when groups are formed by people with shared qualities or similar status attributes. Kanter's (1977) theory of homosocial reproduction explains the exclusion of minorities (including women) from higher level positions as a result of the dominant group promoting people who are most like them. Homosocial reproduction theory does not explain this exclusion as a monopolization of resources; instead it is seen as an unintended consequence of increasing trust and communication among socially similar folks, while reducing uncertainty within an organization.

I examine the effect that social closure through training time may have on African American's relative chances of attaining an authority invested position within an organization. I also examine the influence of homosocial reproduction by linking the racial composition of the current job with the probability of receiving a promotion and the likelihood of having an authority invested position.

The present research most directly builds upon previous research by Baldi and McBrier (1997), who advance the argument that the determinants for promotion differ for White and Black employees. After controlling for levels of education and work experience, Baldi and McBrier (1997) find that Blacks are significantly less likely to be promoted than White workers. They find that firms with a high population of minority workers are less likely to promote Blacks. The lack of promotions in a firm with a high minority population could indicate some type of group threat process happening, in which Whites will protect the valued resources associated with promotions and authority for the few Whites in the firm. Although Baldi and McBrier (1997) also propose that there may be a sponsorship model of promotion for Whites and that Blacks may be

promoted by more formal criteria than Whites, they do not address social closure or homosocial reproduction processes that could account for their results.

This paper argues also that past literature may have erred in their examination of promotions because they have failed to observe promotions and authority simultaneously. Baldi and McBrier (1997) found that Black employees were promoted less often than Whites in two instances; as the minority presence in the firm increased or in firms with an internal labor market. I argue that it is not only important to examine the likelihood of being promoted, but also the likelihood of having access to a position of authority. According to Wright et al. (1995), “job authority is one of the central ways in which the financial rewards of work are allocated.” The study of job authority is essential to the sociological study of earnings inequality (Halaby & Weakliem, 1993). Workplace authority is as highly coveted a resource as promotions. Wilson (1997) argues that job authority’s effects are not workplace specific; they can be intergenerational. I develop a theoretical argument around two organizational mechanisms that may result in negative outcomes in relative authority attainment for Blacks in the workplace. By building on Kanter’s concept of homosocial reproduction and Weber’s theory of social closure I argue that Blacks may not have the same path to promotions and authority as Whites.

I begin this research with a review of relevant theoretical and empirical literature on workplace inequality, with a particular focus on social closure and homosocial reproduction mechanisms. Following the literature review I explain the data and methods used. I will conclude with a discussion of the results.

## CONCEPTULIZING PROMOTION

I conceptualize promotion as the process whereby an employee experiences upward mobility either in income, title, or supervisory duties. There has not been a consensus on the topic of promotions in previous studies. The main issue that is debated is promotion criteria, specifically in bureaucratic organizations (Halaby, 1978). Weber (1964) stated, “There is a system of promotion according to seniority, or to achievement or both. Promotion is dependent on the judgment of superiors.” My working definition of promotion is; the act of being raised in position or rank dependent on the judgment of one’s superior.

Kluegel (1978) argues that the vagueness of criteria for promotion makes promotions susceptible to subtle manipulation for discriminatory purposes. Similarly Baldi and McBrier (1997) note that promotion decisions are less open to scrutiny than hiring decisions thus making them more subjective. It is the subjectivity of the promotion process that could lead to discrimination in promotions. Mueller et. al. (1989) suggests that the fact that promotions are subject to “particularistic manipulation” could make race a basis for such decisions. Greenhaus et. al. (1990) term discrimination in the promotion process as “treatment discrimination”, and this occurs when the “subgroup members receive fewer rewards, resources, or opportunities on the job than they legitimately deserve on the basis of job-related criteria. According to Halaby (1978), promotion criteria may be fixed and objective or discretionary and subjective. This fixed or objective criterion relies on the notion of an employee having the correct amount of firm specific human capital as measured by examinations or seniority. The discretionary

or subjective mode of promotion is based on evaluations or the manager's judgment and perception of the employee (Halaby, 1978). Ospina (1996) observes that employees at a large public organization noted that a major barrier to promotion was the persistent use of favoritism by managers. Promotions may also be the most common way for employees to obtain positions of authority and increase their earnings. Discrimination in promotions will affect the relative chances of occupying a position of authority (Wright et. al, 1995) and levels of personal income (Thomas, 1993; Tomaskovic-Devey, 1993a).

The likelihood of receiving a promotion tells us something about within firm interactions and processes. If promotions are typically given on a subjective basis as previous literature has theorized, then examining promotions could tell us something about the interactions between employees and managers and the networks formed within the firm. If, as Kanter (1977) states, managers "sponsor" and form ties with employees most like themselves, then the probability of a member of the out-group forming one of these ties is likely to be smaller than if they shared characteristics with managers making the promotion decisions. Members of the in-group are promoted on subjective criteria due to informal ties and interactions with managers, while members of the out-group are promoted more on objective, observable criteria (Mueller, Tanaka, & Parcel, 1989). Wilson (1997) advances the particularistic mobility thesis, which posits that employers make recruitment and promotion decisions based on personal characteristics "that are vaguely defined and difficult to measure directly" such as a recruit's personality. This practice reinforces existing patterns of racial exclusion. Baldi and McBrier (1997) argue that Blacks receive promotions based on human capital characteristics, but there is a failure to examine the types of promotions Blacks are often rewarded. Authority

positions are the most valued within the organization because of the rewards attached to them.

## **CONCEPTULIZING AUTHORITY**

Writing about the gender gap in workplace authority, Wright et.al. (1995) identify three ways in which authority is relevant to the analysis of workplace inequality and organizational structures. First authority is seen as a valuable attribute of the job; second it is one of the ways in which the financial rewards of work are allocated; and finally because workplace authority is associated with “real power”, the inequalities in the allocation of positions of authority may represent a key mechanism that allows for the persistence of inequalities within the workplace (Wright, Baxter, & Birkelund, 1995).

According to Smith (2002) there are two major classifications of authority that have dominated the sociological literature; “control over organizational resources and control over human resources” (Smith, 2002). Under the umbrella of these two types of authority, several types of organizational authority emerge: ownership (control over the means of production), sanctioning authority or span of responsibility (ability to influence the pay or promotions of others), span of control (number of people under direct supervision), decision-making or managerial authority (control over products, services, budgets, or purchases), hierarchical authority position (formal location within the structure of organizational hierarchies), and supervisory authority (whether an individual supervises anyone on the job) (Smith, 2002).

Similar to Smith, Wright et. al. (1978) conceptualizes three types of authority, sanctioning authority, decision-making authority, and formal position in the authority hierarchy. Sanctioning authority is the “ability to impose positive or negative sanctions

on subordinates...decision-making authority is direct participation in policymaking decisions within an organization”. Having a formal position in the authority hierarchy would be occupying a position where the authoritative figure had authority over other authoritative figures.

Tomaskovic-Devey (1993a) conceptualizes two types of authority: managerial and supervisory. Managerial authority is “the ability to make decisions to change the organization’s products or services or about the firm’s budgets or major purchases”, while supervisory responsibility is “the degree to which a worker has direct control over other workers’ labor”. Here Tomaskovic-Devey (1993a) makes an important distinction in two types of authority, one is control over the firm’s resources, and the second control of other’s labor. This is a significant point in that one can be granted control over other’s labor such as a shift leader or foreman in a mill, but that type of authority may not yield the same benefits that one with managerial authority has.

Although there are various definitions of authority, the consistent question in the literature is not what type of authority the group holds, but rather does the group hold any authority at all? McGuire and Reskin (1993) found that being Black contributed to the gap in authority for men and women (see also Kluegel, 1978; Mueller, Parcel, and Tanaka, 1989; Smith, 2002). The reasons for this gap in authority vary, and are not fully explained by race differences in human capital investments, parent’s socioeconomic status, or Blacks location within the labor market (Kluegel, 1978; Mueller et al., 1989; McGuire & Reskin, 1993; Smith, 1997; Wilson, 1997). This leads me to my first set of hypotheses:

*Hypothesis 1 – Blacks are less likely than Whites to be promoted and are similarly less likely to receive authority.*

Hypothesis 2 – *Blacks are less likely than Whites to be promoted and are similarly less likely to receive authority even after controlling for human capital.*

A key limitation in existing research has been the failure to distinguish between promotion and authority. In testing hypotheses one and two I examine promotion and authority performing separate analyses. I use separate analysis because one can be promoted without receiving authority, and an individual can exercise authority without being promoted. Smith (2002) fails to make this distinction, as do Baldi and McBrier (1997). Wilson (1997) also overlooks the distinction between promotion and authority, choosing instead to conceptualize promotions as a means to the end which is authority. Using data from the North Carolina Employment and Health Survey (see Tomaskovic-Devey, 1993a). Table 1 highlights this distinction. As observed in table 1, 21.43 and 25.69 percent of Blacks and Whites respectively, enjoyed some authority but had not received a promotion, while 5 percent of Blacks and 6.46 percent of Whites received a promotion, but exercised no authority. The majority of Black and White respondents with authority never received a promotion. Also observed in table 1 is the number of respondents who did receive a promotion to a position of authority, 5 percent of Blacks and 12.15 percent of Whites, which suggests that a higher percentage of Whites are promoted to positions of authority compared to Blacks. These figures also suggest that promotions and authority are not the same thing.

---Table 1. About Here---

## **SOCIAL CLOSURE PROCESSES**

Social closure theory argues that a closed social relationship will be formed in order to monopolize advantages to the members of a particular group, reserving access

and competition for those resources to any member of the in-group (Weber, 1968). According to Weber (1968), “This monopolization is directed against competitors who share some positive or negative characteristics; its purpose is always the closure of social and economic opportunities to *outsiders*.” Following Weber (1968), Parkin (1979) argues that social closure refers to “the process by which social collectivities seek to maximize rewards by restricting access to resources and opportunities to a limited circle of eligibles.” Tomaskovic-Devey (1993b) expands on the previous theoretical arguments by suggesting that “status groups create and preserve their identity and advantages by reserving certain opportunities for members of the group”. Ospina (1996) views social closure as a product of the existence of social inequality, while simultaneously promoting further inequality. Following the theoretical logic, the out-group will be excluded from the resources monopolized by the in-group, and these resources are monopolized for the preservation of the in-group and the status that accompanies membership to that group. Social closure arguments are essentially about the practices that produce and preserve advantages (Ospina, 1996; Tomaskovic-Devey, 1993b). In the case of firm internal labor markets the resources monopolized are the positions valued most by the members of a given society, namely positions that hold some type of authority within the workplace.

Social closure processes are the ways in which the dominant group protects their group privilege and status by linking access to jobs, specifically high reward jobs or other scarce resources, to group characteristics (Tomaskovic-Devey, 1993a). Social background, educational credentials, socioeconomic background, race, and gender are all group characteristics used for either exclusion or inclusion into a particular job. The discrimination practiced by members of the in-group is not merely a matter of prejudice,

but a way of preserving the advantages of being a member of the in-group. Tomaskovic-Devey (1993a) argues that a clear advantage of social closure theory over other accounts of discrimination is the fact that, “[social closure theory] points out clearly that historical and contemporary patterns of exclusion involve not only discrimination or market mechanisms of job allocation but also privilege”.

Superordinate group members have a vested interest in maintaining their authoritative positions; they retain these positions by excluding candidates who differ from their racial or gender identity (Smith, 2002). Some argue that this exclusion may be an unconscious act or a result of the demography of the organization (Baldi & McBrier, 1997; Elliott & Smith, 2001). Tomaskovic-Devey and Skaggs (2002) put it more bluntly in stating that social closure processes are about more powerful actors monopolizing desirable jobs by excluding subordinate groups. Because these processes are typically unobservable, in reference to the social closure theory, it may not matter whether they are a mix of conscious or unconscious processes. Within the framework of social closure processes, the human capital model might be most relevant at the outset of a career before access to promotions or authority became objects of social closure. According to social closure theorists, even later in the career given equivalent human capital, Blacks will less often attain promotions or positions of authority, because the dominant group monopolizes these positions for other members of the dominant group.

Social closure theory is not as cut and dry as it may sound. Weber (1968; see also Parkin, 1979) in his original conception of social closure conceptualized two sub-processes, one is the most common form of social closure where the dominant social group excludes the subordinate groups from desirable resources; the other process has

been largely ignored within the literature and it states that the subordinate group practices usurpation which is a collective response to exclusion practiced by the dominant group (Elliott & Smith, 2001). Elliott and Smith (2001) contend that pressures from the “bottom-up” works against the “top-down” forces in minority authority attainment. In other words, what we begin to see is another constraint put on minority mobility within the organization. This manifests itself in the following ways: the more minorities are employed in an organization the more likely they are to have a minority supervisor. Since many of the minorities are employed toward the bottom of the corporation, the supervisor will also be at the bottom of the organizational hierarchy. Elliott and Smith (2001) concluded that minorities are at least seven times more likely to hold positions of authority over other minorities, and their results show that this type of relationship reduces perceptions of racial discrimination among subordinates and racial tension in the firm, while increasing organizational harmony and commitment among the subordinates. The “top-down” aspect of social closure does not manifest itself until the minority moves up the hierarchy within the organization. I conclude from the research of Elliott and Smith (2001) that there are forces acting from the bottom that keep minorities at the bottom of the authority hierarchy, but allowing limited authority over other minorities. Collins (1997) observes this same trend arguing that when Blacks achieve authority it is usually over other Blacks and with little room for further advancement. McGuire and Reskin (1993) noticed the same phenomenon, concluding that Black managers had been relegated into staff positions that lack opportunities for advancement and serve Black customers and employees. Fernandez (1975) argues that Blacks are likely given authority positions over other minorities because of the commonly held notion that

Whites will not accept Black supervisors. Research has consistently shown that when Blacks received promotions to positions of authority, these are usually positions with authority over other Blacks (Collins, 1997; Elliott & Smith, 2001; Kluegel, 1978; Smith, 2002). The question one must ask is whether the authority at the bottom is real authority or perceived authority? Real authority would give the employee control over company resources such as finances, the ability to make company decisions, or the ability to hire and fire other employees. Perceived authority may give the employee limited supervision over a select group of employees with no direct control over company finances or no ability to make decisions about the company. Perceived authority may not allow the employee to make decisions in the matter of hiring and firing subordinates.

Looking back at the different types of authority, being promoted to oversee one's own ethnic group at the bottom of the organizational hierarchy is the lowest form of supervisory authority, particularly when it comes with limited power (Smith, 2001). From an organizational standpoint and the dominant group standpoint, it is a win-win situation. The dominant group avoids directly supervising the subordinate group, by placing a member of the subordinate group into a position of authority, and avoids direct competition for the most powerful positions.

One can infer theoretically what may be taking place within organizations, but there is not substantial direct evidence in past research. Social closure processes require that the dominant group have power over the selection process in which new workers are hired and trained. Tomaskovic-Devey and Skaggs (2002), argue that one could use on-the-job-training as an observable mechanism to measure the potential for social closure in a given organization. The logic is that if social closure processes do exist, in-groups

(who currently control job knowledge) could use long periods of on-the-job-training to exclude out-groups members. The length of on-the-job-training also impacts the amount of firm specific human capital one obtains. Typically jobs that require more skill may also require longer periods of training, and these jobs may also be more highly rewarded (Tomaskovic-Devey & Skaggs, 2002). Conversely, jobs that require little skill or routine jobs may require less training time and may be rewarded substantially less. Previous research concludes that Black employees hold jobs with less task complexity, less supervisory responsibility, and less managerial authority (Kaufman, 1986; Mueller, Parcel, & Tanaka, 1989; Tomaskovic-Devey, 1993a). On-the-job training is not only a way of controlling the amount of firm specific human capital the employee acquires, but also is a way of excluding members of the out-group from desirable positions including those positions with authority. Social closure processes ensure the superordinate group's further monopolization of the valued resources of the firm, specifically positions with authority. The monopolization of access to authority invested jobs through on-the-job training may allow the dominate group to select in-group members for promotion to authority invested positions. This leads me to my next set of hypotheses:

*Hypothesis 3a – When Whites hold positions of authority they will be in jobs with a higher percentage of White employees.*

*Hypothesis 3b – When Blacks hold positions of authority they will be in jobs with a higher percentage of Black employees.*

*Hypothesis 4 – When Blacks receive authority positions, they tend to be positions with less training time than Whites in comparable authority positions.*

## **HOMOSOCIAL REPRODUCTION**

According to Kanter (1977), there are many screening mechanisms that are used to find people who look like and will be socially accepted by the people at the top of the

biggest corporations. The jobs at the top are the “best” jobs within the organization, and as social closure theory would have us believe, these are the jobs that the dominate group monopolizes. The managers close to the top not only hold the most authority, but also reap the most rewards. Managers in the top positions must deal with uncertainty of managerial tasks, rely heavily on communication flows, and cope with the difficulty of evaluating managerial roles (Kanter 1977; Ospina, 1996). Given these circumstances there must be a great deal of trust among the members of the firm that occupy the top positions. Kanter (1977) finds that managers who hold authority at the top most often look to candidates that most resemble themselves when filling the top positions because of issues of trust and uncertainty. This practice of finding employees who are like existing employees at the top is homosocial reproduction (Kanter, 1977). This process is explained by Kanter (1977):

“Managers tend to carefully guard power and privilege for those who fit in, for those they see as ‘their kind.’ The structure sets in motion forces leading to the replication of managers as the same kind of social individual. And the men who manage reproduce themselves in kind.”

Homosocial reproduction theory is not a far departure from social closure theory. Managers at the top are reserving positions for those employees who are socially similar (i.e. socioeconomic background, educational institutions, social activities) to themselves, in other words they are reproducing themselves at the very top of the organization. The racial composition of a job can be a predictor of some homosocial reproduction process occurring within the firm. As managers tend to reproduce themselves, they will use human capital and social selection mechanisms to “weed out” those that do not replicate their images of themselves. At the entry level if the majority of the employees are White males then the logic would be that the majority of those in positions of power would be

White males also. Those at the top of organizations, sponsor those that they think are most like themselves. This implies that there exists some type of “sponsorship” model for advancement within the organization for White males, while Blacks and women have to rely on advancement through a “contest” model (Turner, 1974; Wilson, 1997; Wilson et al., 1999). This sponsorship model also suggests that there is an informal system of promotion through homosocial mentoring for White males; conversely for Blacks and women the contest model implies a system in which one advances only through formal qualifications without the mentoring networks of the sponsorship model (Baldi and McBrier, 1997). Firm tenure could be a way of observing this process empirically. If Blacks are promoted through a more formal route than Whites, then Blacks should have higher firm specific tenure previous to being promoted. Wilson (1997) found that “time with present employer” was a human capital characteristic only significant for Blacks in attaining authority (see also Wilson, et al. 1999). Firm tenure could be a major determinant in access to authority and promotions for Blacks because employers may feel that the employee has shown “loyalty” and this display of loyalty has been found to be more important for Blacks than Whites in career advancement.

According to Ospina (1996), social similarity acts as a mechanism of exclusion or inclusion in circles of power and privilege. This manifests itself not only in organizations, but also in society at large. People tend to exclude those in the out-group and include those within the in-group (Ospina, 1996). Similar to this line of thought, Kanter (1977) suggests that individuals tend to develop significantly better relationships - characterized by greater trust, loyalty, and information exchange – with in-group members than out-group members (see also Brewer & Kramer, 1985). Here we begin to

see a direct relationship between homosocial reproduction and social closure.

Homosocial reproduction is not the intentional monopolization of jobs or resources, it is seen as an unconscious result of in-group behavior, while social closure is generally conceptualized as a more active discrimination by the dominate group to preserve privilege and keep the subordinate group from obtaining highly valued jobs. We can also begin to see how both of these processes could manifest themselves fairly easily within organizations.

Kanter's (1977) theory of homosocial reproduction has extended the social closure model of workplace inequality beyond concerns with discrimination to issues of uncertainty, trust, and organizational control. It links the situational characteristics of control positions to group composition; and lastly it adds a second causal support to the conventional social closure model, specifically stating that it is not that those in charge want to exclude out-group members from good jobs to maintain in-group privilege, but that those in charge include insiders to facilitate inter-personal relations that are presumed important for organizational success, such as trust among supervisors and managers (Elliott & Smith, 2001). This leads me to my last set of hypotheses:

Hypothesis 5a – *When Whites are promoted they tend to be in positions with other Whites.*

Hypothesis 5b – *When Blacks are promoted they tend to be in positions with other Blacks.*

Hypothesis 6 – *Blacks follow a more formal and circumscribed route in attaining job authority and/or promotions than do Whites.*

This review outlines two mechanisms internal to the organization that may account for the race gap in promotions to authority. Social closure processes identify direct discriminatory practices used by the in-group to exclude the out-group from valued

positions, while homosocial reproduction processes highlight indirect discriminatory practices used by the in-group to reduce uncertainty and enhance trust, but lead to the preservation valued positions. Researchers have successfully found empirical support for homosocial reproduction processes in the tendency for race matching of supervisors to subordinates, while unambiguous support for social closure processes is harder to observe. Reskin (2002) argues the social closure theory is motive based and so not observable. I attempt to improve on previous research by improving the measurement of social closure and homosocial reproduction processes more directly. Following Tomaskovic-Devey and Skaggs (2002), I measure social closure indirectly through the duration of on-the-job training for various levels of employment. On-the-job training represents the capacity of the current workforce to control access to the job. To observe homosocial reproduction processes; I focus on the racial composition of the job. As noted above this theory of homosocial reproduction is based on the fact that managers sponsor those employees who are most like them. If Blacks are to make it to the managerial ranks, presumably it will be because of the acts of managers who are like them and the same for Whites. On the other hand if Blacks are given access to authority positions by Whites, it may be the case that the Blacks are just much more qualified than the White employees available for the position. In the rest of this paper, I test my argument by using multiple regression interaction models that measure the effects of human capital, racial composition of the firm, training time, and other firm specific factors on access to authority and promotions for Blacks and Whites.

## **DATA, METHODS, AND MODELS**

### *Data*

To examine these hypotheses I use the North Carolina Employment and Health Survey (NCEHS), which is a random sample survey of employed North Carolinians who worked at least twenty hours a week and were 18 years of age and older in 1989. Respondents were asked to provide detailed information about their job, such as title, amount of training required, size of employing establishment, and the race and gender composition of their current job. The response rate for this telephone survey was 72%. These data are representative of the North Carolina labor force (Tomaskovic-Devey, 1993a).

These data were chosen because they ask a series of questions about the respondent's specific job, organization, and educational history. I have limited my analyses to employees (self-employed respondents were excluded) and respondents who were White or Black. The self-employed are not subject to the selection processes described by the theories and there are too few respondents of other races to analyze. After also deleting missing data for the measures of the dependent variable, my final sample size 790.

### *Dependent Variables – Promotion and Authority*

My dependent variables are authority and promotion. I distinguish between a promotion, authority, and a promotion to a position of authority. One can be promoted to a position attached to little or no authority and one can be hired into a job with authority. The NCHES asked respondents a series of questions about the tasks they perform on a daily basis in their jobs, and the answers to those questions were transformed into a scale

of *supervisory* authority. This is the scale used by Tomaskovic-Devey and Skaggs (2002) in their examination of gender earnings inequality and sex segregation in the labor process. The scale uses the sum of seven variables, with a score of seven representing the highest degree of authority<sup>1</sup>. Respondents were asked whether they supervised, whether they had subordinates who also supervised, whether they assigned tasks, or set the pace of work as well as questions regarding the financial and decision-making responsibilities of the respondent. This scale allows me to examine the degree of authority or power the respondent has in their respective job. Sixty-four percent of the respondents reported that they had no supervisory authority in their jobs. Thirty-eight percent of Whites reported having authority, while twenty-six percent of Blacks have authority in their jobs, resulting in a significant mean difference of 11 percent.

Promotion is the second dependent variable used in this research. The NCHES asked respondents if their current job was the only job they have had with their current employer. If respondents answered “no”, they were asked if they current job was a “promotion” or a “change in duties”. Respondents who answered “yes” to receiving a promotion were coded as 1, others were coded as 0. Nineteen percent of Whites reported that they had received a promotion, while nine percent of Blacks reported being promoted. Descriptive statistics for the key variables used in these analyses are presented in table 4.

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<sup>1</sup> Two scales were initially created, one representing managerial authority the other representing supervisory authority. The managerial authority scale included items on company decision making ability and financial decision making ability. Results were nearly identical for the supervisory scale and the managerial scale, thus leading me to include only one scale that includes all items in the analysis.

### *Independent Variables*

Blacks are coded 1, while Whites are coded 0. Eighty-two percent of the respondents are White, while 18 percent are Black. *Black* is an independent variable, while White is the reference category.

*Training time* is my primary measure of the opportunity for social closure processes taking place within the firm. Training time is measured in number of weeks needed to learn the job.<sup>2</sup> The average training time for Whites is 54 weeks, while the average training time for Blacks is 27 weeks (see table 4). Table 2 reports the percents of White and Black respondents who received promotions and/or authority by training time. In looking at the race comparisons we notice of all White respondents 44 percent receive less than six months of training, while 61.43 percent of Blacks receive less than six months of training. This trend of training time by race continues as 23.54 percent of Whites receive over one year of training, while only 11.43 percent of Blacks receive over a year of training. There are two comparisons that are important to highlight from table 2, the first is the fact that 14.22 percent of Whites who receive between six months and a year of training are promoted with authority, while only 2.63 percent of Blacks who receive the same amount of training are promoted with some authority, a difference of 11.59 percent. Second we notice that of all the White respondents who receive over one year of training 41.83 percent exercise some authority without receiving a promotion, while only 31.25 percent of Blacks who receive over one year of training exercise authority without receiving a promotion, a difference of 10.58 percent.

---Table 2. About Here---

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<sup>2</sup> I also tried the natural logarithm of the total number of weeks trained in the models. Using the log of training time did not explain the models or the race gap in authority any better.

Table 3 reports the percents of White and Black respondents who receive promotions and/or authority by the percentage of Blacks in the job. Again there are two trends that are important from this table. First, we find that 28.84 percent of Whites who work in jobs that are less than 10 percent Black exercise authority without having a promotion, while only 10 percent of Blacks who work in jobs with the same percentage of Blacks exercise authority without having a promotion. These percentages are reversed in jobs that are over 50 percent Black, as 14.29 percent of Whites have some authority with no promotion compared to 18.18 percent of Blacks. Second, we notice that 14.89 percent of Whites receive promotions with authority in jobs that are less than 10 percent Black, while no Blacks in the sample receive such promotions, and in jobs that are over 50 percent Black no Whites receive promotions to positions of authority, while about 5 percent of Blacks receive such promotions. From this table we can come to two preliminary conclusions, first Blacks and Whites are more likely to have access to authority without receiving a promotion in jobs that are overwhelmingly homogenous. A second preliminary conclusion is that Blacks and Whites are more likely to be promoted to positions of authority in jobs that are homogeneous.

---Table 3. About Here---

I include several traditional human capital characteristics in the analysis as my control for non-discriminatory processes that lead to authority and promotion. These include years of formal education, labor force experience, firm tenure, and hours worked in a given week. *Education* is measured by the highest year of school completed by the respondent. Education ranged from 2 years to 18 years, with a mean of 13 years of

education. Whites have slightly more education than Blacks as the mean for White education is 13.37 years, while the mean for Black education is 12.67 years.

*Pre-firm experience* is conceptualized as all the labor force experience the respondent gained prior to joining their current firm. Pre-firm experience is measured as the respondents age minus the years of school completed minus 5 minus current firm tenure. Pre-firm experience ranged from 0 to 59 years with an average of 13 years of experience. Here again, Whites have more pre-firm experience than Blacks with the mean for Whites at 13.02 years, and the mean for Black pre-firm experience is 11.12 years. *Firm tenure* is measured by subtracting the year the respondent began working with the firm from 1989 (the year the NCHES was conducted). Tenure ranged from 0 to 43 years, with an average tenure of eight years. Whites also have more firm tenure than Blacks as the mean for White firm tenure is 8.54 years, while the mean for Black firm tenure is 7.51 years. To allow for declining returns to experience and tenure, I include the squared values for both variables.

*Unemployment spells* is measured as the number of times the respondent has been unemployed for a week or more across their career. Here, we see that there is little variation between Whites and Blacks in their length of unemployment. The mean number of times that Whites have report being unemployed for a week or more is 1.48, while for Blacks the mean is 1.38. It should be noted that Whites are older and have been in the workforce longer, resulting in longer unemployment spells. Lastly, *hours worked* is measured as the number of hours the respondents worked during a normal work week, on their primary job not counting the time taken off for meals. Whites work slightly more hours in a week as the mean for Whites is 41.05 hours, and the mean for Blacks is

39.59 hours. I report the means and standard deviations of all variables for Blacks and Whites in Table 4.

---Table 4. About Here---

### *Workplace Characteristics*

Workplace characteristics may affect the rate of promotion and the rates of entry into positions of authority (Maume, 1999). I assessed the influence of two workplace characteristics: type of firm or organization (private profit making, non-profit, or government) and size of the organization.

I include firm size as a control variable, which has been reported to affect authority attainment (McGuire & Reskin, 1993; Kluegel, 1978). Although the specific effect is not particularly relevant for the current research, dual labor market theorists would argue that resource-rich organizations (i.e. large firms operating in the private sector) reserve the best positions for White males, using race and sex as methods of sorting. One would expect that Blacks would be less likely to hold positions of authority in larger firms. According to Tomaskovic-Devey and Skaggs (2002), firm size and the firm's industry may "capture some organizational-level social closure processes". In other words, organizations with high-resources (firms in the private sector) can afford to employ and promote higher paid White males, thus excluding Blacks and women (Tomaskovic-Devey, 1993a). The social closure argument proceeds in arguing that the advantaged jobs are being reserved for White males, while Blacks and women are being relegated to lower skilled jobs in firms that can afford to so. This argument would be supported empirically if we find that Blacks are working in firms in the private sector at

rates comparable to Whites, but are not being promoted or receiving authority at the same rates.

The type of firm is dummy coded (0, 1 for private profit making and non-profit) for the purposes of this analysis, with the government sector serving as the reference category. Tomaskovic-Devey (1993a) and Wilson (1997) support the particularistic mobility thesis in that they argue that promotion and authority attainment for Black employees in the public sector is based more on formal credentials and related experience, while promotions and authority are given based on more “hard to measure” criteria in the private sector, thus leaving the door open for greater discrimination and personal discretion in handing out promotions and authority. Paulin and Mellor (1996) found that Black workers who were paid on an hourly basis were less likely to be promoted than White workers who also worked for an hourly wage in private sector firms. One would expect human capital determinants to be more significant for Blacks in the private sector than those working in non-profit or government jobs. In this analysis, the majority of all respondents work in the private sector, 74% of Whites and 71% of Blacks respectively. I also included gender in the analysis. Females are coded 1, while males are coded 0. Forty-seven percent of the respondents are male, and 53 percent are female.

### *Multivariate Analysis*

Two similar sets of models will be explored in this analysis. In the first phase of the analysis I conduct a logistic regression analysis using a maximum likelihood estimation procedure to predict the log odds of receiving a promotion. The dependent

variable is promotion, as measured by, “Is your current job a promotion in terms of rank or responsibility...?” (1=yes, 0=no).

In the first model, I include the measures for race and sex, which allows us to estimate the log likelihood of Blacks receiving a promotion as compared to their White counterparts. This first model may provide support for hypothesis one, which says that Blacks are less likely than Whites to be promoted and are similarly less likely to receive authority. Hypothesis two states that Blacks are less likely than Whites to be promoted and are similarly less likely to receive authority even after controlling for human capital. To test hypothesis two, the second model includes human capital measures level of education; hours worked in a normal work week; pre-firm experience; firm tenure; and unemployment spells. Firm sector and size are also included in model two as controls.

The third model includes percent of Black incumbents and the interaction between Blacks and the percent of Blacks in the jobs to examine if the likelihood of being promoted is lower in Black jobs. This interaction will allow us to examine any effect the percent of Blacks in the job may have on Black and White employees. If the likelihood of being promoted increases for Blacks as the percentage of Blacks increase in the job, then model three could provide support for hypotheses 5a and 5b. To reiterate, hypothesis 5a states that when Whites are promoted they tend to be in positions with other Whites while, hypothesis 5b postulates that when Blacks are promoted they tend to be in positions with other Blacks.

Models four and five include interaction terms which could provide support for hypothesis six, which states that Blacks follow a more formal and circumscribed route in attaining job authority and/or promotions than do Whites. In model four the interaction

effects between Black and education and Black and firm tenure if significant could explain that race affects one's likelihood of promotion partly by raising or reducing the effects of variables that could be significant in the determination of receiving a promotion. Specifically, education and firm tenure have traditionally been used to support the particularistic mobility thesis, which states that Blacks (relative to Whites) receive promotions and reach positions of authority through "a more deterministic and formal route" (Wilson, 1997). The interactions in model four may provide support for hypothesis six, which is a derivative of this particularistic mobility thesis. Similarly, model five adds the interactions between Black and the private sector and Black and the non-profit sector. These interactions will allow us to see if organizational sector is significant in the likelihood of Blacks being promoted.

Training time was not used in the analysis of promotion because of the nature of time order in the promotion process. Basically, one may be trained before receiving a promotion, and any additional training may not be recorded. I performed a separate analysis using training time as a dependent variable. In that analysis I found that promotion as an independent variable was statistically insignificant. Similarly, I found that an interaction between race and promotion was also insignificant. Because of the time order and statistical insignificance these findings are not reported.

The dependent variable used in the OLS analysis is supervisory authority as measured with a seven-point summated scale, with seven being the highest degree of authority. Those respondents with no workplace authority receive a score of "0" on the scale. In the first model, I include the measures for race and sex, which provide us with the total race and sex gap in access to authority. Here again in the first model we may

find support for hypothesis one, which states that Blacks are less likely than Whites to be promoted and receive authority. The second model includes human capital measures (level of education, hours worked in a normal work week, pre-firm experience, firm tenure, and unemployment spells), if race is still significant and negatively associated with work authority, this particular model could provide support for hypothesis two, which says that Blacks are less likely than Whites to be promoted and receive authority even after controlling for human capital. The third model includes percent of Black incumbents and the interaction between Black and percent of Black employees in the job. If authority attainment increases for Blacks as the percentage of Blacks increase in the job or if authority for Whites decreases as the percent of Blacks in the job increases, then model three may provide support for hypotheses 3a and 3b. Again, hypothesis 3a states that when Whites hold positions of authority they will be in firms with a higher percentage of White employees, while hypothesis 3b which says that when Blacks hold positions of authority they will be in firms with a higher percentage of Black employees.

The fourth model includes training time, and the interaction of training time with race as the potential social closure mechanism. Training time, should explain some of the race gap in access to authority. Model four may provide support for hypothesis four, which says that when Blacks receive authority positions, they tend to be positions with less training time than Whites in comparable positions.

Model five adds the interactions between Black and education and Black firm tenure. As with the logistic analysis, these interactions are added to test hypothesis six and to find support for the particularistic mobility thesis. In model six the interactions between Black and the private sector and Black and the non-profit sector are added. Here

we are looking for any effect organizational sector may have on Blacks' authority attainment.

The seventh and final model adds the promotion variable in interaction with race. The addition of the promotion variable as an independent variable tests to see if authority is associated with promotions net of the other variables in the model. Promotion in interaction with race is included to examine whether Blacks and Whites enjoyed the same authority for promotions.

## **RESULTS**

### *Analysis of Promotion*

Table five reports the results of five logistic regression models using promotion as the dependent variable. This logistic analysis is similar to the OLS analysis conducted below. Model one in the table regresses promotion on race and sex. Consistent with studies of the past, the results in model 1 indicate that Blacks are almost half as likely as Whites to receive a promotion (odds ratio = .49), while women are less likely than men to receive a promotion (odds ratio = .89), but the latter result is statistically insignificant. The findings in this first model are consistent with the findings of Baldi and McBrier (1997).

Model two regresses promotion on race, human capital characteristics (education, experience, hours worked in a normal work week, and firm tenure), unemployment spells, and organizational characteristics (organization size and sector). It should be noted here that human capital along with unemployment spells and organizational characteristics are used as controls in this analysis.<sup>3</sup> Here again we find results that are

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<sup>3</sup> Pre-firm experience squared was used in all models, but the results were similar to those reported in the analysis.

consistent with past studies in that even after controlling for human capital and organizational characteristics, Blacks are more than half as likely to be promoted (odds ratio = .56). A key finding in this second model is that with the addition of human capital variables and organizational controls the log likelihood of Blacks receiving a promotion has decreased by .08. This finding provides support for hypothesis two which states that Blacks are less likely to receive authority even after controlling for human capital. As shown in table 5 the model chi-square increases from 7.10 in model one to 41.94 in model two, which is evidence that human capital variables help better explain the model in general.

Model three adds the percentage of Blacks in the job along with the interaction between Black and the percentage of Black employees in the job. The results of the interaction indicate that increased Black presence in the job has a positive effect on the log likelihood of Blacks receiving a promotion (odds ratio  $-.017 + .025 = .008$ ). Thus the increased percentage of Blacks in the job slightly increases the likelihood of Blacks receiving a promotion. Increased Black presence in a job has a negative effect on Whites being promoted (odds ratio =  $-.017$ ). Net of the interaction we also see that the likelihood of Blacks receiving a promotion has decreased (odds ratio =  $.25$ ) from model 2 (odds ratio =  $.56$ ), indicating that Blacks are about a quarter as likely as Whites to receive a promotion when they are in a job 100 percent White. This model provides support for hypothesis 5a and 5b, which state that when Whites are promoted they tend to be in positions with other Whites and when Blacks are promoted they tend to in positions with other Blacks. This hypothesis is supported because of the positive effect of the interaction between Blacks and the percentage of Blacks in the job, and the negative

coefficient for Whites in Black jobs. Model three provides support for Kanter's (1977) theory of homosocial reproduction, wherein managers are more likely to promote those who are most like them.

In models four and five I test hypothesis 6, which again states that Blacks follow a more formal and circumscribed route in attaining job authority and/or promotions than do Whites. This hypothesis tests Wilson's (1997) particularistic mobility thesis.

Interactions between Black and education and Black and firm tenure are added to model four. The interaction between Black and education is positive and significant (log odds  $.091 + .381 = .472$ ), a result indicating that the more education Blacks attain the more likely they are to receive a promotion. Thus each year's increase in education makes Blacks a little less than half as likely as Whites of receiving a promotion. Although the interaction between Black and firm tenure is insignificant and negative we still find preliminary support for hypothesis 6 and the particularistic mobility thesis because of the significance of education, which would be a formal criteria used for promotion. One must look at firm sector to find further support for the particularistic mobility thesis. With the addition of these interactions the likelihood of Blacks receiving a promotion has decreased (odds ratio = .003) from model three (odds ratio = .25). The key finding here is that Blacks who have higher amounts of education, are more likely to receive promotions. Thus education is a significant factor in determining likelihood of being promoted. Similar to model four, model five adds interactions to further test hypothesis six, specifically to examine how sector effects Blacks likelihood of being promoted. In table five we see that Black has become statistically insignificant in this model. The interesting finding here is that Blacks in the private sector are less likely to receive

promotions than Whites (log odds  $-1.287 + .556 = -.731$ ). Even after controlling for human capital Blacks are much less likely to be promoted than Whites, indicating that factors other than human capital may contribute to the likelihood of Blacks being promoted. The findings in model five provide further support for the particularistic mobility thesis in that Blacks are less likely to receive promotions in the private sector. A sixth model was run adding the interactions between Black and education and Black and private sector. In this model the interaction between Black and private sector was found to be statistically insignificant, but the interaction between Black and education remained positive and significant (log odds = .444), findings that are consistent with model four. The findings in this model further support hypothesis six and the particularistic mobility thesis. The interaction between Black and non-profit sector was found to be statistically insignificant.

Training time was run as a dependent variable because of issues of time order. As an independent variable, although positive, promotion was statistically insignificant in the training time models. Training time, when used as an independent variable predicting promotions was also found to be statistically insignificant. Thus the exclusion of training time from promotion models does not influence estimates.

---Table 5. About Here---

### *Analysis of Authority*

The unstandardized coefficients from the OLS regression models are presented in table six. In the first model, as expected we see that Blacks have less authority ( $b = -.62$ ) in the workplace than White respondents. Women are also found to have less authority than men. Here we see further support for hypothesis one, which states that Blacks are

less likely than Whites to receive authority. In model two the race gap in authority ( $b = -.32$ ) has been significantly reduced by 50 percent after controlling for human capital and organizational characteristics. Human capital differences are found to explain about half of the race gap in authority. A key finding from this second model is that pre-firm experience is not a statistically significant source of authority. Because of a possible curvilinear relationship I squared the pre-firm experience variable. After squaring the term the coefficient remained statistically insignificant suggesting that workplace authority may be more about current firm experience than pre-firm experience. In other models I experimented a measure with *age* instead of experience and experience squared. Age had a positive effect on authority, but was not statistically significant therefore it was not reported in the findings. Model two provides support for hypothesis two in that Blacks are less likely than Whites to receive authority even after controlling for human capital.

In model three I added the percent of Blacks in the job along with the interaction between Blacks and the percent of Blacks in the job. This interaction should allow us to examine the effect that percentage of Blacks in the job has on Black and White employees. As expected, the percentage of Blacks in the job has a positive effect on Blacks ( $b = .005$ ). To compute the effect of Blacks and the percentage of Blacks in the job, I added .018 and -.013, getting .005. We also note that the percentage of Blacks in the job continues to have a negative effect on White employees in the job ( $b = -.01$ ). The race gap in authority is larger, signifying that when percentage of Blacks in the job is equal to 0 the race gap in authority is almost a full point ( $b = -.80$ ), but decreases for Whites when a job becomes increasingly Black. Model four provides support for

hypotheses 3a and 3b, which states that when Whites hold positions of authority they will be in jobs with a higher percentage of Whites, while when Blacks hold positions of authority they will be in jobs with a higher percentage of Blacks.

In model four I substitute training time for the percentage of Blacks in the job to examine the effects of training time on the race gap in authority. Also added to model four is the interaction between Blacks and training time. The addition of the interaction should allow us to examine any potential effect training time has on race. Being Black still has a negative effect on authority, but has become statistically insignificant ( $b = -.280$ ). A key finding in this model is that training time is significant and positive for White employees ( $b = .004$ ), but the addition of training time has led to the statistical insignificance of the Black coefficient. Another factor to note is that the interaction between Black and training time is positive, but also statistically insignificant ( $b = .001$ ). This would mean that I have failed to support hypothesis 4, which states that when Blacks receive authority positions, they tend to be in positions with less training time than Whites in comparable positions. Although the interaction between Black and training time is statistically insignificant, as evidenced in the means (see table 4) there is a big race difference in training time. Blacks on average get less access to training (on average 27 weeks less) thus giving them less access to authority. The gap in training time and access is in line with the argument posited by Tomaskovic-Devey and Skaggs (2002) in that training time could be used as a social closure mechanism excluding Blacks from the valued positions in the firm. This particular aspect of the analysis warrants further research.

As in the logistic analysis, the fifth and sixth models include the interactions between Black and education and Black and firm tenure along with two interactions for firm sector, Black and private sector and Black and non-profit sector. These interactions were added to test hypothesis 6, and again this model could provide support for Wilson's (1997) particularistic mobility thesis. In model five, none of the interactions were statistically significant from zero. Although the addition of the interactions caused the race gap in authority to increase from model four ( $b = -.383$ ), it was also found to be statistically insignificant. With the insignificant interactions, I failed to support hypothesis 6, which states that Blacks follow a more formal circumscribed route in attaining job authority than do Whites. Four human capital characteristics, education, hours worked in a normal work week, firm tenure, and unemployment spells all remained statistically significant. From model five we can conclude that human capital characteristics are the most significant determinant of authority attainment. Model six adds the interactions between Black and private sector and Black and non-profit sector. Again, as in the logistic analysis the interaction between Black and private sector is negative and statistically significant ( $b = -.339$ ). To compute the effect of Blacks and the private sector, I added  $-.816$  and  $.477$  getting  $-.339$ . What we see here is that Blacks have much less authority in the private sector than Whites ( $b = .477$ ) even after controlling for human capital, a finding which again provides support for the particularistic mobility thesis. An eighth model was run adding the interactions between Black and education and Black and private sector. Here the interaction between Black and education was found to be statistically insignificant, while the interaction between Black and private sector was found to be negative ( $b = -.454$ ). This negative interaction is consistent with

the findings of model six, and provides further support for the particularistic mobility thesis. In this model we see a direct contrast to the sixth model referenced above in the logistic analysis, where sector was statistically insignificant, and education was found to be significant. What we notice from the difference in this eighth model and the sixth model in the logistic analysis is that the interactions between Black and education and Black and the private sector have shifted. In terms of promotions, Blacks are more likely to be promoted with increased education, but are less likely to be promoted in the private sector. When it comes to authority, education is insignificant for Blacks, and they are less likely to have authority in the private sector. Both of these conclusions support the particularistic mobility thesis, and suggest that there may be some type of homosocial reproduction or social closure mechanism at work in the private sector. This area of the analysis would warrant further research. Again, the interaction between Blacks and the non-profit sector was found to be statistically insignificant.

In the seventh and final model, promotion was added to determine if one can accurately conceptualize authority and promotion as distinct from one another. Judging from the coefficient ( $b = 1.17$ ) it appears as if promotion has the strongest effect on authority thus far in the analysis. This is not to say that authority is conceptually dependent on promotions, but up to this point promotion has had the strongest effect on authority. A key finding from this last model is that the interaction effect between job promotion and race is negative ( $b = -1.07$ ). When we add the coefficient for the interaction ( $b = -1.07$ ) and the coefficient for promotion ( $b = 1.17$ ) we see that when Blacks are promoted they essentially have no boost in average authority ( $b = .10$ ), while White authority goes up a full point on the authority scale on average ( $b = 1.17$ ).

Although statistically insignificant, the race gap in authority has significantly decreased ( $b = -.12$ ) with the addition of the promotion interaction effect. The results of this interaction effect clearly show support for hypothesis one, which states that Blacks are less likely than Whites to be receive authority and hypothesis two, which says that Blacks are less likely then Whites to be receive authority even after controlling for human capital. This interaction effect also supports the findings of Collins (1997) in that when Blacks are given promotions, they are usually put into “figure-head” positions with no “real” authority.

---Table 6. About Here---

## **DISCUSSION AND CONCLUSIONS**

Previous research has examined racial disparities in promotions and authority in the workplace. However, the majority of the previous research has treated promotions and authority as one in the same. Results of this research show that employees are promoted without receiving any type of authority and some employees are hired into positions of authority. In addition, previous research has failed to explain how organizational mechanisms could account for the disparities in the allocation of promotions and access to authority. This paper pushes the literature forward by conceptualizing authority and promotions as separate ends, and by examining organizational mechanisms that account for the lack of promotions and positions of authority allocated to Black employees.

This research began with six hypotheses in order to answer several questions. Are Blacks as likely as Whites to receive promotions? Are Blacks as likely as Whites to receive promotions even after controlling for human capital? When reaching a position

of authority are Blacks and Whites in jobs with other employees of the same race? Do Blacks receive less training time than Whites for the same authority invested positions? When Blacks and Whites are promoted are they in positions with members of the same race? Do Blacks follow a more formal route in attaining authority and promotions? The focus here shifts away from conceptualizing promotions and authority as the same end, but as theoretically different, and the mechanisms used to include and/or exclude out-group members may be used for both promotions and authority.

My findings indicate that Blacks are less likely than Whites to be promoted to receive authority, even after controlling for human capital. This finding is consistent with the findings of Baldi and McBrier (1997), who concluded that the determinants for promotion were different for Blacks than for Whites. They found that there was a race-specific model of attainment, which differed from the status attainment models of the past. Two aspects of the present research differ from that of Baldi and McBrier's (1997) research. First, they did not examine authority as an outcome in its own right. Although promotions are a valued resource within the workplace, autonomy and authority are also highly valued and should be studied along with promotions. Second, the present research takes into account social closure as a mechanism used to exclude Blacks from promotions and access to authority.

In my analysis of promotions not only did I find that Blacks are less likely than Whites to receive promotions, but also that Whites that are in jobs with a higher percentage of Blacks are less likely to receive promotions than other Whites. This finding is consistent with Kanter's (1977) notion of homosocial reproduction. This analysis provides empirical support for Kanter's (1977) theory of homosocial

reproduction. After examining the interaction effect of race and percent of Blacks in the job, Blacks were more likely to be promoted when they are in jobs with other Blacks. These findings are also consistent with Tomaskovic-Devey's (1993a) notion of a segregated labor market, in that Blacks are promoted in Black jobs and Whites are promoted in White jobs. Other research shows that Black jobs, (similar to women's work) are devalued so the returns in those jobs are less than the returns to Whites who are promoted in White jobs. Although Whites are less likely to be promoted in Black jobs, it may not be to their benefit to be promoted in those jobs anyway because of the fewer returns they may receive as a result.

Organization characteristics such as size did have a significant negative effect for Whites, but those findings were beyond the scope of the present research. We found that Blacks were promoted less often and had less authority than Whites in the private sector. This finding is consistent with previous literature that found that Blacks who work in the private sector are promoted less often than those who work in the public sector (Baldi & McBrier, 1997; McGuire & Reskin, 1993; Wilson, 1997). Although the results for the private sector were conclusive, the results for the non-profit sector were insignificant. The insignificance of the non-profit sector could be due to the small sample size of Blacks in the analysis, which is one of the limitations to the current research.

In my analysis of authority, it is clear as stated above that when Blacks hold positions of authority they are in firms with a higher percentage of Black employees, and the same is true for White employees. Again we find empirical support for Kanter's (1977) theory of homosocial reproduction. As the percentage of Blacks gets higher the access to authority for Whites declines, similarly as the percent of Blacks increases the

access to authority for Blacks increases. This pattern of exclusion by the in-group is clear, but there is another organizational mechanism taking place here.

According to Tomaskovic-Devey and Skaggs (2002) training time can be used as a mechanism to exclude members of the out-group from desirable positions within a firm. In the present analysis I did not find empirical support for this claim, but I did find that Whites are subjected to longer training periods, which led to more access to authority. The interaction between race and training time was insignificant, but on average Blacks received 27 weeks or about 6 ½ months less training than Whites. This lack of training time limited Blacks access to authority. As Tomaskovic-Devey and Skaggs (2002) hypothesized, training time can be used as a social closure mechanism specifically when it comes to accessing authority positions. The fact that Blacks receive less training time for comparable positions is evidence that there is some type of social closure mechanism taking place. This lack of training not only excludes Blacks from authority invested positions, but also may usher them into Black jobs. The fact that Blacks are receiving less training may be used as a way of maintaining the dual labor market, as those with less training work in the secondary market or the lower jobs with less access to authority, and those with more training work in the primary market of the jobs with room for advancement and access to authority. It should be noted that social closure processes are best observed at the level of interactions, and although this research finds empirical support for the training time hypothesis, it may not explain all of what is happening at the interactional level within organizations.

Promotion was used in this analysis as a dependent and independent variable. In order to observe the difference between promotions and authority empirically, I added

promotion as an independent variable in authority models. Promotions had essentially no consequences for Blacks' access to authority, while Whites authority went up when receiving a promotion. This finding is interesting not only because it supports the hypothesis that Blacks receive less authority even after controlling for human capital, but it also supports the argument advanced by Collins (1997) who argued that Blacks are given positions with no "real" authority. What we notice is that even if Blacks receive promotions it still is not closing the gap in authority, which further supports my conceptually separating of the two terms. Black employees' lack of access to authority even after being promoted is also evidence of closure mechanisms used on a higher level. Although I have not empirically observed the mechanism, it may be an accurate explanation as to why Whites receive on average a full point increase on the authority scale after being promoted, while Blacks have no boost in authority.

My empirical analysis of authority partly supports the particularistic mobility thesis advanced by Wilson (1997). I found that education was a significant factor in determining the likelihood of Blacks being promoted. Similarly the findings concluded that Blacks had less authority in the private sector than did Whites. Both of these conclusions are consistent with the particularistic mobility thesis. According to the particularistic mobility thesis Blacks are promoted on the basis of more formal credentials, which is consistent with the findings in my analysis of promotions. According to this particularistic mobility thesis, Blacks also receive authority on "a range of personal characteristics that are vaguely defined and difficult to measure directly, such as perceived loyalty". White employers begin to feel "comfortable" enough with a Black employee after an extended period of time to give them authority. As Kanter (1977)

suggests managers look for those who they can trust and communicate with, qualifications notwithstanding. In the above analysis on authority we see that even after controlling for human capital, in the private sector, Blacks had less authority than Whites. These findings are consistent with the notion that, when it comes to authority, in the private sector, Blacks often attain it through hard to measure means.

So the question that still remains is; why does this inequality in the workplace persist? Tilly (1998) introduces a theory of categorical inequality, which incorporates paired and unequal categories that result from the processes of exploitation and opportunity hoarding. Tilly (1998) argues from a Marxist perspective that when groups are in competition over valuable resources, the dominant group will exploit the subordinate groups by extracting material returns on their labor. We see a hoarding of opportunities by the dominant group as a way of protecting their valued resources. Tilly (1998) argues that categorical inequality becomes embedded at the structural level, and manifests itself more clearly on the interactional level. Tomaskovic-Devey's (1993a) social closure thesis and Kanter's (1977) theory of homosocial reproduction resemble this form of opportunity hoarding within the workplace.

Empirically it is shown that social closure and homosocial reproduction mechanisms may limit promotion opportunities and access to authority, but the analysis does not show us exactly what happens between employees. It is my suggestion that future research engage in a more qualitative study like that of Royster (2003), which provides in-depth interviews of Black and White employers and employees in blue-collar occupations. The problem with that type of format is that the results cannot be generalized to the larger population so we lose some of the generalizability afforded to us

by a quantitative analysis. It is a good idea to incorporate qualitative analysis because it does allow the researcher to examine relationships. We may be able to learn the motives behind the actions that take place within the workplace. Survey research, although generalizable, only gives us half the story.

The analysis is also limited by the small African American sample size. Some of the non-significant effects in the models might be significant in a larger sample analysis. The size of the sample, the use of cross-sectional data, and the sample of North Carolina workplaces may also hurt the generalizability of the findings of this analysis. Although I would argue that the racial composition of jobs is not very different in North Carolina than in other parts of the United States. The key strength of these data is the wide coverage of job, organization, and individual characteristics, more specifically the racial composition of the respondent's job.

This paper has implications for both theory and research that should be noted. On the theoretical level, I believe social science would benefit from the conceptualization of promotions and authority as separate entities. Both are valued workplace resources that are viewed as achievements not only in workplace, but also in society as whole. They should no longer be conceptualized as one in the same, with the assumption that workers are promoted to authority. Wilson (1997), Baldi and McBrier (1997), and McGuire and Reskin (1993) all fail to make this distinction. It should also be noted that social closure and homosocial reproduction are empirically observable organizational mechanisms used to exclude out-group members within the workplace. More attention needs to be paid to these types of mechanisms, rather than the traditional status attainment models that have been so prevalent in social science. As status attainment models will continue to be

important, there are other factors beyond human capital that can and do account for inequality within the workplace.

## References

- Baldi, Stephane and Debra Branch McBrier. 1997. "Do the Determinants of Promotion Differ for Blacks and Whites?" *Work and Occupations*. 24:478-97.
- Baron, James N. and William Bielby. 1980. "Bringing the Firm Back In: Stratification, Segmentation, and the Organization of Work." *American Sociological Review*. 45:737-65.
- , A. Davis-Blake, and William Bielby 1986. "The Structure of Opportunity: How Promotion Ladders Vary Within and Among Organizations." *Administrative Science Quarterly*. 31:248-73.
- Becker, Gary S. and Barry Chiwick. 1966. "Education and the Distribution of Earnings." *The American Economic Review*. 56:358-69.
- Blau, Peter M. and Otis Duncan. 1967. *The American Occupational Structure*. New York: Wiley.
- Brewer, Marilynn and Roderick Kramer. 1998. "The Psychology of Intergroup Attitudes and Behavior." *Annual Review of Psychology*. 36:219-43.
- Collins, Sharon M. 1997. *Black Corporate Executives: The Making and Breaking of a Black Middle Class*. Philadelphia: Temple University Press.
- Elliott, James and Ryan Smith. 2001. "Ethnic Matching of Supervisors to Subordinate Work Groups: Findings on 'Bottom-up' Ascription and Social Closure." *Social Problems*. 48:258-76.
- and Ryan Smith. 2004. "Race, Gender, and Workplace Power." *American Sociological Review*. 69:365-86.
- Greenhaus, Jeffery, Saroj Parasuraman, & Wayne Wormley. 1990. "Effects of Race on Organizational Experiences, Job Performance, Evaluations, and Career Outcomes." *Academy of Management Journal*. 33:64-86.
- Halaby, Charles. 1978. "Bureaucratic Promotion Criteria." *Administrative Science Quarterly*. 23:466-84.
- 1979. "Job Specific Sex Differences in Organizational Reward Attainment: Wage Discrimination vs. Rank Discrimination." *Social Forces*. 58:108-27.
- and David Weakliem. 1993. "Ownership and Authority in the Earnings Function: Non-nested Tests of Alternative Specifications." *American Sociological Review*. 59:5-21.

- Hout, M. 1984. "Occupational Mobility of Black Men, 1962-1973." *American Sociological Review*. 49:308-22.
- Kanter, Rosabeth M. 1977. *Men and Women of the Corporation*. New York: Basic Books.
- Kaufman, Robert. 1983. "A Structural Decomposition of Black-White Earnings." *American Sociological Review*. 89:585-611.
- Kluegel, James. 1978. "The Causes and Cost of Racial Exclusion from Job Authority." *American Sociological Review*. 43:285-301.
- Maume, David Jr. 1999. "Glass Ceilings and Glass Escalators: Occupational Segregation and Race and Sex Differences in Managerial Promotions." *Work and Occupations*. 26:483-509.
- McGuire, Gail and Barbara Reskin. 1993. "Authority Hierarchies at Work: The Impacts of Race and Sex." *Gender & Society*. 7:487-506.
- Mincer, Jacob and Solomon Polachek. 1974. "Family investments in Human Capital: Earnings of Women." *The Journal of Political Economy*. 82:S76-S108.
- Mueller, Charles, Toby Parcel, and Kazuko Tanaka. 1989. "Particularism in Authority Outcomes of Black and White Supervisors." *Social Science Research*. 18:1-20.
- Murphy, Raymond. 1988. *Social Closure: The Theory of Monopolization and Exclusion*. Oxford: Clarendon Press.
- Ospina, Sonia. 1996. *Illusions of Opportunity: Employee Expectations and Workplace Inequality*. Ithaca: Cornell University Press.
- Parkin, Frank. 1979. *Marxism and Class Theory: A Bourgeois Critique*. New York: Columbia University Press.
- Paulin, Elizabeth and Jennifer Mellor. 1996. "Gender, Race, and Promotions within a Private-Sector Firm." *Industrial Relations*. 35:276-95.
- Reskin, Barbara and Catherine Ross. 1992. "Jobs, Authority, and Earnings Among Managers." *Work and Occupations*. 19:342-365.
- , 1993. "Sex Segregation in the Workplace." *Annual Review of Sociology*. 19:241-70.
- , 2000. "Getting It Right: Sex and Race Inequality in Work Organizations." *Annual Review of Sociology*. 26:707-09.

- , 2000. "Why not Ascription? Organizations' Employment of Male and Female Managers." *American Sociological Review*. 65:210-233.
- , 2002. "Including Mechanisms in our Models of Ascriptive Inequality." *American Sociological Review*. 68:1-21.
- Royster, Deirdre. 2003. *Race and the Invisible Hand: How White Networks Exclude Black Men from Blue-Collar Jobs*. University of California Press.
- Smith, Ryan. 1997. "Race, Income, and Authority at Work: A Cross-Temporal Analysis of Black and White Men, 1972-1994." *Social Problems*. 44:19-37.
- , 2002. "Race, Gender, and Authority in the Workplace: Theory and Research" *Annual Review of Sociology*. 28:509-542.
- Spaeth, Joe. 1985. "Job Power and Earnings." *American Sociological Review*. 50:603-17.
- Tilly, Charles. 1998. *Durable Inequality*. Berkeley: University of California Press.
- Tomaskovic-Devey, Donald. 1993a. *Gender & Racial Inequality at Work: The Sources & Consequences of Job Segregation*. Ithaca: ILR Press.
- , 1993b. "The Gender and Race Composition of Jobs and the Male/Female, White/Black Pay Gaps." *Social Forces*. 72:45-76.
- , and Sheryl Skaggs. 2002. "Sex Segregation, Labor Process Organization, and Gender Earnings Inequality." *American Journal of Sociology*. 108.
- , Melvin Thomas, and Kecia Johnson. 2003. "Race and the Accumulation of Human Capital Across the Career: A Theoretical Model and Fixed Effects Application." (In press).
- Turner, R. 1974. "Sponsored and Contest Mobility and the School System." *American Sociological Review* 25:855-867.
- Weber, Max. 1968. *Economy and Society*. Edited by Guenter Roth and Claus Wittich. New York: Bedminster Press.
- Wilson, George. 1997. "Pathways to Power: Racial Differences in the Determinants of Job Authority." *Social Problems* 44:38-59.
- , Ian Sakura-Lemessy, and Jonathan West. 1999. "Reaching the Top: Racial Differences in Mobility Paths to Upper-Tier Occupations." *Work and Occupations*. 26:165-186.

Wilson, William. 1978. *The Declining Significance of Race*. Chicago: University of Chicago Press.

Wright, Erik, Janeen Baxter, & Gunn Birkelund. 1995. "The Gender Gap in Workplace Authority: A Cross-National Study." *American Sociological Review*. 60:407-435.

**Table 1**  
**Race Difference in Distribution of Authority and Promotion**

	Frequency		Cumulative Frequency	Cumulative Percent
	Black	White		
No Promotion with no Authority	96	362	458	57.97
No Promotion with some Authority	30	167	655	82.91
Promotion with no Authority	7	42	704	89.11
Promotion with Authority	7	79	790	100.00
N=	140	650	790	100.00

**Table 2**  
**Race Difference in Authority and Promotion by Training Time**

	Less Than Six Months of Training		Between Six Months and a Year of Training		Over One Year of Training	
	White	Black	White	Black	White	Black
% of Respondents Respective of Race	44.00	61.43	32.46	27.14	23.54	11.43
No Promotion with no Authority	69.93	77.91	53.55	55.26	32.03	50.00
No Promotion with some Authority	16.78	13.95	26.07	34.21	41.83	31.25
Promotion, with no Authority	5.59	3.49	6.16	7.89	8.50	6.25
Promotion with Authority	7.69	4.65	14.22	2.63	17.65	12.50
N=	286	86	211	38	153	16

N=790. Column percentages total 100.

**Table 3**  
**Race Difference in Authority and Promotion by Percentage of Black Employees**

	Less Than 10% Black		Between 10% and 50% Black		Over 50% Black	
	White	Black	White	Black	White	Black
	% of Respondents Respective of Race	68.45	7.35	24.76	44.12	6.80
No Promotion with no Authority	50.12	80.00	60.13	65.00	80.95	71.21
No Promotion with some Authority	28.84	10.00	22.22	26.67	14.29	18.18
Promotion, with no Authority	6.15	10.00	7.19	3.33	4.76	6.06
Promotion with Authority	14.89	0.00	10.46	5.00	0.00	4.55
N=	423	10	153	60	42	66

*Note:* N=790. Column percentages total 100.

**Table 4**  
**Descriptive Statistics (means and standard deviations)**

Variable	Mean	SD	Black		White	
			Mean	SD	Mean	SD
Authority (0-7 summated scale)	1.38	2.07	0.89	1.68	1.45	2.11
Promotion	35.82		.264	.443	.378	.485
Training Time (weeks)	49.56	68.93	26.16	34.78	53.51	72.95
Percent of Black Employees	21.49	30.36	59.08	34.38	13.54	22.44
Education (years)	13.24	2.44	12.67	2.45	13.36	2.42
Pre-Firm Experience (years)	12.68	11.01	11.12	9.09	13.02	11.36
Firm Tenure (years)	8.36	8.25	7.51	7.75	8.55	8.35
Hours Worked Per Week	40.79	10.08	39.59	7.67	41.05	10.51
Unemployment Spells (weeks)	1.46	5.24	1.38	3.12	1.47	5.59
Organization size	3.88	1.93	4.01	1.86	3.85	1.95
Private Sector	.738	.440	.714	.453	.743	.437
Non-Profit Sector	.062	.241	.064	.246	.062	.241
N=	790		140		650	

**Table 5**  
**Logistic Regression of Promotion**

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Black	-.722 / .486* (.299)	-.572 / .564* (.308)	-1.370 / .254* (.670)	-5.765 / .003* (2.131)	.415 / 1.514 (.534)
Female	-.117 / .889 (.190)	.112 / 1.118 (.210)	.094 / 1.099 (.216)	.139 / 1.149 (.211)	.146 / 1.157 (.211)
Education	-	.130 / 1.138* (.045)	.115 / 1.122* (.046)	.091 / 1.095* (.047)	.132 / 1.141* (.045)
Pre-Firm Experience	-	-.013 / .987 (.011)	-.013 / .987 (.011)	-.014 / .987 (.011)	-.013 / .987 (.011)
Hours Worked	-	.016 / 1.016 (.011)	.013 / 1.013 (.011)	.017 / 1.018 (.011)	.017 / 1.017 (.011)
Unemployment Spells	-	-.037 / .964 (.037)	-.033 / .968 (.038)	-.035 / .965 (.037)	-.037 / .964 (.037)
Firm Tenure	-	.032 / 1.032* (.011)	.034 / 1.035* (.012)	.032 / 1.033* (.012)	.032 / 1.033* (.011)
Percent Black	-	-	-.017 / .983* (.006)	-	-
Organization Size	-	.089 / 1.093* (.053)	.142 / 1.153* (.056)	.091 / 1.095* (.053)	.089 / 1.093* (.053)
Private	-	.344 / 1.410 (.263)	.252 / 1.287 (.270)	.354 / 1.424 (.265)	.556 / 1.744* (.292)
Non Profit	-	-.061 / .941 (.476)	-.226 / .798 (.483)	-.065 / .937 (.479)	.251 / 1.285 (.498)
Black * Percent Black	-	-	.025 / 1.025* (.011)	-	-
Black * Education	-	-	-	.381 / 1.463* (.146)	-
Black * Firm Tenure	-	-	-	-.010 / .990 (.041)	-
Black * Private Sector	-	-	-	-	-1.287 / .276* (.660)
Black * Non-Profit Sector	-	-	-	-	-13.666 / .000 (583.6)
Constant	-1.41	-4.68	-4.24	-4.23	-4.96
-2 log likelihood	715.42	666.37	630.64	658.86	661.01
Model X <sup>2</sup>	7.10	41.94	52.97	49.44	47.29
Model X <sup>2</sup> improvement	7.10	34.84	11.03	-3.53	-2.15
Degrees of Freedom	2	10	12	12	12

Note: N=790 Table entries are coefficient and odds ratios respectively (standard errors of estimates in parentheses)

\*indicates p<.10 (one-tailed tests)

**Table 6**  
**OLS Regression Coefficients of Authority**

Model	1	2	3	4	5	6	7
Black	-.616*	-.321*	-.798*	-.280	-.383	-.284	-.120
(White Reference)	(.199)	(.189)	(.350)	(.235)	(1.047)	(.398)	(.197)
Sex	-.698*	-.352*	-.322*	-.203	-.350	-.339*	-.352*
(Male Reference)	(.153)	(.150)	(.149)	(.154)	(.150)	(.150)	(.147)
Education	-	.202*	.185*	.165*	.205*	.202*	.185*
		(.033)	(.033)	(.034)	(.036)	(.033)	(.032)
Pre-Firm Experience	-	.003	.002	-.000	-.003	-.004	.005
		(.007)	(.007)	(.007)	(.007)	(.007)	(.007)
Hours Worked	-	.054*	.053*	.050*	.054*	.054*	.052*
		(.008)	(.008)	(.008)	(.008)	(.008)	(.007)
Firm Tenure	-	.034*	.033*	.028*	.029*	.034*	.028*
		(.009)	(.009)	(.009)	(.010)	(.009)	(.009)
Unemployment Spells	-	-.024*	-.023*	-.023*	-.025*	-.024*	-.022*
		(.013)	(.013)	(.013)	(.013)	(.013)	(.013)
Organization Size	-	-.117*	-.078*	-.116*	-.115*	-.114*	-.131*
		(.039)	(.040)	(.038)	(.038)	(.039)	(.038)
Private Sector <sup>+</sup>	-	.311	.239	.275	.312	.477*	.248
		(.190)	(.190)	(.188)	(.190)	(.211)	(.186)
Nonprofit Sector <sup>+</sup>	-	.409	.297	.372	.402	.482	.392
		(.328)	(.326)	(.325)	(.328)	(.362)	(.321)
Percent Black	-	-	-.013*	-	-	-	-
			(.004)				
Training Time	-	-	-	.004*	-	-	-
				(.001)			
Promotion	-	-	-	-	-	-	1.170*
							(.199)
Black * Percent Black	-	-	.018*	-	-	-	-
			(.006)				
Black * Training Time	-	-	-	.001	-	-	-
				(.005)			
Black * Education	-	-	-	-	-.009	-	-
					(.077)		
Black * Firm Tenure	-	-	-	-	.023	-	-
					(.024)		
Black * Promotion	-	-	-	-	-	-	-1.069*
							(.587)
Black * Private Sector	-	-	-	-	-	-.816*	-
						(.452)	
Black * Non-Profit Sector	-	-	-	-	-	-.299	-
						(.847)	
R <sup>2</sup>	.040*	.180*	.196*	.197*	.181*	.184*	.218*

Note: N=790 Table entries are unstandardized regression coefficients (standard errors of estimates in parentheses)

\*indicates p<.10 (one-tailed tests)

+indicates government sector used as reference category

Figure 1.

### Race Difference in Predicted Promotions by Job Race Composition

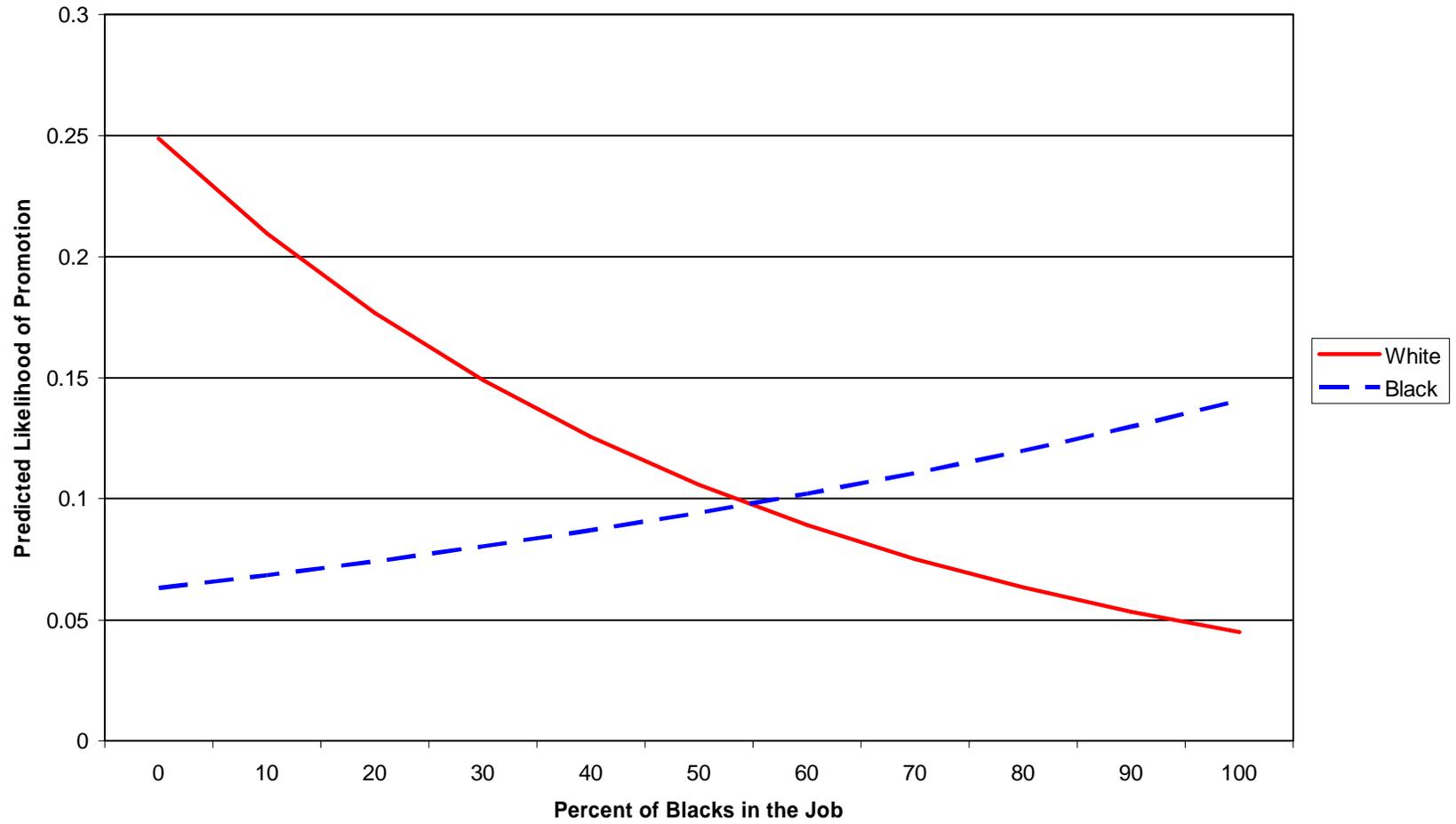


Figure 2.

### Race Difference in Predicted Promotion By Education

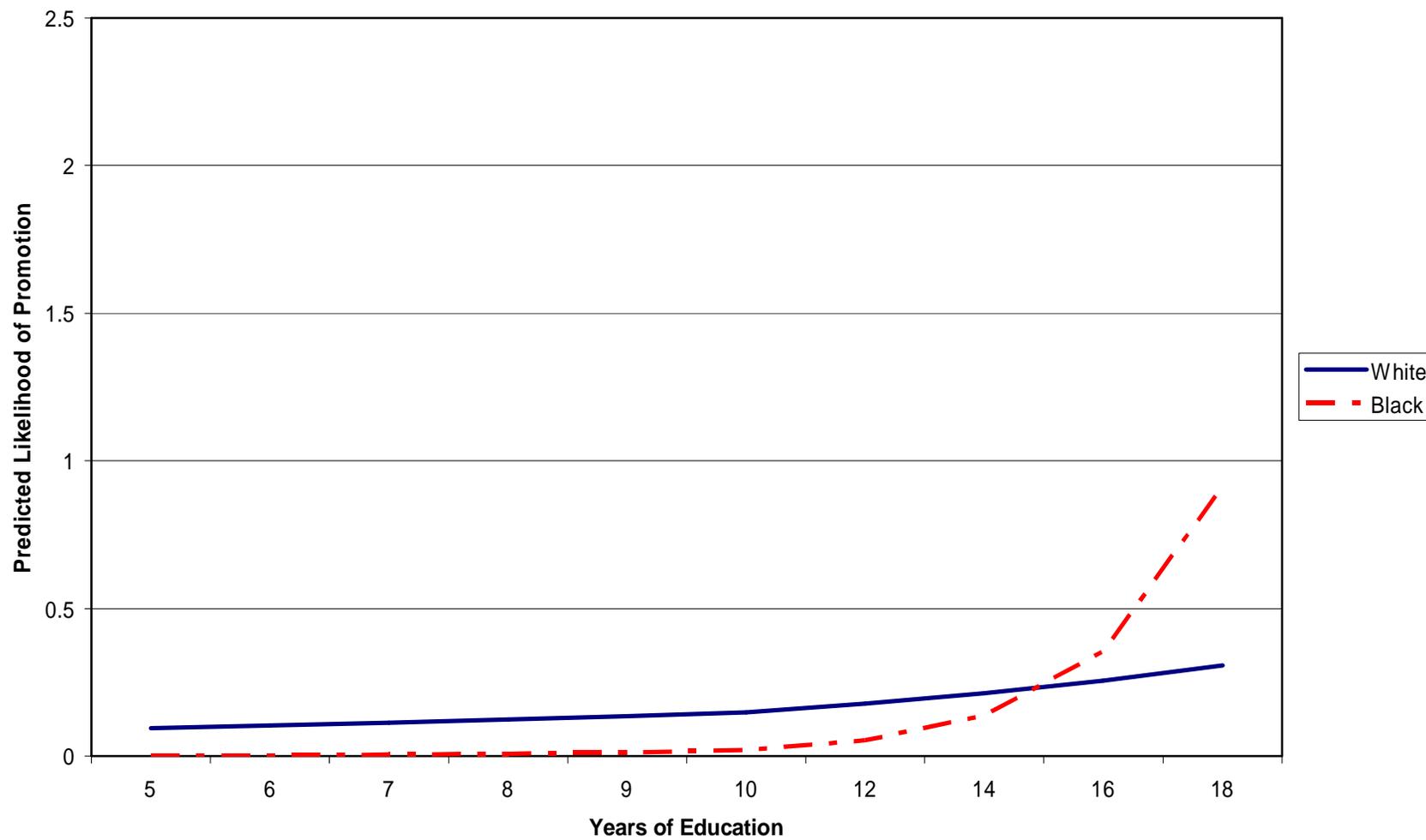


Figure 3.

### Race Difference in Predicted Authority by Job Race Composition

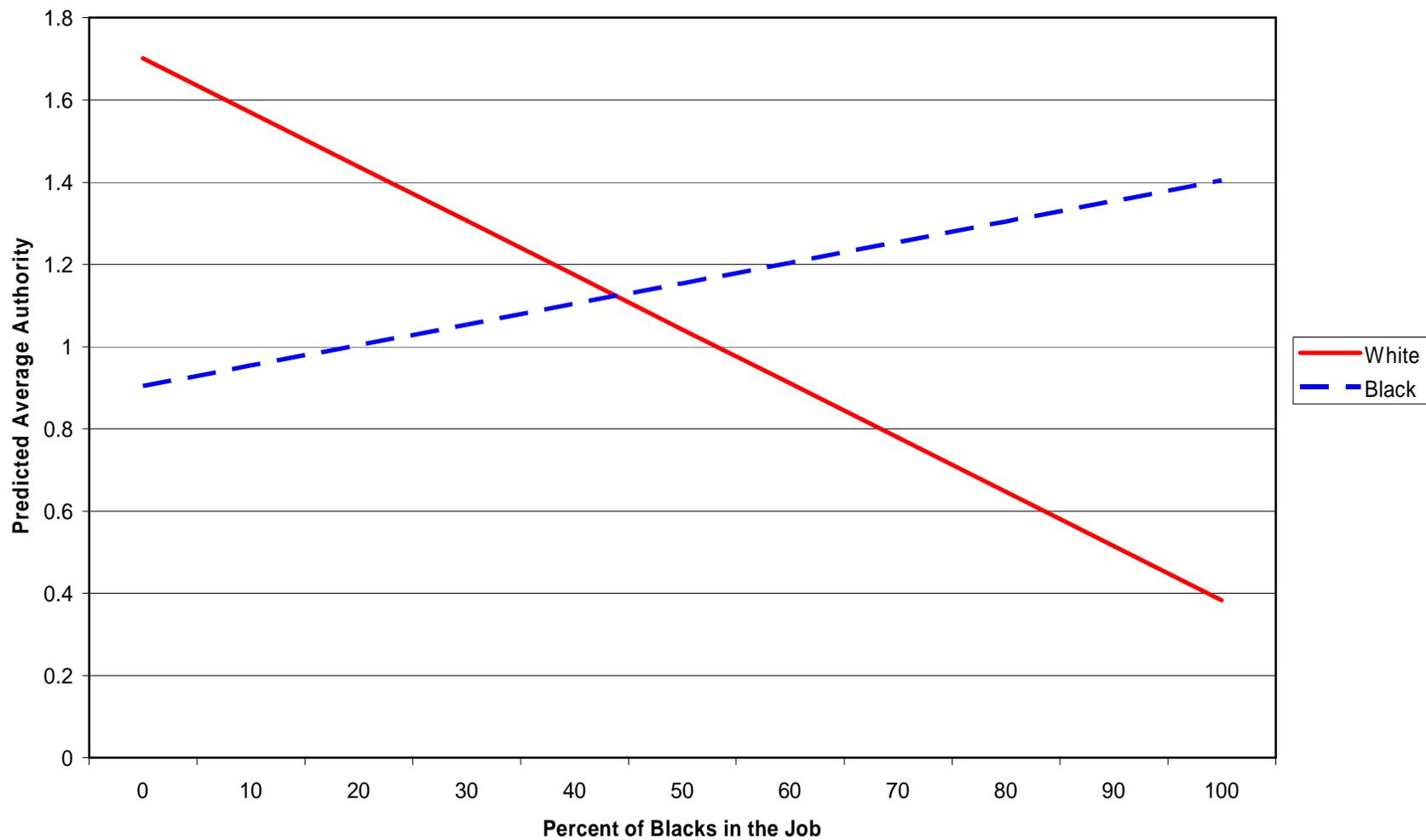
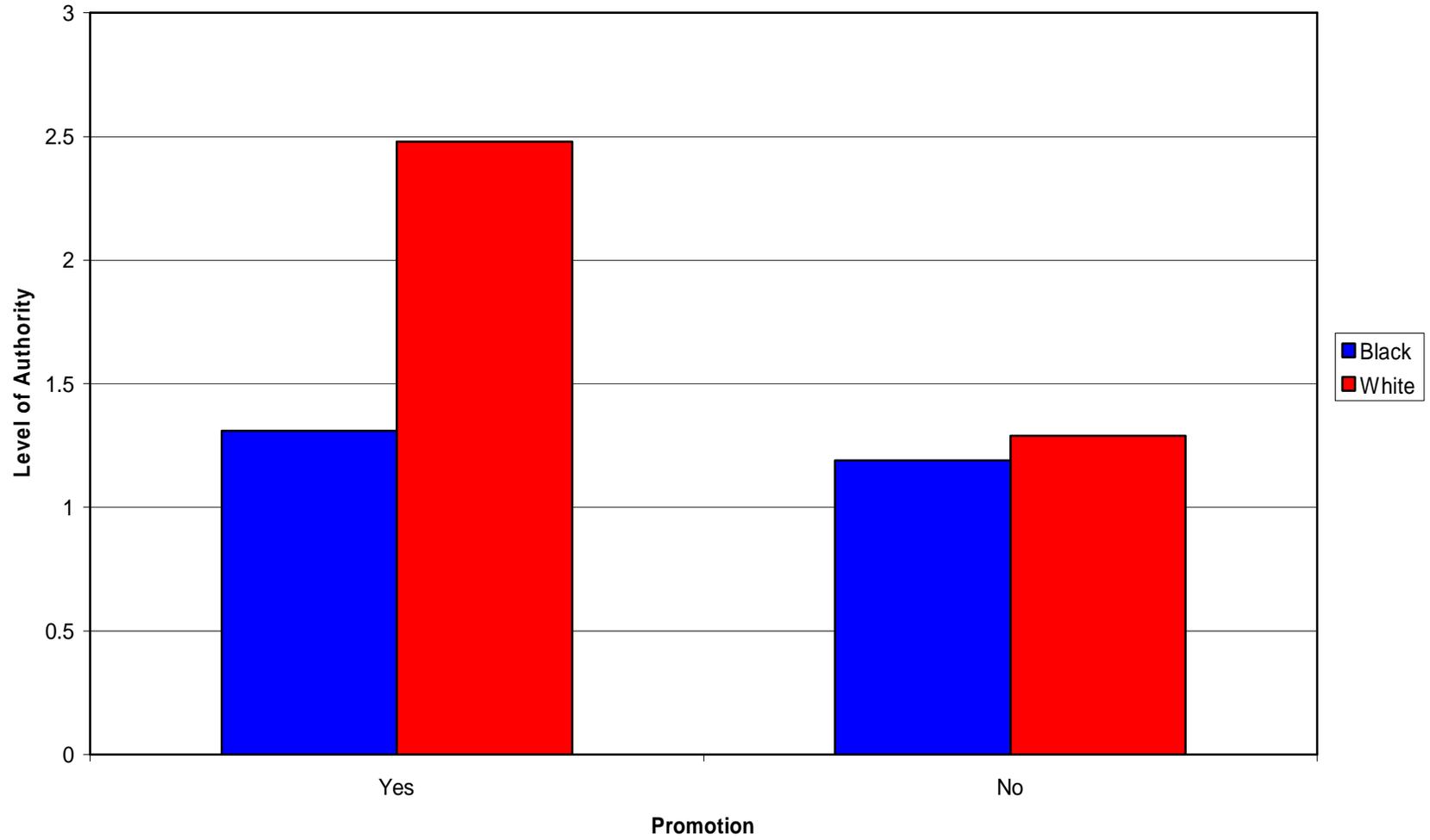


Figure 4.

### Race Differences in Observed Authority by Promotion



Appendix A.

**Correlation Matrix**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 Race	1.00	-.01	-.11	-.07	-.06	-.04	-.02	.05	-.04	-.00	.57	-.15	-.09	.84	.58	.98	.65	.29	.82	.23
2 Sex		1.00	-.03	.04	-.30	.00	.03	-.01	-.04	.08	.03	-.28	-.02	-.02	-.08	-.01	-.01	-.02	.01	.05
3 Education			1.00	-.28	.16	-.01	-.06	.11	-.29	.13	-.11	.27	.15	-.09	.03	-.02	-.13	.10	-.16	.03
4 Pre-Firm Experience				1.00	-.12	-.12	.02	-.17	.08	.00	-.10	-.02	-.09	-.06	-.07	-.09	-.03	-.05	-.02	-.03
5 Hours Worked					1.00	.04	-.06	.13	-.03	-.01	-.05	.22	.09	-.05	.03	-.05	-.06	.00	-.07	-.00
6 Firm Tenure						1.00	-.04	.22	-.09	.00	.05	.13	.13	-.01	-.00	-.05	.29	.01	-.05	.01
7 Unemployment Spells							1.00	-.01	.04	.02	.03	-.05	-.05	-.00	-.01	-.03	-.02	-.02	-.00	-.02
8 Organization Size								1.00	-.04	.02	.19	.04	.11	.02	.06	.05	.04	.06	.06	-.04
9 Private									1.00	-.44	-.09	-.04	-.00	-.06	-.04	-.06	-.05	-.06	.23	-.18
10 Nonprofit										1.00	-.03	.03	-.02	.00	-.01	.00	.01	-.04	-.10	.41
11 Percent Black											1.00	-.17	-.10	.74	.36	.56	.41	.20	.43	.15
12 Training Time												1.00	.06	-.12	.09	-.13	-.09	-.04	-.13	-.04
13 Promotion													1.00	-.07	-.04	-.07	-.05	.29	-.10	-.05
14 Race * Percent Black														1.00	.52	.83	.59	.28	.64	.21
15 Race * Training Time															1.00	.61	.42	.20	.44	.11
16 Race * Education																1.00	.61	.34	.76	.24
17 Race * Firm Tenure																	1.00	.23	.50	.18
18 Race * Promotion																		1.00	.17	-.01
19 Race * Private																			1.00	-.04
20 Race * Non-Profit																				1.00

Note: For the variable sex, female is coded one and for the variable race, Black is coded one.