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Transitions to the Top: Race, Segregation, and Promotions to Executive Positions in the College Football Coaching Profession

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Abstract

This study investigates the effects of job-level, task-based, segregation on racial differences in promotions to executive positions within the college football coaching profession. Using event-history methods to analyze the careers of 323 college football coaches, the results suggest that, relative to White coaches, Black coaches' career prospects are harmed by their disproportionate placement into jobs that inhibit mobility (i.e., noncentral positions) and their differential returns from occupying jobs that induce mobility (i.e., central positions). These findings shed light on processes related to job-level racial segregation, particularism, and racialization in the coaching profession as well as more general, high-status, labor market contexts.

Keywords

race, segregation, promotions, football, coaches

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Since the passage of equal employment opportunity legislation in the 1960s, the American workforce has become increasingly diverse (Stainback & Tomaskovic-Devey, 2012). The labor market has witnessed overall reductions in occupational segregation by race and increases in minorities' representation in managerial positions (Stainback & Tomaskovic-Devey, 2009; Tomaskovic-Devey et al., 2006). Yet, even with this increasing diversity, American occupations remain segregated, and racial inequalities in access to job authority and promotions remain significant, especially in the highest paying and most prestigious managerial and professional occupations (Baldi & McBrier, 1997; Smith, 2002; Stainback & Tomaskovic-Devey, 2012; Wilson, 1997, 2012; Wilson, Sakura-Lemessy, & West, 1999).

Minority workers' restricted access to jobs, occupations, and economic sectors that offer the opportunity to develop requisite human capital, social network contacts, and display the particularistic criteria necessary for promotion into high-status jobs and occupations has been implicated in divergent mobility outcomes for White and Black workers (see Baldi & McBrier, 1997; Byron, 2010; Collins, 1997; Greenhaus, Parasuraman, & Wormley, 1990; Kim & Tamborini, 2006; Maume, 1999; Mueller, Parcel, & Tanaka, 1989; Paulin & Mellor, 1996; Smith & Elliott, 2002; Wilson et al., 1999). Furthermore, recent work has shown that even when White and minority workers occupy similar jobs, occupations, or economic sectors, minorities are still at a disadvantage compared with Whites in regard to their future career attainment (see Harvey Wingfield, 2009; Wilson, 2012). However, the focus on differential returns by race, especially from high-status jobs, has been hampered by the lack of minorities occupying such positions (Maume, 1999; Wilson, 2012).

The following study examines the relationship between job-level, task-based, segregation and promotions and authority attainment within the college football coaching profession, a profession with a large proportion of Black workers (e.g., athletes) and lower level managers (e.g., position coaches), but relatively few in the executive levels of the profession (e.g., coordinators and head coaches; Lapchick, Agusta, Kinkopf, & McPhee, 2013). Although prior research on the college football coaching profession has highlighted important individual correlates of mobility (e.g., skills, experiences, and social contacts) as well as the effects of positional segregation among players in explaining racial differences in coaching career outcomes (Anderson, 1993; Braddock, 1989; Day & McDonald, 2010;

Finch, McDowell, & Sagas, 2010; Loy & Sage, 1978; Massengale & Farrington, 1977; Sagas & Cunningham, 2005), scholars studying this and similarly unique professions have only recently begun to integrate theory and research from the larger sociological literature on segregation and employment outcomes (see Bozeman & Fay, 2013; Cook & Glass, 2013; Seebruck & Savage, 2014). This article expands on such efforts by focusing on a key managerial transition within coaches' careers—their first coordinator or head coach position at the National Collegiate Athletic Association's (NCAA) Football Bowl Subdivision (FBS) level, the highest level of college football. In doing so, this study contributes to research on segregation and mobility by utilizing the relative diversity of the coaching labor market to examine hypotheses related to the differential effects of job-level segregation in a high-status profession that are difficult to examine in more general labor market contexts. More specifically, the present study addresses the following research questions: (a) *Do certain coaching positions (e.g., central positions) facilitate occupational attainment?* (b) *Are racial disparities in occupational attainment explained by racial differences in access to these key positions?* and (c) *Are racial disparities in occupational attainment explained by racial differences in returns from these positions?*

Background

Race and Mobility

The *particularistic mobility thesis* is the predominant theoretical explanation for racial/ethnic differences in both authority attainment and promotions in the labor market, particularly in high-status professions. According to the particularistic mobility thesis, performance indicators in high-level positions are inherently vague and uncertain (Jackall, 1988; Kanter, 1977), and the characteristics that upper management looks for when considering promotions such as loyalty, leadership potential, trustworthiness, and achievement orientation are not easily measured and quantified. This opens promotion decisions to "particularistic manipulation," or the subjective (mis)perceptions of upper level managers (Baldi & McBrier, 1997; Kluegel, 1978; Wilson, 1997). As a result, minority workers follow a more circumscribed pathway to high-level positions where they are limited to formal channels of mobility based on their objective experience, credentials, and skills. Whites, on the other hand, not only have access to formal channels of mobility but

also benefit from the subjective and sometimes biased assessments of their skills and abilities. As a result, a broader range of mobility pathways, both formal and informal, are available to White workers (Mueller et al., 1989; Smith, 2005; Wilson, 2012; Wilson et al., 1999).

Prior research examining the particularistic mobility thesis has demonstrated that human capital indicators (e.g., education, general work experience, occupational work experience, and job tenure) are more predictive of Black workers' promotions and authority attainment than they are for White workers (Baldi & McBrier, 1997; Mueller et al., 1989; Smith, 2001, 2005; Wilson, 1997; Wilson et al., 1999). Furthermore, research on racial differences in performance evaluations shows that Black workers' performance is evaluated less favorably than that of White workers' net of human capital and other objective and subjective performance indicators (Elvira &Town, 2001; Greenhaus et al., 1990; Smith, DiTomaso, Farris, & Cordero, 2001). Although scholars have primarily posited out-group bias and in-group favoritism as driving these differences (Elvira & Town, 2001; Greenhaus et al., 1990; Smith et al., 2001), they have also been linked to minorities' segregation into jobs that do not allow them to develop the skills or display the particularistic criteria necessary for promotions (see Dickerson, Schur, Kruse, & Blasi, 2010; Greenhaus et al., 1990; Smith, 2005; Wilson, 2012; Wilson & Maume, 2014).

Taken together, prior research suggests that job-level segregation is related to particularistic mobility outcomes in two fundamentally different ways. First, minority and White workers are segregated into different jobs that, to varying degrees, allow for the development and display of the human capital credentials and subjective characteristics that upper management looks for in making promotion decisions. In this way, racial differences in promotions and authority attainment occur via minorities' and Whites' *differential access* to jobs that facilitate mobility. Second, however, even if occupying the same job, White workers may be evaluated more favorably and minority workers may be evaluated less favorably as a result of existing out-group bias and in-group favoritism. As a result, job-level segregation also produces racial differences in promotions and authority attainment via minorities' and Whites' *differential returns* from similar jobs. Existing research linking job-level segregation to racial differences in mobility emphasizes, to varying degrees, the effects of access to and returns from mobility-inducing jobs in explaining persistent racial differences in career attainment.

Differential Access and Mobility Outcomes

Research that emphasizes racial differences in access to mobility-inducing jobs tends to focus on either (a) the characteristics of the typical incumbents occupying jobs (i.e., composition effects) or (b) the tasks associated with certain jobs (i.e., task effects) in explaining the processes through which job-level segregation inhibits minority workers' mobility into higher status and authoritative positions. Scholars focusing on composition effects, or " . . . the degree to which two or more groups are differently distributed across work settings" (Reskin, McBrier, & Kmec, 1999, p. 337), draw on a rich theoretical tradition regarding the effects of the relative numbers of different demographic groups within occupations and organizations. For example, Kanter (1977) and Blau (1977) suggest that being a part of a minority group that makes up a relatively small proportion of workers should have negative consequences on workers' careers as a result of the increased scrutiny they experience with being a "token" (Kanter, 1977). On the other hand, Blalock (1967) suggests that being a member of a minority group that makes up a relatively large proportion of workers should have negative consequences for those members as a result of them being perceived as a threat to the dominant group's valuable resources (e.g., high-status jobs).

Scholars of labor market inequality, often framing these different theoretical ideas as competing hypotheses (see Bygren, 2004), have generally found more support for Kanter's and Blau's predictions related to occupational outcomes. Specifically, research shows that when minorities find themselves in predominantly White workgroups, organizations, or occupations, they report increased stress (Jackson, Thoits, & Taylor, 1995), lower job satisfaction and commitment (Mueller, Finley, Iverson, & Price, 1999), more experiences of racial discrimination (Roscigno, 2007; Stainback & Irvin, 2012), and fewer promotions (Baldi & McBrier, 1997; Paulin & Mellor, 1996; Smith & Elliott, 2002). Furthermore, research on bottom-up ascription has found that minority managers are disproportionately placed in charge of racially similar subordinates (Elliott & Smith, 2001), which negatively affects their promotions and access to authority (Smith & Elliott, 2002). Finally, Collins (1997) research on "racialized jobs" has demonstrated that, in addition to being placed in charge of racialized workgroups, minority managers are also placed in charge of racialized job tasks such as affirmative action compliance and urban/community relations. As a result of not overseeing tasks central to the organizations' profit-driven

mission, minority managers are unable to develop the skills and experience necessary for being promoted to higher level executive positions (Collins, 1997).

Overall, research on differential access to mobility-inducing positions suggests that the source of racial inequality in promotions and authority attainment lay primarily in the early segregation of minorities and Whites into different jobs that either facilitate or impede mobility. In conceptualizing the effects of job-level segregation in this way, this research implies that, if granted access to more racially heterogeneous jobs and workforces as well as mainstream tasks, minority workers' career outcomes would be similar to their White counterparts. Similarly, if White workers are workforce tokens, placed in charge of a predominantly minority workforce, or in charge of "racialized" job tasks, then their careers should mirror similarly placed minority workers. However, a lack of access is only one way that job-level segregation operates to produce racial differences in career outcomes. The same job can also provide differential mobility returns depending on a worker's race.

Differential Mobility Returns From Job-Level Segregation

Research that emphasizes racial differences in returns from occupying the same job or occupation suggests that, in addition to affecting one's initial placement into different types of jobs, race matters throughout one's career. Scholars of organizational and occupational demography have found that the percent minority in an occupation or firm has a negative effect on the promotion likelihood of minorities and a minimal effect on White's promotion chances (Baldi & McBrier, 1997; Paulin & Mellor, 1996). These results mirror research on "the glass escalator" phenomenon identified by Williams (1992), where men in traditionally female occupations (e.g., nurse, elementary school teacher) move more quickly into management and administrative positions than women.

Adia Harvey Wingfield demonstrated that the glass escalator is also a racialized process (see Harvey Wingfield, 2009, 2012). She found that the advantages men in women's work generally experience do not fully extend to Black men in predominantly White occupations (Harvey Wingfield, 2012). Instead, Black men performing high-status work experience what she calls "partial tokenization," where they enjoy some, but not all, of the benefits associated with being male in predominantly male workplaces while still experiencing some of the

negative consequences of racial tokenization (Harvey Wingfield, 2012). Specifically, Harvey Wingfield (2012) found that Black men in professional and managerial occupations were acutely aware that they would be graded harsher than their White counterparts. As a result, they expressed the importance of being vigilant in how they dressed, carried themselves, as well as how their coworkers interacted with them (e.g., making sure they were called by their official title). However, the Black male professionals in Harvey Wingfield's (2012) study also suggested that token status provided advantages, including being able to more readily demonstrate their high-quality performance and thus accruing the rewards associated with such performance (e.g., salary, status, and customers). Some of Harvey Wingfield's (2012) respondents also expressed the benefits of strong relationships and social support from their fellow, token status, coworkers. This work shows that occupying a "White job" can have countervailing effects on Black professionals' future career outcomes.

Taken together, studies that emphasize differential returns suggest that the same job does not necessarily produce the same results for workers of different racial or ethnic backgrounds. However, this research has focused primarily on the racial composition of occupations and workplaces and less on the effects of racialized job tasks. Few scholars have considered racial differences in the effects of occupying the same job on subsequent promotion opportunities, especially in high-status professions (see Wilson, 2012). For example, Collins's (1997) research on racialized jobs was based on interviews with Black managers in the Chicago area. Counterfactual comparisons of White managers who occupy "Black" jobs or Black managers who occupy "White" jobs are virtually nonexistent in studies of more general samples of high-status workers, as the paucity of Blacks who ascend to managerial and other high-status positions does not allow for the statistical power necessary for such comparisons (see Maume, 1999; Wilson, 2012). Toward this end, the present study examines the effects of racial differences in both access to and returns from different types of job functions on promotions to executive positions within the college football coaching profession.

Segregation and Mobility in the College Football Coaching Profession

The college football coaching profession, particularly at the highest level of the profession (i.e., FBS level), provides a unique opportunity to study the effects of job-level segregation on mobility and authority

attainment. First, as a managerial/professional occupation with a relatively large representation of minority workers relative to other managerial/professional occupations, it provides the statistical power necessary to examine racial differences in managerial career outcomes. However, like more general labor market contexts, minorities are segregated into certain low-level positions and are underrepresented in high-status positions within the profession. For example, entering the 2012 college football season, there were 15 Black head coaches (13%) at the FBS level. At the same level, Black coaches accounted for 31% of the total assistant coaches, including 17% of the offensive and defensive coordinators—the most prestigious assistant coaching positions (Lapchick, Anjorin, & Nickerson, 2012; Lapchick et al., 2013). Among the primary workers and the largest pool of potential coaches at the same level, student athletes, 52% were Black and 43% were White (Lapchick et al., 2013). As a result of these demographic characteristics, studying the college football coaching profession allows for the simultaneous examination of both access to and returns from different coaching positions in explaining racial differences in promotions and occupational authority attainment.

Second, generally agreed upon hierarchies and functions that exist among the different job levels within the college football coaching profession (see Bozeman & Fay, 2013) allow for the examination of racial disparities across discrete levels of the job structure (see Wilson, 2012). Coaching staffs at the FBS level include one head coach, nine full-time paid assistants, two graduate assistants, and multiple full-time, part-time, volunteer, and intern-like support positions (e.g., strength and conditioning coach, director of football operations, volunteer assistant, and graduate assistant). The head coach on a staff is the equivalent of a CEO, overseeing the entire program. The full-time assistant coaches are separated into different types of job functions and different levels of authority and prestige. Offensive and defensive coordinators act as executive vice presidents or divisional managers in charge of their offensive and defensive divisions, respectively. Lower level managers include the full-time "position coaches" who are in charge of coaching one or two specific positions (e.g., quarterbacks coach).

Following the classic sociology of sport literature on "stacking" among athletes, researchers have further categorized position coaches based on whether they coach central or noncentral positions. According to this literature, minority and White athletes are segregated into different positions based on the centrality of the positions or their responsibility for controlling the outcome of competition (Kahn, 1991).

Although scholars have cited an increase of Black players in central positions such as quarterback (Hawkins, 2002), minority athletes at both the intercollegiate and professional levels are generally overrepresented in noncentral positions, or those with less responsibility (i.e., wide receiver, running back, tight end, and defensive line), and underrepresented in central positions, or those with more responsibility (i.e., quarterback, offensive line, linebacker, defensive back; Jones, Leonard, Schmitt, Smith, & Tolone, 1987; Kahn, 1991; Williams & Youssef, 1975a; Woodward, 2004).

Because nearly all coaches begin their full-time careers as a position coach, the opportunity for task-based segregation is built into the labor market structure, as coaches generally start out in either a central or noncentral coaching position. Research on the college football coaching profession has documented that stacking among players is subsequently reproduced among coaches and that minorities' overrepresentation in noncentral coaching positions explains some of the documented racial disparity in college football coaches' career achievements (Anderson, 1993; Braddock, 1989; Finch et al., 2010; Massengale & Farrington, 1977). In this way, noncentral positions are similar to racialized jobs in that the coaches occupying them are put in charge of recruiting and supervising predominantly Black workers and are supervising positions that are less central to the football team's primary mission: winning games. Research on the coaching profession has also found evidence of particularistic evaluation processes in that White coaches are more likely be described in terms of their technical abilities and experience, whereas Black coaches are more likely to be described in terms of their ability to recruit and relate to players (Cunningham & Bopp, 2010).

Although these results point to similar processes operating in coaching professions as operating in more general labor market contexts, because of their reliance on data from single seasons, narrow career segments, or only key positions throughout coaches' careers (e.g., best coaching job), prior research on the coaching labor market has yet to fully account for the divergent career trajectories of Black and White coaches upon entering the profession. Toward this end, the present study addresses three primary research questions: (a) *Do certain coaching positions (e.g., central positions) facilitate occupational attainment?* (b) *Are racial disparities in occupational attainment explained by racial differences in access to these key positions?* (c) *Are racial disparities in occupational attainment explained by racial differences in returns from these positions?*

If central coaching positions facilitate mobility in the college football coaching profession, coaches who occupy central positions in any given season should be more likely than coaches who occupy noncentral positions to move into a coordinator or head coaching position (i.e., "executive positions") at the FBS level prior to the start of the following season. Furthermore, if Black coaches' career prospects are primarily disadvantaged by their lack of access to these mobility-inducing central positions, any effects of race on mobility should be mitigated when including coaching position centrality into regression models. Finally, if differential returns are the culprit for Black coaches' limited mobility, Black coaches occupying central positions should be less likely than White coaches occupying central positions to transition into FBS executive positions prior to the start of the following season.

Data and Methods

To investigate this unique managerial population, a cluster sample of 340 full-time FBS coaches was collected. Roughly, 25% of the teams (3 to 4) in each of the 11 FBS conferences and one out of the three FBS independent (i.e., not conference affiliated) programs were randomly sampled entering the 2009 college football season. This produced a sample of 34 different programs from across the nation, spanning both high-prestige and low-prestige conferences and programs. Complete career histories were compiled for all 10 full-time coaches working for each of the 34 programs sampled. The analytical sample for the present study consists of 323 coaches spanning a combined total of 3,584 individual coaching seasons and moving among 374 different teams and programs across multiple levels of college and professional football throughout their careers.[1] Using information from each of the 34 FBS football programs' media guides, the NCAA's official football record book and Web site (see Campbell et al., 2009), and independent Web sites tracking college records and statistics,[2] a series of time-invariant demographic variables, and time-varying career- and performance-related variables were constructed.

Dependent Variable

The dependent variable analyzed here is coaches' *first executive FBS transition*. This is measured with a categorical variable that indicates if and when a coach received their first executive position at the FBS level. Executive positions include the divisional manager positions of

offensive and defensive coordinator as well as the CEO position of head coach. Most coaches enter the executive ranks in coordinator positions although a few move into head coaching positions directly from position coach jobs.[3] As a result, the present study examines a key transition event into the executive ranks of the college football coaching profession, positions that prior research has shown to be an important avenue for reaching head coaching positions at the highest level of college football (Anderson, 1993; Bozeman & Fay, 2013; Finch et al., 2010).[4]

Independent Variables

Both time-invariant and time-varying independent variables are included in the analyses. Time-invariant measures include coaches' demographic characteristics, experience as football athletes, and pre-full-time coaching experience. Demographic characteristics are measured with two dichotomous variables measuring each coach's *race* (0 = *White*; 1 = *Black*) and *educational attainment* (0 = *bachelor's degree*; 1 = *graduate degree*). Coaches' experience as football athletes is measured with two time-invariant variables indicating their playing position and playing prestige level. *Central playing experience* is a dichotomous variable that indicates whether each coach played a central (i.e., quarterbacks, offensive line, linebackers, and defensive backs coach) or noncentral (e.g., running backs, wide receivers, defensive line, and special teams coach) position (0 = *noncentral*; 1 = *central*).[5] Playing prestige level is measured with three dichotomous variables—*no playing experience, FBS playing experience,* and *professional playing experience*—that indicate the highest level of collegiate or professional competition at which coaches played during their careers as football athletes. *Non-FBS playing experience,* indicating playing experience at the lower levels of college football (e.g., NCAA Division II and Division III, NAIA, and Junior/Community College), is the reference category for each. Age is not consistently reported in coaches' media guide biographies and is perhaps a less important measure of career processes, as it is highly correlated with years of experience (see Day & McDonald, 2010). Instead, cohort effects are measured with a variable that indicates coaches' *First career year*, or the season in which coaches' first started their coaching careers regardless of whether it was a full-time or part-time/volunteer position. Because the risk period for the event-history analysis begins with coaches' first full-time positions, the number of non-full-time positions coaches' held prior to receiving their first

full-time job is controlled for with three variables—*pre-full-time high school experience*, *pre-full-time college experience*, and *pre-full-time professional experience*—that measure the number of seasons coaches spent in non-full-time or support positions at different levels of the profession before beginning their full-time careers.

Time-varying variables that measure different characteristics of each job coaches' held throughout their careers are measured at the beginning of each season and, as a result, have the potential to change between seasons. Three dichotomous variables indicate the tasks associated with the specific position coaches held during each season. First, similar to playing experience, *central position* indicates that coaches were in charge of coaching central football positions (quarterbacks, offensive line, linebackers, and defensive backs). Second, *executive position* indicates whether coaches held executive-level positions at non-FBS programs or with professional teams (e.g., offensive coordinator, defensive coordinator, and head coach). Third, *peripheral position* indicates that coaches occupied non-full-time or support positions during a given season (e.g., graduate assistant, strength and conditioning coach, and director of football operations). *Noncentral position* (e.g., tight ends, wide receivers, running backs, defensive line, special teams coach, and nonspecified full-time assistant coaching positions) is the reference category for each coaching position variable.

Percent Black is a sample-specific measure that indicates the average percent Black in each non-high school coaching position included in coaches' career histories for the entire range of seasons (1962 to 2009) covered in these data. In other words, the measure aggregates every position occupied across all seasons in these data and estimates the percentage of these position-season combinations that were occupied by Black coaches in the current sample. Although technically invariant over time, the aggregate percent Black has the potential to change between seasons for individual coaches as they move between different positions. Ideally, percent Black in each position would be measured independently for each season covered in the coaches' career histories. Unfortunately, no readily available yearly data exist that report racial demographics for each specific coaching position.[6] Given that White coaches in these data have had longer careers than Black coaches, and thus contribute more observations to the aggregated percentages, this measure is biased toward finding a lower percent Black across these positions than may have actually existed within any given season. This is

particularly the case for earlier decades (e.g., 1960s to 1980s) covered within coaches' career histories. Although this is a relatively crude measure of job-level racial composition, it allows for separating out the effects of the *tasks* of the job coaches' held during a particular season from its racial *composition*.

Coaching position prestige level is measured with two categorical variables that indicate if coaches held an *FBS position* or a *professional position* during each season within their careers. *Non-FBS position* is the reference category for each prestige-level variable. Time-varying performance measures of *points scored for* and *points scored against* are also included in the analyses and indicate the average points per game scored by and against the team the coach worked for during a given season.

Descriptive Statistics

Table 1 displays the descriptive statistics for each of the variables described above along with information on the risk period for the analysis for the full analytical sample and for Black and White coaches separately. Table 1 also displays *t* statistics comparing mean differences between Black and White coaches for each variable. In terms of race, the sample is representative of the larger population of FBS football coaches from the 2009 season with Black coaches accounting for 30% of the total sample. Also, similar to prior research and descriptive reports, White coaches are significantly more likely to acquire an executive position at the highest level of college football than Black coaches (49% vs. 23%). The importance of early playing experience is apparent with 63% of the coaches in the sample having played central positions. Although the majority of both Black and White coaches has central playing experience (54% and 67%, respectively), White coaches are significantly more likely to have central playing experience, while Black coaches are significantly more likely to have noncentral playing experience (45% vs. 25%). Similarly, Black coaches' careers are characterized by significantly more noncentral coaching positions (63% vs. 39%) and significantly less central coaching positions (31% vs. 39%) than White coaches' careers. In addition to being segregated into racialized job tasks, Black coaches' careers are also characterized by compositional segregation, as they are more likely to include positions with a significantly larger percent of Black incumbents than White coaches' careers (38% vs. 24%).

Table 1. Descriptive Statistics.

	Full sample		Black coaches		White coaches		
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*t*
Executive transition	41%	—	23%	—	49%	—	−4.45**
Risk period	11.73	7.16	10.96	6.43	12.05	7.44	−1.26
Time-invariant							
White[R]	70%	—	0%	—	100%	—	—
Black	30%	—	100%	—	0%	—	—
Bachelor's degree[R]	66%	—	77%	—	62%	—	2.70*
Graduate degree	34%	—	23%	—	38%	—	−2.70*
Noncentral playing experience[R]	31%	—	45%	—	25%	—	3.55**
Central playing experience	63%	—	54%	—	67%	—	−2.27*
Non-FBS playing experience[R]	34%	—	27%	—	37%	—	−1.72
No playing experience	6%	—	1%	—	7%	—	−2.32*
FBS playing experience	43%	—	36%	—	46%	—	−1.63
Professional playing experience	17%	—	35%	—	9%	—	6.01**
First career year	1990	10.26	1994	7.27	1988	10.75	5.34**
Pre-full-time experience	2.7	3.5	2.14	2.49	2.94	3.82	−1.89
Pre-full-time high school	1.29	3.21	1.08	2.25	1.38	3.54	−.76
Pre-full-time college	1.36	1.74	.99	1.13	1.51	1.92	−2.48*
Pre-full-time professional	.05	.46	.06	.32	.05	.51	.25

(continued)

Table 1. (continued)

	Full sample		Black coaches		White coaches		
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*t*
Time-varying							
Non-FBS position[R]	34%	—	27%	—	37%	—	−5.76**
FBS position	59%	—	66%	—	56%	—	5.49**
Professional position	7%	—	7%	—	7%	—	.10
Noncentral position[R]	46%	—	63%	—	39%	—	13.29**
Peripheral position	4%	—	3%	—	5%	—	−2.91**
Central position	36%	—	31%	—	39%	—	−4.48**
Executive position	14%	—	4%	—	17%	—	−11.05**
Percent Black	27.90	17.03	38.08	15.93	23.82	15.70	24.45**
Points scored for	25.24	7.3	25.53	7.48	25.12	7.22	1.52
Points scored against	23.51	6.7	24.31	6.76	23.2	6.65	4.50**
Individuals	323		96		227		
Observations	3,584		1,024		2,560		

Note. [R] indicates the reference category in the analyses; *t* statistics compare mean differences between Black and White coaches. FBS = Football Bowl Subdivision.
*$p < .05$. **$p < .01$.

Analytical Techniques

Event-history analysis, including Cox regression (see Cox, 1972), is used to model the timing and likelihood of transitioning into an FBS executive position before the start of each season within coaches' full-time coaching careers. The risk period for this analysis is the season in which coaches began their first full-time job until (a) they transition to an FBS executive position or (b) they reach the end of the observation period without experiencing the transition-event (i.e., censored).

The use of event-history methods offers numerous advantages over cross-sectional methods, such as logistic regression or descriptive cross-tabulations, that have been common in prior research examining racial segregation in the coaching profession (e.g., Anderson, 1993; Braddock, Smith, & Dawkins, 2012; Finch et al., 2010). First, they allow for the investigation of coaches' entire career histories to determine if and when they have occupied high-status positions. This corrects for prior research looking at only one point in time by allowing for the possibility that coaches who did not currently occupy FBS executive positions in 2009 may have occupied them in the past. Second, event-history methods correct for right censoring, or the fact that coaches who have yet to transition into high-status positions by the 2009 season are still at risk for doing so. By treating all coaches who were not coordinators or head coaches at the time of data collection as overall mobility failures, prior research largely ignores the fact that coaches from any one season are at different points in their individual careers and thus should differ in their risk for experiencing an executive FBS transition.

Cox regression is used to analyze the conditional effects of the independent variables on the likelihood of moving into an executive position at the FBS level of college football. Cox regression is a semiparametric method for modeling the hazard function: the instantaneous risk of an individual experiencing the event of interest (e.g., executive FBS transition) at a particular time (e.g., season) given that the individual has not experienced the event already and has not been censored (i.e., they are still at risk). Cox regression differs from parametric event-history techniques in that it leaves the baseline hazard function unspecified and instead assumes that "the hazard for any individual is a fixed proportion of the hazard for any other individual" (Allison, 1995, p. 114). However, with the inclusion of covariate by time interaction terms, the partial maximum likelihood estimation strategy employed by Cox regression is a robust and flexible method for analyzing the effects of predictors on dichotomous event outcomes such as the outcome observed in the

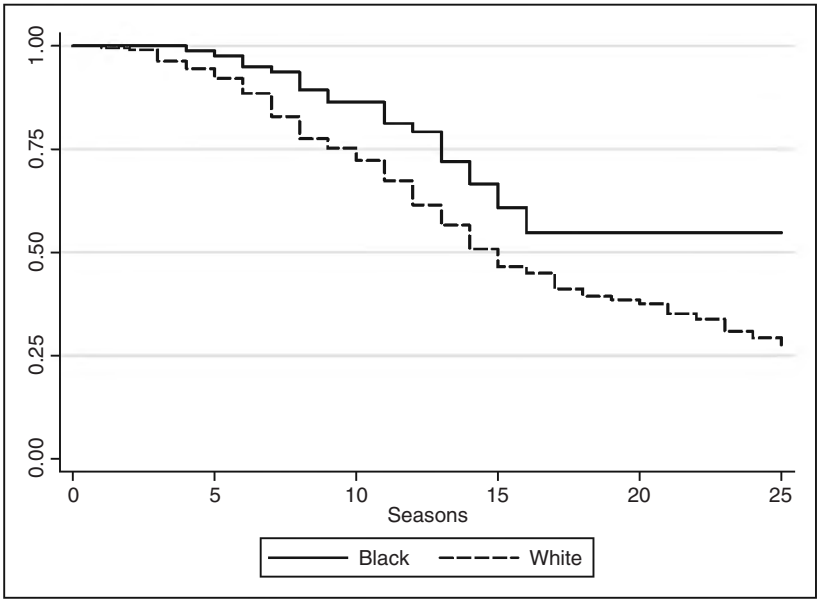

Figure 1. Estimated survivor function by race.

present study (Cleves, Gould, Gutierrez, & Marchenko, 2008; Singer & Willett, 2003).[7] Indeed, the benefit of parametric methods for analyzing event occurrence is that they allow for examining the shape of the baseline hazard function. However, they are also limited in that the a priori specification of its shape may not be met in practice (Singer & Willet, 2003). Given that the present study is focused primarily on examining the conditional effects of coaching positions on mobility rather than the shape of mobility within the college football coaching profession, Cox regression is the method chosen here (Singer & Willett, 2003).[8]

Results

Figure 1 displays the unconditional survivor functions for Black and White coaches separately (i.e., the estimated probability of a coach not transitioning to an executive FBS position prior to the start of the next season). Starting around five seasons into their full-time coaching careers, White coaches are significantly more likely than Black coaches to transition into an executive position at the FBS level. Within the first nine seasons of full-time experience, 25% of White coaches are

estimated to make such a transition compared with 13 seasons for Black coaches. It only takes another six seasons for 50% of White coaches to move into their first executive position at the FBS level, whereas 50% of Black coaches are not estimated to reach an FBS executive position. Mobility appears to stall after 15 seasons of full-time experience for White coaches, taking an estimated 12 more seasons before 75% move into executive FBS positions. This stagnation is especially apparent for Black coaches with none of them estimated to move into executive positions at the FBS level after 16 seasons of full-time experience. However, this should be interpreted with caution as most Black and White coaches in the sample (79% and 73% respectively) are censored before reaching 16 seasons of full-time experience.

To examine the conditional effects of the independent variables on the likelihood of moving into an executive position at the FBS level, Table 2 displays the results of Cox regression models predicting the hazard of coaches' first executive FBS transitions. The results address each of the research questions described above by first showing the main effects of the time-invariant independent variables in Model 1, adding the time-varying variables in Model 2, and showing the contingent effects of race and coaching position in Model 3.

Differential Access and Promotions to Executive Positions

Models 1 and 2 show that moving into an executive position at the highest level of college football is associated with both positional segregation as players and job-level segregation throughout coaches' careers. Model 1 in Table 2 shows that central playing experience is associated with an increased likelihood of transitioning to the top of the college football coaching profession. Compared with coaches with playing experience in noncentral positions, coaches who played central positions are nearly twice as likely ($\exp(\beta) = 1.8$) to move into an FBS executive position. When adding the time-varying effects of coaching positions in Model 2, the results suggest that task-based segregation throughout coaches' careers is an especially important predictor of mobility within the profession. Central position coaches are 2.7 times more likely than noncentral position coaches to move into an FBS executive position prior to the following season. Executive coaching experience at other levels of the football coaching profession is also an important avenue for mobility. Non-FBS executive coaches are 5.3 times more likely than noncentral position coaches to move into an FBS executive position. It also appears that coaching position is related to

Table 2. Cox Regression Predicting First FBS Executive Transition.

	Model 1			Model 2			Model 3		
	β	*SE*	exp(β)	β	*SE*	exp(β)	β	*SE*	exp(β)
Time-invariant									
Black	−.69*	(.30)	0.50	−.89**	(.32)	.41			
Graduate degree	.01	(.20)	1.01	.08	(.22)	1.08	.08	(.21)	1.08
Central playing experience	.59*	(.27)	1.80	.38	(.25)	1.46	.34	(.24)	1.41
FBS playing experience	.16	(.23)	1.17	.06	(.22)	1.06	.04	(.21)	1.04
Professional playing experience	.48	(.29)	1.62	.46	(.30)	1.58	.44	(.30)	1.55
No playing experience	−.33	(.46)	0.72	−.52	(.47)	.60	−.56	(.46)	.57
First career year	−.01	(.01)	0.99	−.01	(.01)	.99	−.01	(.01)	.99
Pre-full-time high school experience	−.02	(.06)	0.98	−.03	(.06)	.97	−.03	(.06)	.97
Pre-full-time college experience	.01	(.06)	1.01	−.01	(.06)	.99	−.01	(.06)	.99
Pre-full-time professional experience	.40**	(.06)	1.49	.33**	(.07)	1.39	.32**	(.07)	1.38

(continued)

Table 2. (continued)

	Model 1			Model 2			Model 3		
	β	*SE*	exp(β)	β	*SE*	exp(β)	β	*SE*	exp(β)
Time-varying									
FBS position				.92**	(.32)	2.52	.91**	(.32)	2.47
Professional position				.95**	(.25)	2.59	.89**	(.25)	2.44
Peripheral position				−.33	(.77)	.72	−.52	(.73)	.60
Central position				.99**	(.21)	2.70			
Executive position				1.67**	(.36)	5.30	1.54**	(.37)	4.66
Percent Black				.02**	(.01)	1.02	.02**	(.01)	1.03
Points scored for				.03*	(.01)	1.03	.03**	(.01)	1.03
Points scored against				−.01	(.02)	.99	−.01	(.02)	.99
Black/noncentral position							−1.31**	(.43)	.27
Black/central position							.30	(.37)	1.35
White/central position							.86**	(.20)	2.36
−2 Log likelihood	1276.59			1243.40			1242.01		

Note. $N = 323$; Observations = 3,584; First career year, Percent Black, points scored for, and points scored against are centered on their mean. FBS = Football Bowl Subdivision.
*$p < .05$. **$p < .01$.

precareer playing experience. With the introduction of the coaching position variables in Model 2, the coefficient for central playing experience is reduced by 36% and is nonsignificant. This is supportive of the tracking effect found in prior research that demonstrated coaches' current positions are related to their experience in similar positions as athletes (Anderson, 1993; Braddock, 1989; Finch et al., 2010; Massengale & Farrington, 1977).

In addition to variables indicating positional segregation prior to and during one's career, Model 2 suggests that the level of competition, offensive division performance, job-level racial composition, and race are also significantly associated with one's likelihood of moving into an executive FBS position. First, non-full-time coaching experience in professional football is associated with an increased likelihood of transitioning to a high-level position in college football. However, such experience is particularly rare among the coaches in this sample and thus this effect should be interpreted with caution. Second, occupying an assistant coaching position at the FBS level, as compared with a lower level of college football, is associated with a 2.5 times higher likelihood of moving into an executive FBS position prior to the following season. Third, offensive performance, but not defensive performance, is associated with an increased likelihood to move into an executive FBS position. Each additional average point scored per game is associated with a 3% increase in the likelihood of moving into an executive FBS position. In analyses not displayed here, this effect is not contingent on whether coaches worked within the offensive or defensive division of the program. This may reflect the fact that successful and therefore mobile coaches often bring with them coaches from their prior staff to their new jobs. This not only leads to mobility opportunities for assistant coaches who follow the successful coach to a new program but also opens up potential promotion opportunities for assistant coaches within the program the successful coach left.

Positions that have a higher average percentage of Black incumbents are also associated with an increased likelihood of moving into an executive FBS position. Each additional percent Black within a position is estimated to increase the likelihood of moving into an executive position at the FBS level by 2%. This relatively small positive effect seems counterintuitive upon first glance. However, it is not completely inconsistent with prior research on the main effects of job-level racial composition on promotions which has generally found inconsistent, small, and null effects, especially when studying men's mobility (see Baldi & McBrier, 1997; Elliott & Smith, 2001; Smith & Elliott, 2002).

Furthermore, it indicates that certain positions characterized by Black incumbents may actually facilitate rather than impede mobility in the college football coaching profession.

Finally, the significant effect of coaches' race in Models 1 and 2 has some important implications for the second research question regarding whether positional segregation as a coach explains the documented racial disparity in access to high-level positions in the coaching profession. In each model, Black coaches are significantly less likely than White coaches to move into an executive position at the FBS level. Model 2 in Table 2 shows that Black coaches are 59% less likely than White coaches to transition to an FBS executive position even after controlling for their positions as football athletes and coaches as well as the average racial composition of each job they have held throughout their careers. This net effect of race suggests that race matters beyond Black and White coaches' differential access to and placement in positions that induce or inhibit mobility in predicting subsequent career attainment. If tracking processes were primarily driving racial inequality in the college football coaching profession, as suggested in prior research (see Anderson, 1993), race should only matter in terms of coaches' access to central positions, both as athletes and coaches. By finding persistent effects of race, these results point to Black and White coaches receiving differential mobility returns from occupying the same coaching positions.

Differential Returns and Promotions to Executive Positions

Model 3 in Table 2 addresses the third research question regarding racial differences in returns from task-based segregation. It displays the results of models estimating the contingent effects of race and coaching position centrality. Compared with White coaches occupying noncentral positions, Black coaches in noncentral positions are 73% less likely; Black coaches in central positions are slightly, although not significantly, more likely; and White coaches in central positions are 2.4 times more likely to transition to an FBS executive position prior to the following season. Figure 2 displays these effects graphically by displaying the estimated survivor function for each race/position combination. It shows that Black noncentral coaches are the least likely and White central coaches are the most likely to move into FBS executive positions. Black central and White noncentral coaches are about equally likely to move into FBS executive positions as indicated by the two statistically equivalent lines in the middle of the graph.

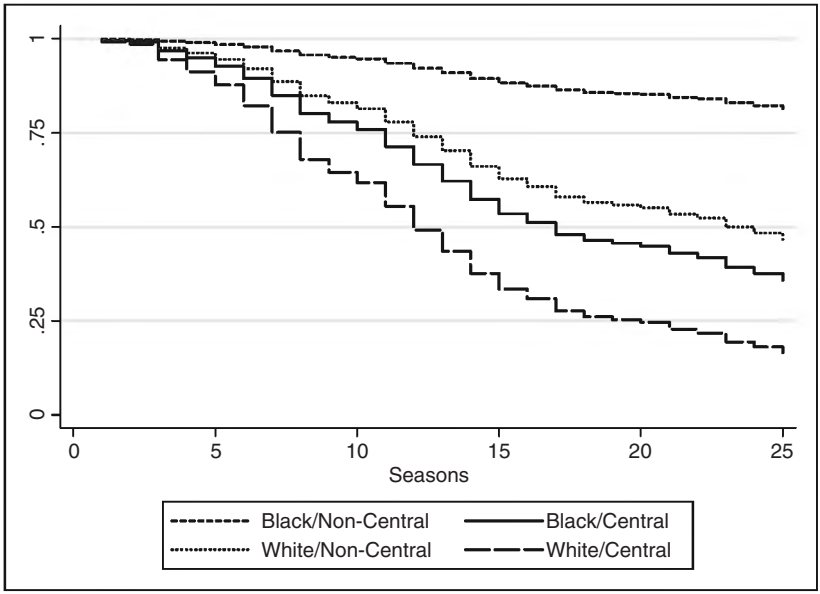

Figure 2. Estimated survivor function for race/position interactions. Survivor functions are plotted with all other variables in the regression model at their mean.

These results suggest that race matters throughout coaches' careers, not simply in their placement into certain types of jobs.

Discussion

The present study sought to understand the processes that limit minority workers' access to high-status and authoritative positions within the workplace by examining the effects of race and job-level, task-based, segregation on promotions into executive positions within the college football coaching profession. The results suggest that racial inequality in career outcomes results from a constellation of racial privilege and disadvantage that is structured by the jobs coaches occupy throughout their careers. While Black and White coaches experience differential access to mobility-inducing, central, positions within the coaching profession, it appears that these racial differences in access are largely a product of positional segregation during their playing careers. However, once they enter the profession, occupying noncentral positions hampers Black coaches' promotion opportunities more and occupying central

positions facilitates Black coaches' promotion opportunities less than they do for White coaches. This suggests that particularistic processes, such as the particularistic manipulation of the intangible characteristics and differential performance evaluation and treatment of Black and White coaches occupying the same positions, are operating to facilitate White coaches' and hinder Black coaches' career attainment. As a result, this research has important implications for understanding the effects of job-level racial segregation in coaching professions and other contemporary high-status occupations, where general experience and subjective skills are increasingly valued over firm-specific experience and formal credentials (see DiPrete, Goux, & Maurin, 2002; Kim & Tamborini, 2006; Moss & Tilly, 1996).

The unique demographic characteristics of the college football coaching profession allowed for comparing the mobility outcomes of White and Black workers who occupied the same positions within the job structure of the profession. Wilson (2009, 2012) noted that the lack of such comparisons is a key limitation of previous research on racial differences in mobility, where scholars have tended to estimate a general race effect while controlling for average positional differences within the occupational structure. Similar to the present study, Wilson (2012) found that minority workers reported less mobility into management than Whites and, when entering management, did so through a more circumscribed path. Wilson (2012), however, relied on relatively broad, census-based, occupational categories (e.g., "lower white collar," "blue collar," "Managers/Administrators") in examining racial/ethnic differences in mobility. The present study, by focusing on workers at the highest level of a single occupation, examined more discrete professional origins and destinations. In doing so, the results suggest that the processes that produce racial differences in mobility are more complex than previously thought.

By finding that noncentral position coaches are less likely than central position coaches to move into executive coaching positions, the current study suggests that noncentral positions in the coaching profession operate similar to the racialized jobs identified by Collins (1997). According to Collins (1997), racialized jobs are detrimental to Black workers' mobility because, as a result of overseeing peripheral tasks, they do not provide the same opportunities for developing and displaying the human capital credentials necessary for promotion into the executive ranks of a given occupation or organization. As a result of measuring key human capital indicators prior to the start of coaches' careers (e.g., education and playing experience), the present study was

unable to isolate whether the negative effects of job-level segregation on promotions operates though limiting noncentral coaches' and enhancing central coaches' human capital development. However, given that prior research has found minimal effects of human capital measures on occupational status attainment within the coaching profession (Day & McDonald, 2010; Finch et al., 2010; Loy & Sage, 1978; Sagas & Cunningham, 2005), evidence of racial differences in returns from occupying central coaching positions suggests that racialized perceptions of skills and abilities may be more important than actual human capital development.

The segregation of Black athletes into noncentral positions as a result of racial stereotyping and discrimination has enjoyed a fair amount of research support in the sociology of sport and sports management literatures (Jones et al., 1987; Kahn, 1991; Williams & Youssef, 1975a; Woodward, 2004). While there has been less attention on the direct stereotyping and discrimination of Black coaches (although see Cunningham & Bopp, 2010), the Occupational Internal Labor Market (OILM) structure of the college football coaching profession allows the same coaches who hold stereotypical views of Black and White athletes to have control over entry into and mobility within the profession (Smith, 1983; Smith & Abbott, 1983). Studying the prejudicial attitudes of coaches' and administrators' making hiring and promotion decisions is beyond the scope of the present article. However, the results suggest that central and noncentral positions do not simply yield better or worse career outcomes; they are race coded, reverberating across coaches' careers to produce especially negative results for Black coaches and minimally negative or especially positive results for White coaches.

The particularistic mobility thesis suggests that these differences result from subjective aspects of work, such as upper level managers' (mis)perceptions, stereotypes, and biased evaluations of workers' managerial abilities. If coaches are hired into executive positions based on their perceived intangible traits (e.g., loyalty, leadership abilities, and work effort), in addition to their real or perceived professional experience and technical expertise, the particularistic manipulation of these traits and skills will likely lead to more numerous and less constricted promotion opportunities for White coaches than for Black coaches. As a result, relative to White coaches, Black coaches are unable to take full advantage of performing job tasks that generally facilitate mobility and less likely to overcome the disadvantages of performing job tasks that generally inhibit mobility.

In the present study, Black coaches occupying central coaching positions experience similar rates of promotion into the executive ranks of the profession as White coaches occupying noncentral coaching positions. These results are congruent with Harvey Wingfield's (2012) ideas regarding the effects of "partial tokenization." Black coaches working in an occupation dominated, at least hierarchically, by Whites, appear to be simultaneously advantaged and disadvantaged in terms of their career prospects. However, the results presented here suggest that Black coaches in central positions experience a process more akin to "partial racialization." Rather than experiencing simultaneous advantages and disadvantages stemming from their competing statuses within the composition of the occupation, organization, or workplace (e.g., racial minority vs. gender majority), Black coaches in the present study suffer the deficits associated with their racial token status in these positions but receive the benefits of performing a mainstream, and therefore, valued task. As a result, they benefit from the opportunity to develop valuable skills and experience that make them objectively qualified for mobility into executive coaching positions. However, at the same time, Black central position coaches are likely disadvantaged by stereotypical assessments and the particularistic manipulation of their performance, skills, and intangible characteristics. White coaches occupying central positions, on the other hand, experience the most favorable career outcomes, as they are those most likely to move up into executive positions at the FBS level of the college football coaching profession. In this sense, they appear to experience the advantages of performing a mainstream task by developing and displaying the tangible skills and abilities desired in executive coaches; at the same time, they experience the advantages associated with positive stereotypes and favorable evaluations of their intangible traits.

Black coaches occupying noncentral positions experienced the worst career outcomes in the current study. This suggests that Black/noncentral position coaches are double-burdened in terms of their mobility potential. First, they are tracked into racialized positions that limit their human capital development. This is particularly problematic given that minority workers' human capital is more scrutinized than that of Whites in promotion decisions (Baldi & McBrier, 1997; Mueller et al., 1989; Smith, 2001; Wilson, 1997; Wilson et al., 1999). Second, to the extent that the positions they predominantly coach are considered less important to the outcome of competition, Black coaches' experience and performance may be less visible to or less valued by

upper management. As a result, they may lack the opportunity to display those intangible characteristics favorable to particularistic manipulation. At the same time, their behaviors and activities are evaluated against a backdrop of sociocognitive stereotypes regarding their skills and abilities (Cunningham & Bopp, 2010).

White coaches occupying noncentral positions are simultaneously advantaged by their racial majority status but disadvantaged by performing peripheral job tasks in that they are unable to develop the tangible skills and experience necessary for promotion. However, their heightened visibility associated with being *different* from their coworkers yet at the same time *similar* to their supervisors may allow White/noncentral coaches to develop connections with influential coaches and administrators and benefit from the particularistic manipulation and favorable evaluation of their skills and abilities. In this sense, the results of the current study may also point to processes associated with the glass escalator phenomenon (Williams, 1992), where informal processes, conditioned by occupational segregation, allow Whites to develop more positive relationships and receive sponsorship from coworkers and administrators that ultimately operate to produce better career outcomes (Harvey Wingfield, 2009). Prior research on coaching samples has suggested that White and Black coaches differ in the extent to which they develop and utilize connections (Day & McDonald, 2010; Sagas & Cunningham, 2005). However, its relationship to job-level, task-based, segregation is unclear. Combined with the results of the present study, this research suggests that White coaches' inclusion in White professional networks may allow them to be less reliant on formal channels of mobility, having the "right" kind of prior experience, and performing mainstream job tasks.

Conclusion

This study examined the effects of race and job-level, task-based, segregation on promotions into executive positions within the college football coaching profession. By finding that, compared with White coaches, Black coaches' careers are harmed more by occupying noncentral coaching positions and helped less from occupying central coaching positions; the present study offers some important advancements over prior research on the college football coaching profession as well as high-status professions in general. However, the research presented here is not without limitations.

Study Limitations

First, given that the current study is essentially a case study of mobility in the college football coaching profession, the extent to which the results are generalizable to both general and other high-status labor market contexts is unknown. However, as previously mentioned, while limited in terms of its empirical generalizability, the peculiar features of the college football coaching profession allow for examining theoretical questions that have eluded scholars investigating more general samples of workers and labor market contexts. Scholars studying both specific and general samples of workers should continue the recent focus on the effects of discrete jobs within and across occupations and organizations (see Wilson, 2012; Wilson & Maume, 2014). Doing so should allow for a more direct assessment of and a more complete and nuanced explanation of how race and job-level tasks influence mobility over the course of workers' careers (Wilson, 2012).

Second, as a result of the retrospective nature in which the longitudinal data were collected, all coaches in the sample have experienced some degree of success in their coaching careers by reaching the highest level of the college football coaching profession. As a result, the data do not account for the effects of racial differences in attrition from the coaching profession. Research has demonstrated that Black workers are more likely than White workers to experience downward mobility from high-status professions (McBrier & Wilson, 2004), and research on coaching professions shows that Black coaches perceive more barriers to advancement and anticipate leaving the profession sooner than their White counterparts (Cunningham, Bruening, & Straub, 2006; Cunningham & Sagas, 2004). However, given that Black coaches are more likely to leave the profession, by examining predictors of racial differences in promotions to executive positions, the present study offers a conservative test of the relationship between job-level, task-based, segregation and racial disparities in career outcomes. If Black coaches are indeed more likely to attrite, any disparities found in the present study would likely be exaggerated by prospectively analyzing coaches' careers. Such effects of attrition on producing racial disparities in career outcomes require attention in future work.

Third, the data analyzed in the present study are also limited in their ability to differentiate between the effects of prestige and function of a specific coaching position and the racial composition of the specific job, occupation, and workplace. Such an analysis is particularly difficult in the present data, as coaches' careers span different coaching staffs as

well as different levels of college and professional football. Although an attempt was made at controlling for the racial composition of different coaching positions in the present study, future research on coaching professions, perhaps those limited to more narrow time frames and narrow segments of the profession, should attempt to better model the simultaneous effects of both of these job-related features. Based on prior research and theory, it is likely that both processes are operating to the advantage of White coaches and disadvantage of Black coaches (Baldi & McBrier, 1997; Collins, 1997; Harvey Wingfield, 2012; Maume, 1999; Paulin & Mellor, 1996; Tomaskovic-Devey, 1993).

Fourth, more theoretical work is necessary to better integrate theoretical constructs from more general sociological research on segregation and labor market inequality with the structural realities of specific occupational labor markets such as the one that exist within the coaching profession (see, e.g., Bozeman & Fay, 2013; Cook & Glass, 2013; Seebruck & Savage, 2014). For example, Collins's (1997) concept of "racialized jobs" presumes that jobs dealing with "Black issues" or the "Black community" are inherently peripheral to an organization's success. However, in the college football coaching profession, racialized positions are not necessarily synonymous with peripheral job tasks. The defensive backs coaching position is one that deals with the Black community in that it is a position occupied predominantly by Black athletes; yet, it is dealing with a task—pass defense—that, in the modern game, is critical to a team's success. Although scholars studying college football have differed on whether such a position should be conceptualized as "central" or "noncentral," the college football coaching profession may provide evidence of a racialized job that promotes rather than prevents mobility. However, as the present study demonstrates, whether it promotes mobility equally for Black and White coaches is an issue worthy of future research. Studying unique professions and samples of workers, while limited in terms of its empirical generalizability, may encourage theoretical refinement by highlighting negative cases that do not fit with existing theories and typologies. While there is little doubt that certain jobs become racialized, processes related to racialization may be conceptually, if not always empirically, distinct from those related to whether a position is dealing with a mainstream or peripheral task.

Finally, theoretical refinement is also necessary to better explain the relationship between race, playing position, and task-based segregation among coaches in predicting their future career attainment. The fact that, in the present study, coaching position mitigated the effects of playing

position but not race suggests that race may interact with this early, precareer, experience in more complex ways than hypothesized in prior research on the football coaching profession. White football athletes' disproportionate representation in central positions likely translates into a head start within the coaching profession, as they have developed knowledge, skills, and contacts beneficial in their coaching careers. At the same time, Black athletes' disproportionate representation in noncentral playing positions may put them at an initial disadvantage when entering the coaching profession. Indeed, prior research on coaches' stereotypes of players suggests that the abilities required to be an effective coach (e.g., effort, intelligence, and leadership abilities) are not perceived as being necessary to a play noncentral position (Williams & Youssef, 1975b; Woodward, 2004). However, the stereotypical assessment and particularistic manipulation of White and Black athletes' skills and abilities, even given that they occupy the same position, may lead to persistent inequalities once they enter the coaching profession. Research has found that even among Black and White athletes in the same central position of quarterback, perhaps the "ultimate central position" (Hawkins, 2002, p. 154), differences emerge in the perceptions of their skills and abilities; Black quarterbacks are described in terms of their athletic abilities (e.g., "running quarterback") rather than their effort, intelligence, and leadership abilities (see Buffington, 2005; Murrell & Curtis, 1994). Future research on the football coaching profession should explore the subtle mechanisms through which a coach's experience as a player interacts with race to affect the perceptions and particularistic manipulation of their skills and abilities for becoming an effective coach and how this affects coaches' career attainment upon entering the profession.

Policy Implications

By demonstrating the complex interaction of race and job-level, task-based, segregation, in producing divergent mobility outcomes in the college football coaching profession, the results of the present study do not lend themselves to simple policy solutions for addressing the persistent underrepresentation of minority football coaches at the highest level of the college football coaching profession. While Black coaches representation in executive positions at the FBS level has generally increased over the early part of the 21st century, they have yet to catch up to either their representation among FBS football athletes or FBS position coaches (see Lapchick et al., 2012). The recent increase in Black head coaches has been attributed, in part, to heightened political

and media pressure on schools to hire more Black coaches (Lapchick et al., 2012). However, occupational and organizational diversity gains that result from political pressure are not guaranteed to be sustainable, as progress can be easily lost once the political climate changes (see Collins, 1997; Stainback & Tomaskovic-Devey, 2012).

Others have called for more institutionalized approaches to promoting diversity, particularly at the level of head coach. For example, advocates have argued for, and at least one state has implemented, a rule similar to the National Football League's (NFL) "Rooney Rule," which requires organizations to interview at least one qualified minority candidate for every head coach job opening (Bachman, 2009; Lapchick, 2009). Although the rule has been touted as a success in the NFL, which has seen an increase in Black head coaches since its passage (Duru, 2011), research evidence regarding its effects is mixed (Madden & Ruther, 2011; Solow, Solow, & Walker, 2011). By targeting head coach vacancies, policies such as the Rooney Rule will likely have, at best, indirect downstream effects. It requires that an increase in Black head coaches will lessen the informal barriers to mobility faced by Black position coaches. This idea is supported in prior research, demonstrating that Black head coaches are more likely to hire Black assistants than White head coaches (Cunningham & Sagas, 2005). Indeed, the informal and subjective nature of hiring and promotion decisions are compounded in the college football coaching profession as a result of its occupational mobility structure, where movement is more prevalent between organizations than within and is largely controlled by existing job holders (Smith, 1983; Smith & Abbott, 1983). Any effective policy interventions geared at reducing racial/ethnic inequality within the coaching profession will likely have to address and overcome the informal nature of hiring within the coaching labor market.

The NCAA, in partnership with other organizations (e.g., NFL, American Football Coaches Association, National Association of Collegiate Directors of Athletics), has multiple programs geared toward addressing racial inequality in the college football coaching profession as part of their overall diversity initiative (see Lapchick, Johnson, Loomer, & Martinez, 2014). These include (a) the Future Football Coaches Academy geared toward recent college graduates who are new to the profession; (b) the NCAA and NFL Coaches Academy offered to current assistant coaches and current and former NFL athletes; and (c) the NCAA Champion Forum, geared specifically toward the professional development of "high-performing ethnic minorities" to prepare them for head football coaching positions at the college

level (Lapchick et al., 2014). While each of these programs differs in its specific focus, scale, and the degree to which it directly targets racial and ethnic minorities, they all include some degree of professional development, skill building, networking, professional socialization, and mentoring.

Based on prior research within the coaching profession, the focus on professional skill development included in these programs, while not harming coaches' future career attainment, is likely not helping much either, as human capital has demonstrated minimal effects on coaches' career progress (Day & McDonald, 2010; Finch et al., 2010; Loy & Sage, 1978; Sagas & Cunningham, 2005). In relation to the results of the current study, what is more interesting are these programs' focus on informal networking, socialization, and mentoring. Although the effectiveness of these programs has not been systematically documented, having the opportunity to network with current leaders within the profession may provide the opportunity for minority coaches to overcome existing stereotypes and implicit bias regarding their skills and abilities. Indeed, by explicitly including and marketing the "exposure" and "networking" aspects of these diversity programs, the NCAA and leaders within the profession are tacitly acknowledging the informal and subjective nature of the coaching labor market. Coaches do not simply move up the career ladder by doing their job well, they move up when athletic directors and existing executive coaches decide they are capable and ready. Such practices are not limited to managerial and professional occupations in modern economies. Within post-Fordist labor markets, firm-specific human capital has increasingly lost its importance (DiPrete et al., 2002). As a result, one's ability to have his skills perceived and recognized by existing jobholders or managers is likely as important as actually having those skills. As this study demonstrates, job-level, task-based, segregation may be one key process that keeps minorities' abilities from being recognized equal to those of Whites and, therefore, perpetuates racial and ethnic inequality in career mobility.

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Notes

1. Seventeen coaches were eliminated from the original sample as a result of 13 being coded in the "other" race category and four who began their full-time coaching careers in the 2009 season. Furthermore, 204 individual coaching seasons were eliminated as a result of missing data on performance measures for certain positions throughout coaches' careers (e.g., high school, junior college, and obscure professional positions).
2. Retrieved from http://www.cfbdatawarehouse.com; http://www.totalfootballstats.com
3. In the present data, 12 of the 136 coaches who experienced an FBS executive transition made the move directly into a head coaching position without prior coordinator experience. Analyses excluding these coaches produced similar results as those displayed here, details of which are available from the author upon request.
4. Forty-three coaches in the analytical sample attained a head coaching position at the FBS level by the 2009 season. In analyses not displayed here, coordinator positions at the FBS, professional, and lower college levels were associated with an increased likelihood of moving into a head coaching position at the FBS level. Details are available from the author upon request.
5. Although early research on stacking among players (1970s) conceptualized defensive back as a noncentral position, recent changes in the way the game is played has made the passing game more prevalent and complex. This has granted defensive backs increased importance for controlling the outcome of the game. Furthermore, a football coach scholar categorized defensive backs coaches as central positions in his dissertation (see Hill, 1997). Following this logic, defensive back playing positions and coaching positions are categorized as *central* positions in the present study.
6. In addition to the aggregate measure of percent Black, Cox regression models were estimated with two other measures: (a) *2009 Percent Black* measures the average percent black in each coaching position for the 2009 season from which the data analyzed here were collected; (b) *Published Percent Black* measures the percent Black in each coaching position based on the data from the 2009 season in the present data and three prior published and unpublished analyses that report position by race demographic information for the population of FBS college football coaches during the 1990 (Anderson, 1993); 1996 (Anae, 1999); and 2005 (Finch et al., 2010) seasons. The results were similar regardless of the specific measure analyzed and are available from the author upon request.
7. Time-dependent effects (i.e., nonproportional effects) were analyzed and largely produced null results. However, *first career year, pre-full-time high*

school experience, and *pre-full-time professional experience* were each estimated to have nonproportional effects on the hazard when examining their interaction with the natural logarithm of time. Given that these are each control variables and do not affect the substantive results presented here, they are allowed to violate the proportional hazards assumption. As Allison (1995) suggests, this is akin to estimating " . . . a sort of *average* effect over the range of times observed in the data" (p. 155) for these variables. The results of models estimating these time-dependent effects are available from the author upon request.

8. Different parametric models, not displayed here, were also investigated. Parametric models specifying a log-logistic, log-normal, and generalized gamma shape for the hazard function were determined to provide the best fit to the data. Based on these different specifications, the likelihood of moving into an executive FBS position generally increases through about the 15th season of coaches' full-time coaching career (although most coaches in the data are censored by Season 16). After this time, coaches who have yet to move into an executive position are less likely to move up and their careers generally stagnate. In relation to the independent variables of interest, the substantive results of these parametric models were consistent with those of the semiparametric Cox regression models and are available from the author upon request.

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