ALONG ETHNIC LINES:
A QUANTITATIVE ANALYSIS OF FOOTBALL ATHLETES' INTEREST
IN COACHING AS A CAREER

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ABSTRACT

LAURA BERNHARD: Along Ethnic Lines:
A Quantitative Analysis of Football Athletes' Interest
in Coaching as a Career

(Under the Direction of Dr. Richard Southall)

This study posed two questions: first, are there any significant differences related to ethnicity in the five social cognitive career theory factors? Second, is there a significant difference between an athlete's interest and intention in the coaching career based on the ethnicity of his position coach or coordinator? A sample of student-athletes (N=134) who were members of the football team at three Division I institutions in the Southeast were targeted. The results indicated differences between black and white athletes for both self-efficacy (p=.009) and barriers (p<.0005). This supported the hypotheses that black athletes would have lower self-efficacy and perceive higher barriers to coaching as a career. In seeming contradiction, there were no significant differences between the athletes' interest in and intention to enter coaching as a profession. There were no significant differences between the athlete's interest in and intention to coaching as a career based on the ethnicity of their position coach or coordinator.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Page

CHAPTER I

INTRODUCTION

At the Division I (DI) level, it is well documented that blacks constitute a large proportion of those competing in collegiate football (45.9%) (Lapchick, 2009). Additionally, research concludes that college athletes not only represent one of the most viable pools of potential coaches (Everhart & Chelladurai, 1998), but a large majority of coaches previously participated in athletics – 75% of men and 96% of women based on a study of assistant coaches (Cunningham & Sagas, 2002). From this, one would expect the proportion of blacks coaching football would mirror that of those participating. However, in 2008 this was not the case. Black assistant football coaches comprised just 23.8% of all Football Bowl Subdivision (FBS) coaches, and at the end of the season only seven head coaches (5.8%) at the 120 FBS universities were black (Lapchick, 2009).

As these numbers suggest, and despite calls for increased diversity (Louis, 2007; Rhoden, 2008), blacks are significantly under-represented in head coaching and leadership positions in college sports (Cunningham, 2007). In comparison, blacks made up 45.9% of all DI football players in 2006-07, the year for which the most current data is available (Lapchick, 2009). When the percentage of blacks who are head coaches is juxtaposed against the percentage of blacks who are athletes, there is an apparent discrepancy.

As part of its annual "Race and Gender Report Card" of sport organizations, the Institute for Diversity and Ethics in Sport (TIDES) at the University of Central Florida polls

all FBS universities to determine the ethnicity of faculty, faculty athletics representatives (FARs), players, coaches, athletic directors and university presidents (Medina, 2008; Lapchick, 2009). Due to a lack of minority head coaches, DI college football received an 'F' on the 2009 Report Card (Lapchick, 2009). In response to this and the continuing lack of black head coaches, Charlotte Westerhaus, the National Collegiate Athletic Association's (NCAA) own Vice President for Diversity and Inclusion said, "I found it appalling. It's extremely disturbing in light of the fact there are a wealth of African-American coordinators and a vast majority of football players are African-American" (Medina, 2008).

The dearth of black coaches in relation to the percentage of black players continues at both the assistant and head coaching levels (DeHass, 2007). Blacks being disproportionately under-represented in the collegiate coaching profession, especially in football, is not a new development. Researchers have approached this issue from different perspectives and proposed several possible reasons for the low numbers of black head coaches in the NCAA (Cunningham, 2003; Hill, 2004; Louis, 2007). Cunningham, Sagas and Ashley (2001) point to societal or occupational variables such as discriminatory hiring practices, while others have used the rationale that black coaches do not see coaching to be their primary career path, so that assistant coaches do not aspire to become head coaches (Cunningham, Bruening & Straub, 2006). Additional research has found that once in the profession, minority coaches have fewer opportunities for career advancement (Cunningham et al., 2001; Cunningham et al., 2006) and may perceive discrimination based on their ethnicity. These both contribute to the finding that ethnic minority coaches are more likely to leave coaching earlier than their white counterparts (Cunningham et al., 2001).

Other researchers have examined how college athletes' positive and negative experiences may shape their intentions to pursue coaching as a profession (Cunningham, 2003). Athletes of color have expressed a belief that they are valued more for their athletic accomplishments than academic (Sailes, 2000), and may have strained relationships with white coaches due to a feeling of being "used" (Anshel, 1990). These negative responses may collectively influence athletes' attitudes toward becoming a collegiate coach based on their perceptions of the profession. In fact, in a 2003 study it was found that minority football athletes have less interest than whites do in pursuing coaching as a career (Cunningham).

The notion that athletes of color are less likely than whites to enter the coaching ranks signifies a possible disparity in perceived opportunity of entrance into, and advancement within the coaching profession along ethnic lines. If true, this would severely hinder the effort to increase ethnic diversity amongst college coaches. Thus, it is necessary to examine the preceding conditions of the decision to become a coach amongst current football athletes. The purpose of this study is then derived from this need, and to identify possible ethnic differences in current football athletes' interest in and intent to pursue coaching college football as a career. This issue will be explored using the framework of social cognitive career theory to detect the influence of personal and environmental factors on intentions to enter the coaching ranks.

Social cognitive career theory (SCCT) has roots in Bandura's (1986) social cognitive theory, and was developed by Lent, Brown and Hackett (1994) to explain the complex and dynamic process through which academic and vocational choices are made. SCCT centers on three cognitive-person factors – self-efficacy, outcome expectations, and choice goals – and how these factors interact with outside sources to predict the choices people make. The

theory forwards the idea that the interaction between the three cognitive-person factors and two environmental variables (barriers and supports) can best predict academic and career choice behaviors (Cunningham, Doherty & Gregg, 2007).

Statement of Purpose

The purpose of this study is twofold: first is to determine if there are any statistically significant differences related to ethnicity in the five factors of SCCT and second is to see if there is a relationship between the ethnicity of the position coach or coordinator and a players' interest in coaching as a career. Social cognitive career theory – utilizing the internal constructs of self-efficacy, outcome expectations, and choice goals and external constructs of barriers and supports – is used as a conceptual framework.

Research Questions and Null Hypotheses

Null Hypothesis 1: There is no statistically significant difference.

Research Question 1

Is there a significant difference between black and white collegiate football athletes'

      a. level of coaching self-efficacy?

.   b. positive outcome expectations associated with coaching?

      c. perceived barriers associated with collegiate coaching?

      d. perceived supports associated with collegiate coaching?

      e. interest in pursuing a college coaching position?

      f. intentions to pursue a coaching position?

Null Hypothesis 2: There is no statistically significant difference.

Research Question 2

Is there a significant difference in college football athletes' interest in and intent to become a college coach based on the ethnicity of their position coach or coordinator?

Research Hypothesis Statements

The researcher's hypotheses for Research Questions 1a.-f. are that black athletes will have a lower level of self-efficacy, foresee less positive outcomes, perceive more barriers and fewer supports, and have less interest and intention associated with collegiate coaching when compared with their white counterparts. The hypothesis for Research Question 2 is that black athletes who have a black coach at any level will have more interest in and intent to become a college coach than black athletes with no black coaches.

Definition of Terms

- African American/Black: a person having origins in any of the black ethnic groups in Africa (except those of Hispanic origin).

- Caucasian/White: a person having origins of any of the original peoples of Europe, North Africa or the Middle East (except those of Hispanic origin).

- Division I (DI): the highest level of intercollegiate athletics sanctioned by the NCAA, members must sponsor at least 14 sports and meet other requirements, there are currently 340 institutions classified as such.

- Football Bowl Subdivision (FBS): formerly known as Division I-A, a classification within Division I for schools with a football team. Members must meet minimum attendance requirements (15,000 in actual or paid attendance at home games).

- National Collegiate Athletic Association (NCAA): a national governing body comprised of nearly 1,200 institutions, conferences and members created for the

purpose of preserving competitive balance, academic integrity and amateurism for all its institutions and student-athletes.

- Position Coach: an assistant coach that oversees players in a specific position, typically answers to an offensive or defensive coordinator or head coach.

Assumptions

1. It is assumed completion of the survey is voluntary.

2. It is assumed each respondent is a member of the football team at their respective institution at the time of the survey.

3. It is assumed collection procedures were followed and that a neutral environment was provided for responding to the survey questions.

4. It is assumed subjects understood all questions being asked of them and answered objectively and honestly in completing the survey.

5. It is assumed participation in the study had no bearing on participant's position or playing time as a member of the football team.

Limitations

1. Due to time and resource constraints, this study is limited to a sample of current male football student-athletes at select DI FBS institutions in the southeastern United States.

2. This study was limited by the subjects' ability and desire to understand and respond to each question accurately. As Frey noted, (1994) the DI FBS football sub-culture may often convey to members a drive to win at all costs, even if that comes at the expense of academics. This general lack of commitment to academics makes the collection of honest and complete data from football student-athletes challenging.

Delimitations

1. This study is delimited to current student-athletes on the football roster at three DI institutions in the southeastern region of the United States.

2. All participating schools had white head coaches for their varsity football programs.

Significance of Study

The problem is one of omission – that despite acknowledged talent and skills among black student-athletes in football, there is a lack of black head coaches in DI football (Louis, 2007). The notion that talented individuals are not appearing in the pool of candidates is a critical problem to all involved in the sport, for those that do the hiring of football coaches as well as for those young men who fall under the guidance of a coach.

This dearth of qualified black individuals is well-documented and there have been continued calls to diversify the coaching ranks (Hill, 2004; Rhoden, 2008). Many researchers have attempted to answer this problem by looking at the discrimination that minority coaches face once in the profession and other institutional matters. However, there is little research done on the athletes' point of view and almost no studies that ask them if they even want to be coaches. This study addresses that question and divides responses along ethnic lines to see if black athletes differ from whites. By surveying members of the most viable pool of candidates, the aim of this study is to provide insights to athletic departments to aid in the recruitment and retention of black coaches. It is also important to investigate the reasoning behind vocational interests, especially for those young men who are thinking of a career in sports but not necessarily as an athlete. This study will fill a void in the academic research addressing the lack of black head coaches in college football and will give a voice to the athletes themselves.

CHAPTER II

REVIEW OF LITERATURE

Everhart and Chelladurai (1998) contend college athletes represent one of the most viable applicant pools for potential college coaches. Indeed, most college football head coaches are former college football players. However, while blacks constitute a large percentage of college football players, there is a disproportionately small number of black head football coaches. The most recent data (2006-07 season) reveal that 45.9 % of all DI football players were black (Lapchick, 2009). In contrast, at the beginning of the 2008 football season, only six National Collegiate Athletic Association (NCAA) Football Bowl Subdivision (FBS) programs (approximately 5 percent of all programs) had black head coaches (Medina, 2008). The proportion of blacks involved in FBS football consistently decreases from players (45.9%) to assistant coaches (23.8%), to coordinators (12.2%) to head coaches (5.8%) (Lapchick, 2009).

At the beginning of the 2008 season, there were 120 head coaching positions at the FBS level, of which 112 or 93.3 % were filled by whites. The remaining spots were filled by six blacks, one Latino and one Pacific Islander. By the end of the season, three black coaches had been fired and four had been hired, bringing the total to seven blacks for all DI FBS schools. With the addition of the other two minority coaches, there is a new total of nine minority coaches for the start of the 2009 season, the highest number in the history of the

FBS schools. However, blacks still represent just 5.8 % of all FBS head coaches (Lapchick, 2009).

While athletes may constitute the most viable pool of candidates for head coaching candidates, many of them are either not qualified or not interested in coaching. In light of this situation, Ford (2008) contends a more accurate comparison should be between the percentage of black coaches and the percentage of blacks among qualified and interested potential coaches. This qualified applicant pool realistically consists of offensive and defensive coordinators and assistant coaches presently coaching in college, since college head coaches most often work their way up through the college football coaching ranks. Most head coaches first gained experience as position assistant coaches, then spent time as either an offensive or defensive coordinator. In 2008, 23.8 % of assistant coaches were black for all of DI football teams. For coordinators, the numbers were lower: only 12.2% were black (Lapchick, 2009).While the disparity between head coaches and coordinators and assistant coaches is not as stark as between head coaches and athletes, the gap warrants further investigation.

There is general agreement that blacks continue to be under-represented at all levels of college football coaching. However, based strictly on the sheer number of black college football players, there appears to be an adequate potential applicant pool. From this, a basic question remains: Are college football players, particularly black college football players, interested in coaching college football?

Theories to Explain the Lack of Black Coaches

Increasingly, research has been conducted in an attempt to understand the disparity in numbers of minority players and minority coaches (Cunningham, 2003; Cunningham et al., 2006; Gordon, 2008; Hill, 2004; Louis, 2007). Many studies, focusing on black coaches' reported struggles, have concluded that ethnic minorities encounter impediments in obtaining coaching positions (Cunningham & Sagas, 2005). Fink, Pastore, and Riemer (2001) found "evidence that American intercollegiate athletic employees with characteristics dissimilar to the typical majority employee (i.e., white, Protestant, able-bodied, heterosexual males) meet less than accepting environments" (p. 13) and are systematically denied access to certain jobs. This "access discrimination" (Greenhaus, Parasuraman, & Wormley, 1990) may be related to those doing the hiring, as whites represented 90% of all DI athletic directors and 89.2% of DI associate and assistant athletic directors in 2007-08 (Lapchick, 2009). In 1993, more than 15 years ago, Anderson cited a similar breakdown along ethnic lines and concluded that ethnicity functions at least indirectly to keep blacks from entering the pool from which coordinators and head coaches are traditionally selected.

Another factor that further hinders the development of increased coaching diversity is the hiring process. Head football coaches are often hired without regard for specific criteria or clearly stated qualifications; instead, head football coaches are hired on the basis of intangibles such as the "it" factor and other extremely subjective criteria (Hill, 2004). While research indicates people are more likely to hire someone ethnically similar to themselves than they are to hire someone ethnically different (Carington & Troske, 1998; Cunningham & Sagas, 2005), a hiring process without clearly defined qualifications (e.g., skills, knowledge, abilities) may also perpetuate hiring discrimination. The current system allows

administrators to hire someone from within their social network who may not necessarily be the most qualified candidate. If a qualified black candidate is not considered, this could be explained with a myriad of reasons that have nothing to do with ethnicity. However, if a job listing has clearly specified requirements, then – theoretically – qualified candidates should enter the applicant pool rather than be excluded based on social circles.

Anderson (1993) contended that the dearth of black coordinators and head coaches results from blacks who do get coaching jobs often being placed in peripheral roles without leadership potential. In addition, Brown (2002) reported that black coaches are often hired for the lone purpose of recruiting minority athletes. It has also been found that within the workplace, minority coaches have fewer chances to advance professionally (Cunningham, Bruening & Straub, 2006), and often perceive discrimination based on their ethnicity (Cunningham et al., 2006). Given the reported lack of opportunity, minority coaches are more likely to leave coaching earlier than their white counterparts (Cunningham, Sagas & Ashley, 2001).

Discrimination in coaching hiring practices may also result from the relationship between ethnicity and centrality of position played in college football (Anderson, 1993). As far back as the 1970s, position centrality was found to be related to an athlete's ethnicity. Traditionally, black college football players have been underrepresented in central positions and overrepresented in peripheral ones (Eitzen & Sanford, 1975; Loy & McElvogue, 1970). This positional "stacking" is defined as the "assignment to a playing position, an achieved status, on the basis of an ascribed status" (Ball, 1973, p. 98). Previous studies have found that an athlete's positional centrality is an important factor in career advancement and upward mobility into leadership positions in the sport industry (Anderson, 1993; Loy, Curtis, & Sage,

1978). It has been posited that limiting blacks' playing positions subsequently limits their career choices. Likewise, being placed in non-central coaching positions makes the path to attaining head coach status a difficult one.

Research has also been conducted on the college athletes' experiences and how these shape their perceptions of the coaching profession and possibly their interest in pursuing such a career. It has been found that athletes of color may feel they are valued more for their athletic exploits than their academic success (Sailes, 2000) and may believe that they are funneled into certain academic paths by advisors (Spigner, 1993). Black athletes may also have forced or uncomfortable relationships with white coaches, and report feelings of being "used" (Anshel, 1990). As Cunningham (2003) found, such negative feelings and experiences have a cumulative negative effect on black football players' perceptions of coaches and result in minority football players having less interest in coaching than white players.

While reasons have been offered to explain the lack of black head coaches in FBS college football, perhaps an initial question to guide an investigation into this issue might involve an examination of whether black college football players are interested in becoming head coaches. While vocational choice is an extremely complex process, it is apparent both internal and external motivations and factors affect one's choice. In order to examine the interaction between motivations and factors and their effect on an individual's interest in and intent to pursue a career, the next section will define and discuss social cognitive career theory.

Foundation of Social Cognitive Career Theory

The foundation for the framework of social cognitive career theory lies in social learning theory (SLT), dating back to the late 1800's. At the most basic level, SLT is the idea that people learn a new behavior by observing those around them who are engaged in that behavior (Miller & Dollard, 1941). In studying SLT, Rotter (1954) suggested the expected effect or outcome of a behavior has an impact on a person's motivation to engage in that behavior. Based on the presupposition that people wish to avoid negative consequences while desiring positive results or effects, if people expect a positive outcome from a behavior then they will more likely engage in that behavior (Catanzaro, Wasch, Mearns & Kirsch, 2000). From this, Rotter (1954) concluded that behavior is also influenced by one's environment, and not psychological or personal factors alone.

Bandura expanded Rotter's formulation of SLT to include behavioral learning in which behavior is not just a by-product of the person-environment transaction but a co-determinant (Lent, Brown & Hackett, 1994). He also emphasized the idea that an individual person's cognition is critical to development. Based upon this distinction, in 1986 Bandura reformulated SLT, developing social cognitive theory (SCT) and emphasizing that cognition plays an important role in a person's choice process. SCT posits that people neither act completely on their own nor are they simple conveyers of what surrounds them; rather, they are active contributors to their own behavior (Bandura, 1986). This active contribution occurs within a reciprocal and dynamic system whereby a person, their behavior and their environment all interact to explain their actions. Bandura (1986) termed this causal interaction "triadic reciprocality," where (a) personal attributes, (b) external environmental factors, and (c) overt behavior "all operate as interlocking mechanisms that affect one

another bidirectionally" (Lent, Brown & Hackett, 1994, p. 82). However, Bandura also notes not all sources of influence are of equal strength and not all occur simultaneously. The interaction will differ based on the individual, the behavior being examined and the specific situation in which the behavior occurs (Bandura, 1989), making the model proposed by SCT extremely complex.

Figure 1

Social Cognitive Theory
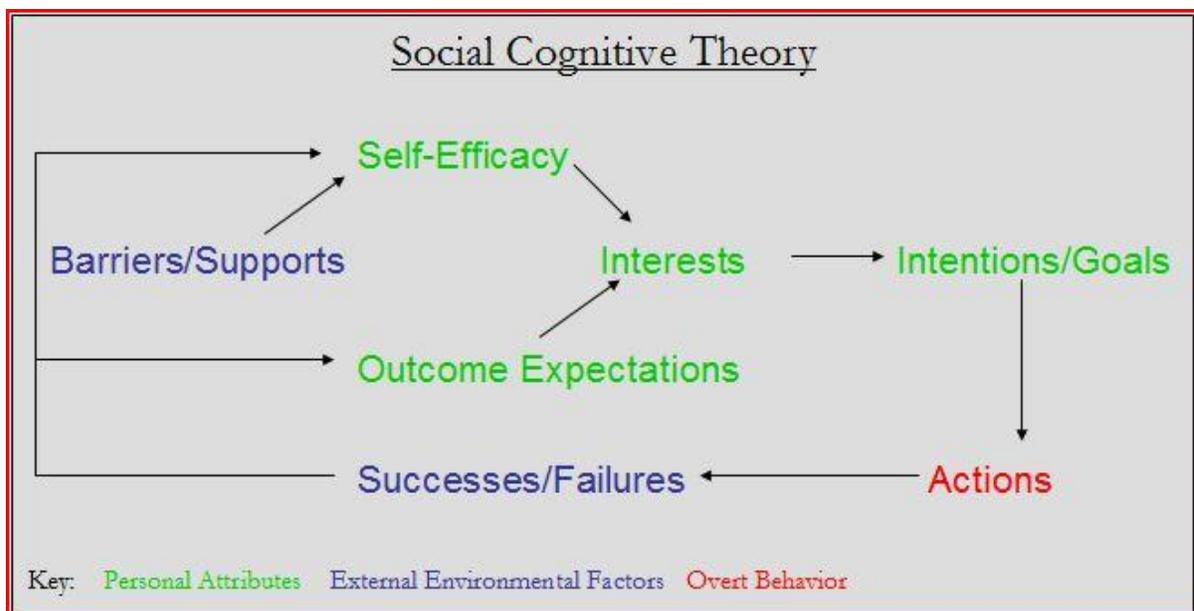
The complexity of SCT seems to mirror the complexity of career choice, where many factors both internal and external, ultimately lead to decision-making. In an attempt to integrate the many theories on career development and choice, Hackett, Lent and Greenhaus (1991) saw value in creating a more integrative framework to explain the process (Hackett et al., 1991; Lent et al., 1994; Osipow, 1990). Drawing upon Bandura's (1986) SCT, Lent et al. (1994) created a new theory known as social cognitive career theory (SCCT) that more closely examined the processes involved in academic and vocational choice.

Social Cognitive Career Theory

Social cognitive career theory (SCCT) was developed by Lent, Brown, & Hackett (1994) to explain the complex process of how people make academic and vocational choices. More specifically, SCCT is a conceptual framework that "attempts to explain [the] central, dynamic processes and mechanisms through which (a) career and academic interests develop, (b) career relevant choices are forged and enacted, and (c) performance outcomes are achieved" (Lent et al., 1994, p. 80). In Bandura's (1986) triadic SCT system numerous cognitive and self-reflective processes were identified as being involved in the development of choice. While many of these processes are believed to contribute to academic and vocational choices, the SCCT framework focuses on just three cognitive-person factors that seem particularly relevant to career development – self-efficacy, outcome expectations, and choice goals (Lent et al., 1994). It is these three internal factors along with two external factors (barriers and supports) that comprise the SCCT framework.

Cognitive-Person Factors

Self-Efficacy. Self-efficacy refers to "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391). High-efficacy beliefs have been shown to be related to behavioral choices, e.g., exercise (Hagger, Chatzisarantis, & Biddle, 2002), leadership styles (Sullivan & Kent, 2003); and ambition for managerial positions (Cunningham, Sagas, & Ashley, 2003). While some research has dealt with the effects of general self-efficacy, Lent et al., (1994) assert that SCCT predictions focus on task-specific self-efficacy and suggest that expectations related to a specific activity should result in subsequent outcomes, such as choice goals or behaviors. Therefore, if people believe they can be successful in a career path

they are more likely to choose a position along that path (Cunningham & Singer, 2009).

According to SCCT framework, assistant coaches are more likely to be interested in, and

pursue, head coaching positions if they believe they have the ability to succeed as a head

coach (Cunningham, et al. 2007).

Outcome Expectations. Outcome expectations can simply be described as "beliefs

about the outcomes of various courses of action" (Lent et al., 2003, p. 458). This refers to the

perceived consequences of acting out specific behaviors. For example, if a person associates

a specific outcome with a specific behavior, this association will factor into the decision to

perform that behavior (Lent et al., 1994). People are more likely to pursue a particular

academic or vocational path if they foresee favorable outcomes from doing so. Thus, athletes

are more likely to pursue becoming a coach and assistant coaches are more likely to pursue

becoming a head coach, if they foresee favorable outcomes resulting from such pursuit.

Bandura (1986) describes three forms of outcome expectations: physical (monetary rewards,

power), social (approval or lack thereof), and self-evaluative (satisfaction associated with

given behaviors).

Choice Goals. Interest in a particular career is thought to serve as a direct antecedent

of choice goals (Lent et al., 1994). Choice goals represent the "intention to engage in a

particular action or series of actions" (Lent et al., p. 94). Also, choice goals are the closest

antecedent of actual behavior, with theoretical (Ajzen, 1991) and empirical support (Hagger

et al., 2002) for this belief.

Interaction Among Cognitive-Person Factors

SCCT suggests that self-efficacy and positive outcome expectations are positively

related to vocational interests (Lent et al., 1994). Therefore, if people believe they have the

ability to perform the tasks for a job and perceive positive outcomes with obtaining that job, then they are more likely to have an interest in that job. Following that, vocational interests are thought to lead to choice goals (behavioral intentions) which, in turn, give rise to behavior (Lent et al., 1994). Thus, if individuals believe they can become successful head coaches, and anticipate positive outcomes with being a head coach, then it is likely they will have interest in that career path. These interests are likely to result in intentions to actually enter the coaching field.

Figure 2

Interaction Among Cognitive-Person Factors
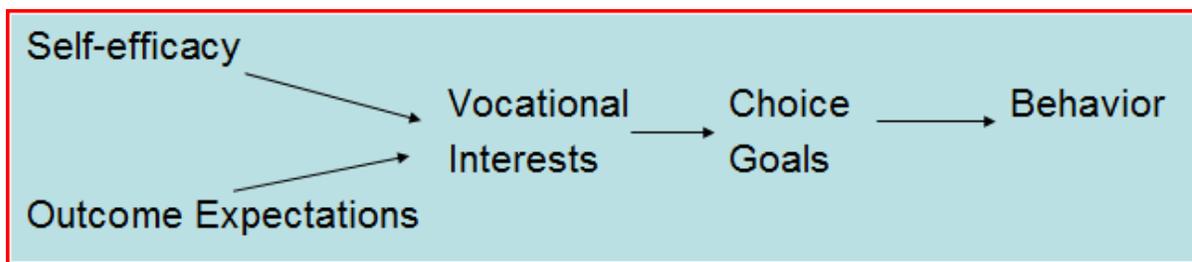
However, as Cunningham, Doherty and Gregg (2007) stated, "it is important to note, however, that the cognitive-person variables do not operate in isolation; rather, environmental factors impact people, their efficacy, expectations concerning various behavioral choices, and ultimately, the behavioral choices they make" (p. 367). SCCT posits that the three cognitive-person factors interact with environmental factors, most notably barriers and supports, to determine vocational choice.

Environmental Factors

Barriers. Barriers are the first of two environmental factors thought to influence the choices people make, and have an effect on self-efficacy such that "people who face considerable barriers are likely to have lower efficacy estimates and subsequent behavioral

intentions to pursue a vocational option" (Cunningham & Singer, 2009, p. 7). This means that if people perceive substantial barriers to entering or advancing in a career, people are not likely to pursue that specific path, even if they believe they have the internal capabilities to succeed (Brown & Lent, 1996). Barriers are such a powerful factor in the SCCT mix that "even persons with well-developed and differentiated interests in a particular career path will be unlikely to pursue that path if they perceive…substantial barriers to entering or advancing in that career" (Brown & Lent, 2006, pp. 355-356).

When discussing the vocational choices of black men, the main barrier identified in the literature is discrimination (Cunningham et al., 2001; Cunningham et al., 2006). This is apparent as Cunningham et al., (2001) offer two main reasons to explain the under-representation of blacks in head coaching positions: (a) that blacks are constrained by societal and occupational factors, such as hiring discrimination, and (b) they do not view coaching as a primary career path.

According to Greenhaus, Parasuraman, and Wormley (1990), there are two forms of discrimination: access and treatment. Access discrimination refers to instances when people from a particular group are denied access to a job, organization or profession. Treatment discrimination "occurs when subgroup members receive fewer rewards, resources, or opportunities on the job than they legitimately deserve on the basis of job criteria" (Greenhaus et al., 1990, pp. 64-65). This form of discrimination occurs at the workplace and can impact tangible outcomes such as opportunities for promotion and raises, as well as less tangible outcomes such as how well one integrates into the group. Studies have shown that both access and treatment discrimination are prevalent among the work experiences of blacks and that these practices have negative effects on their work outcomes (Fink et al., 2001;

Lapchick, 2001). Perhaps as a result of such discrimination, Anderson (1993) found that black coaches in college football were more likely than whites to fill peripheral or position coaching jobs and less likely to fill decision-making positions, such as head coach or coordinator.

The perception of access and treatment discrimination can be a factor in career option viability. Another way viability is determined is to observe the social characteristics of the people currently holding the position one desires (Knoppers, Meyer, Ewing & Forrest, 1991). For example, black football players who see that almost all coaches in DI football are white may perceive that coaching is not a viable career path for blacks (Knoppers et al., 1991). At the same time these athletes will notice that the few blacks who are on staff are rarely in leadership positions and may even have difficulty advancing to a higher level. Such negative perceptions could inhibit their interest in pursuing football coaching positions and thus perpetuate the lack of black head coaches.

Supports. The second environmental factor thought to affect self-efficacy and career choice is supports. This term includes things such as network contacts, career-relevant learning experiences, peer approval and access to funding (Lent, Brown & Hackett, 2000). While Lent et al. (2003) found that both barriers and supports were significantly related to self-efficacy, the effects of supports were actually shown to be stronger than barriers. Similar results were found in Cunningham et al.'s 2005 study of students' decision to enter the sports industry. Despite this, supports have received the least amount of study among all the factors within the SCCT framework (Lent et al., 2000).

Perhaps the most evident form of support relative to minorities in the workplace or in academic settings are role models or mentors. In the workforce, such supports are essential to

combating institutional racism and exclusion of social networking that has historically

hindered the advancement of blacks in administration (Brooks & Clunis, 2006). In fact, many

researchers (Lent et al., 2001, McWhirter, 1997) have noted the "importance of social

support in buffering the pervasive effects of societal racism on career development" (Gushue

& Whitson, 2006, p. 114).

LaVant, Anderson & Tiggs (1997) stress the critical need for black males on college

campuses to have role models in leadership positions and opportunities for mentorship. Black

men continue to represent a minority of the collegiate population – 4.4% of all students

enrolled in degree-granting institutions in the fall of 2004 (U.S. Department of Education,

2008), increasing the importance of the mentor relationship. However, blacks also continue

to represent a minority of the faculty – 6.4% of all faculty in instruction, research, and public

service positions at colleges in the U.S. (U.S. Department of Education, 2009). Research has

shown that positive feedback from important people in a student's life can work to counteract

the weight of ethnically or culturally based occupational stereotypes (Gushue & Whitson,

2006). This is where black coaches in leadership positions would provide mentorship to

black athletes who may have a talent for coaching or are considering pursuing the profession.

However, as previously stated, black college athletes have few black coaches on whom to

model themselves, leaving them with inadequate supports to overcome barriers and boost

self-efficacy.

Applications of SCCT

SCCT was developed to reflect a period in time – late adolescence to early adulthood

– when career-related interests and selections are being formed. The theory is not meant to be

a sweeping explanation of lifelong career development, but rather to offer a model of career

behavior that reflects a period in time (Lent et al., 1994). For this reason, SCCT seems particularly appropriate for examining the career decisions of college students.

An additional rationale for using the SCCT framework to investigate why an athlete chooses to enter the coaching profession is it provides a socio-cultural context for examining career development. Working from this outlook, researchers may consider "how social factors such as race, culture, and gender affect career self-efficacy beliefs," (Gushue & Whitson, 2006, p. 114) which are then thought to turn into career interests and behavior. Others have found that psychological experiences of ethnicity may not only influence career choice, but that an individual's perception of an ethnic climate for a given occupation may also affect their decision to enter such an occupation (Helms & Piper, 1994). This seems particularly applicable to college football as almost half of all players are black and yet so few players become coaches (Lapchick, 2009).

In addition, the contention that all three types of factors (personal, environmental, behavioral) affect vocational choice is relevant to the coaching profession. Coaching FBS college football is a highly visible job, in which individuals incur criticism from the general public as well as local and national media. In order to succeed, coaches must receive encouragement from outside sources and believe in themselves. In this way, the integration of internal and external forces seems very pertinent to an athlete's intentions to enter collegiate coaching.

Finally, further support for SCCT is derived from the fact that the framework has been used in many contexts to understand the academic and vocational choices people make. SCCT has been utilized in a study of career choices (Flores & O'Brien, 2002), as well as in studies of academic choice by high school students (Lopez, Lent, Brown & Gore, 1997;

Gushue & Whitson, 2006) and college students (Ferry, Fouad & Smith, 2000). However, major is not a precise determinant of career path, either actual or anticipated (Lindley, 2005), creating a need for studies examining the specific career intentions of college students, and college athletes in particular. In fact, Cunningham and Singer (2009) used SCCT to frame their examination of college athletes' intentions to enter the coaching profession.

SCCT Studies

There have been two recent studies utilizing the SCCT framework to examine vocational interest. In 2005, Cunningham et al. conducted a study using SCCT to investigate student intentions to enter the sport and leisure industry. They surveyed 197 students enrolled in sport and leisure courses at four universities throughout the U.S. and found general support for SCCT in terms of cognitive-person factors. Specifically, they found that self-efficacy and outcome expectations are positively associated with vocational interests, which in turn are positively related to choice goals. In addition, their research – consistent with SCCT – supported the contention that barriers, such as discrimination and negative outcome expectations, have a negative effect on self-efficacy. However supports, both social and human capital, more than compensated for the negative impact of barriers and can boost self-efficacy enough to aid in entrance to the industry (Cunningham, 2005).

In 2007, Cunningham et al. conducted a study on assistant coaches and their intentions to advance in the profession. The SCCT framework hypothesized that gender was related to head coaching intentions among male and female assistant coaches of women's teams. The study found that men, relative to women, had greater head coaching self-efficacy (for example greater belief in their abilities), anticipated more positive outcomes, and possessed greater interest in becoming, and intentions to become, a head coach. A finding of

note was the lack of differences by gender in barriers and supports, suggesting that there may be other sources of self-efficacy (e.g., sociological factors such as ethnicity). The goal for the 2007 Cunningham study was to help explain, at least in part, the under-representation of women as head coaches of women's teams. The goal for this study is to explain the under-representation of blacks as head coaches of college football teams.

Perhaps the most applicable research, conducted in 2009, involved a study that specifically looked at the coaching intentions of college athletes. Applying SCCT within the context of DI sports and career choice, Cunningham and Singer (2009) ask the question, "Why aren't there more black coaches in college sports?" Using a survey instrument built around the five factors of SCCT, they collected data from 128 athletes at a large, public university in the Southwest. Their purpose was to consider "antecedent conditions of the decision to be a coach" (p. 4) and to use the SCCT framework "to explore potential racial differences in the theory's primary constructs" (p. 7). Their hypotheses were that ethnic minority athletes would have less interest and less intention to pursue coaching than whites.

The 128 athlete sample consisted of 59% men and 40% women, with whites (60%) and blacks (37%) comprising the two largest ethnic groups. Participants were given a questionnaire asking for demographic information and items designed to measure the five factors of SCCT. All questions employed a seven-point Likert scale and the mean was used as the final score. The researchers' hypotheses predicted differences based on ethnicity in the five factors. They expected perceptions of self-efficacy, choice goals, outcome expectation and supports to be higher for whites, and barriers to be higher for ethnic minorities. A two-way multivariate analysis of variance (MANOVA) was used to examine this, with ethnicity

and sex as the independent variables. Results of the analysis showed significant effects for ethnicity, but not for sex or the ethnicity/sex interaction.

Contrary to their hypotheses, Cunningham and Singer found no differences in self-efficacy or supports between whites and ethnic minorities. Minorities in fact, had greater choice goals and expected more positive outcomes associated with coaching. The only supported hypothesis was that ethnic minority athletes expected more barriers than white athletes did. Perhaps the most interesting finding is that even though ethnic minorities anticipated more barriers in coaching, they still had greater intent to enter the profession than whites. The conclusion that minority athletes had greater intentions to become coaches contradicted previous research (Cunningham, 2003) and also suggests the under-representation of minorities in coaching is not due to a lack of interest.

This finding has contradicted earlier studies and runs counter to both SCCT (Lent et al., 1994) and empirical research among students (Cunningham et al., 2005) and assistant coaches (Cunningham et al., 2007). This discrepancy calls for further research using SCCT and the question of athletes' interest in coaching as a profession.

CHAPTER III

METHODOLOGY

The purpose of this study is twofold, first, to determine if there are significant differences by ethnicity in the five factors of SCCT; and secondly, to see if there is a significant difference in athletes' interest in and intention to coach based on the ethnicity of their position coach or coordinator. The study uses the SCCT framework to gauge sampled college football players' interest in coaching as a career through the measurement of five factors: self-efficacy, outcome expectations, choice goals (interest and intent), barriers, and supports. It is hoped this study's results will enable college athletic department personnel to more effectively recruit and retain qualified black assistant and head football coaches.

Development of Survey Instrument

The developed instrument was adapted from Cunningham and Singer's (2009) survey instrument utilized in a pilot study of male and female college athletes across many sports at a large, public university in the Southwest. While the study's findings have not yet been publicly disseminated, a pre-publication copy revealed statistically significant differences by ethnicity among a few of the factors (choice goals, outcome expectations, and barriers). The current study is a subset of Cunningham and Singer's previous work, focusing on football players and specifically looking for differences by ethnicity. For the current survey, content was not altered; however, the demographic questions were changed to reflect the specific interest of this study.

Survey Instrument Description

The questionnaire was developed by Cunningham and Singer and later adapted for the specific focus of this study. The survey instrument contains two sections – demographic and SCCT measurements (for the complete survey see Appendix A). In the demographic section, survey participants were asked for their ethnicity, athletic year in school, academic major, and basic position played. They were also asked to identify the ethnicity of their position coach, coordinator, and head coach.

Athletic year in school and academic major were fill-in questions where the participant was free to write in his own answer. The four ethnicity questions as well as the position question provided set options that the participant had to circle to answer. Athletic year in school was used, as opposed to academic year, since in DI college athletics that is the common way to classify one's self – in terms of athletic eligibility. For instance, if a second year athlete had not played his first year in college he would be considered a redshirt freshman – technically a sophomore in the eyes of the school but still a freshman on the playing field. For playing position, the following options were given: offensive line (OL), defensive line (DL), wide receiver (WR), running back (RB), quarterback (QB), linebacker (LB), defensive back (DB), and special teams (SpT). Some of those position areas encompassed more than one position –OL had tackle, guard and center, DL had tackle and end, RB had halfback and fullback, DB had cornerback and safety, and SpT had kicker, punter and long snapper. While all football teams are organized differently, by consulting current college team rosters, it was determined that the position areas offered are standard and broad enough that every individual position could be classified into one of the options.

The SCCT measurement portion of the survey contained 36 questions. Each factor within SCCT had its own set of questions, and for each factor, a final-score mean was calculated.

Self-efficacy was measured with nine items adapted from Everhart and Chelladurai (1998) (Cronbach's α = .914). Participants first read the following: "The following questions focus on activities college coaches would perform. Please rate the level of confidence you have that you could complete the following tasks." All items used a seven-point scale from 1 (no confidence) to 7 (complete confidence).

The outcome expectations section contained nine items adapted from Cunningham et al. (2005) (Cronbach's α = .879). The measure included items reflective of physical, social, and self-evaluative outcomes, consistent with Bandura's (1986) theory. Participants were asked, "Respond to the following items concerned with the outcomes you might expect from being a college coach." All questions were anchored using a seven-point scale from 1 (strongly disagree) to 7 (strongly agree).

The six barriers questions came from Lent et al. (2000) and Cunningham et al. (2007) (Cronbach's α = .849). Participants were directed to "Respond to the following items concerned with the factors that might influence your decision to become a college coach." All questions used a seven-point scale from 1 (strongly disagree) to 7 (strongly agree).

Supports contained six items again drawn from Lent et al.'s (2000) and Cunningham et al.'s (2007) work (Cronnbach's α = .903). The questions were reflective of human and social capital investments. Each item used a seven-point scale from 1 (strongly disagree) to 7 (strongly agree).

Choice goals were measured by asking participants the extent to which they were interested in and intended to become a college football coach following graduation. Interest was measured by asking participants three questions as to their level of interest in becoming a college football coach. Items were measured on a seven-point scale from 1 (strongly disagree) to 7 (strongly agree). Intent was based on Hagger, Chatzisarantis, and Biddle's (2001) formulation of behavioral intentions. The three items used a seven-point scale from 1 (strongly disagree) to 7 (strongly agree). Both sections contained three questions: two positive statements and a third negative statement, designed to cross check a participant's answer as a measure of reliability. It should also be noted that since choice goals had two measurements, there were actually six sections of questions for the five SCCT factors.

Selection of Survey Participants

Survey participants were chosen based on two main factors. All survey participants were required to (1) be current members of the fall 2009 football team at their institution and (2) self-identify as belonging to either the white or black ethnic group. Current members of the football team were identified by the coaching staffs and verified by the athletic department rosters. Surveys were then distributed to these athletes at select southeastern United States universities. For the purposes of data analysis, only participants who identified themselves as either white or black were included.

Members from the football team at three schools participated in the survey. To understand the context of where these athletes are playing, a basic profile of each school is given below.

University A is a public school and the flagship campus of its state university system. The campus enrolls approximately 18,000 undergraduate and 10,000 graduate students. The

university is considered a premier academic institution and ranked in the top five in the 2009 Division I United States Sports Academy's Directors Cup, an annual ranking of successful athletic programs in the United States. University A sponsors 26 varsity sports with approximately 750 student-athletes and has an operating budget of approximately $60 million.

University B is a public land-grant university with approximately 23,000 undergraduate and 7,000 graduate students and consistently ranked among the top 100 of national universities by U.S. News and World Report. University B sponsors 23 varsity sports with an operating budget of approximately $39 million.

University C is a private university with approximately 7,000 undergraduate and 7,000 graduate students. The school is a premier research university, consistently ranking in the top 10 of national universities that offer doctoral degrees by U.S. News & World Report. University C sponsors 24 varsity sports with an annual athletics budget or approximately $71 million.

Survey Distribution and Collection Procedures

After institutional approval was obtained for the study, athletic department personnel were approached with the proposal for this study, and their help was requested in administering the questionnaires to the student athletes. For schools outside the travel area, it was the researcher's plan to contact the football team's academic advisor via email. Advisors at select schools throughout the Southeast were sent an email containing a brief overview of the study, data collection procedures, and copies of the survey and script. The researcher received two positive responses regarding participation but did not receive any actual surveys.

The plan for local universities was to use the following procedure: the researcher would contact the football team's academic advisor or coordinator for academic study and explain the survey procedure. Appropriate time (or multiple times if necessary) and place for survey completion would be determined, ideally at whole team meetings, with the primary researcher serving as survey administrator. All surveys would be distributed to and collected from the entire team during one time period at each school, thus allowing for greatest access to potential participants and greatest return rate of completed surveys.

However, due to the nature of working with this population, that plan could not be utilized. The potential participants were members of an athletic team in the middle of their competitive season and gaining access to whole team meetings was not feasible. The study was also limited by time constraints and funding, not allowing the researcher to travel to campuses outside of the local area.

The data collection plan actually utilized was as follows: the primary researcher contacted each football program through the academic advisor or head of study hall. Possible dates and times were coordinated via email and telephone, to ensure that the researcher would be present at all data collection. The plan was to disseminate the survey to participants in small groups at the beginning or end of player meetings and collected as they were completed.

For University A the surveys were distributed at meetings held for students to register for classes. Each night, students from different academic years were present, and direct access to freshmen, sophomores and juniors was given to the researcher. Seniors did not need to register for additional classes and were not present at the meetings.

At University B, the researcher attended one evening of study hall and also provided the school representative with additional surveys to be completed at the athlete's convenience. For University C the researcher also attended a session of study hall and left a number of surveys with the team's academic advisor. While study hall is organized differently at each school, it is a program largely populated by underclassmen.

Each survey was accompanied by a cover letter that explained the purpose of the study, emphasized the voluntary nature of participation, and provided contact information for the lead researcher in the event of questions (Appendix B).

Survey Data Analysis

All completed surveys were identified with an identification code according to the university. Descriptive statistics were compiled for all demographic data and frequency counts were taken to build a sample profile of students. The raw data were entered into Microsoft Excel and transferred to Statistical Package for the Social Sciences (SPSS) version 17.0 for evaluation.

The demographic data included: ethnicity, year in school, academic major, position, ethnicity of position coach, ethnicity of coordinator, and ethnicity of head coach.

In order to test for significant differences in measurements of the SCCT factors based upon ethnicity, the independent sample t-test was utilized. The group of questions that fell under the four main SCCT factors (self-efficacy, outcome expectations, barriers and supports) had their scores combined and a mean generated for each participant. These scores were then used to run a t-test comparing the means of the responses from black football athletes to those of the white football athletes. For the measurements of interest and intent, the last question had to be reverse-scored and this number was combined with the scores

from the first two questions to generate a mean. These means were compared using a t-test. With each t-test, an alpha level of .05 was used, and since ethnicity was only divided into two levels, further post-hoc tests were not required.

To determine if there was a significant difference in athlete's interest in and intention to coach as a career based on their position coaches' and coordinator's ethnicity, a two-by-two multivariate analysis of variance (MANOVA) was run. The two-by-two factors represented the two ethnicity options for the player and the two ethnicity options for the coach. The MANOVAs were run four times to show all possible combinations of interest, intent, position coach and coordinator. For all tests an alpha level of .05 was used.

CHAPTER IV

RESULTS

The study's survey (consisting of questions designed to gather both demographic and SCCT measurements – see Appendix A) was distributed to college football players at three NCAA Division I universities in the southeastern United States. All data were entered into Microsoft Excel, and then transferred to SPSS 17.0 for evaluation. Each SCCT factor – self-efficacy, outcome expectations, barriers, supports, and choice goals, represented by interest and intent – had a group of three to nine questions measured on a seven-point Likert scale. The scores for each group of questions were averaged for each athlete, and this average was used for data analysis.

Independent samples t-tests were used to identify significant differences between black and white athletes and their individual averaged scores for the six SCCT measurements. ANOVAs were also computed to determine if any significant differences existed in an athlete's interest in and intent on coaching as a career based on his position coach's and coordinator's ethnicity.

Description of the Sample

The three participating NCAA DI football programs had a total of 316 football players on their fall 2009 rosters. Every attempt was made to distribute a survey to every football student-athlete but not all athletes received a survey. A total of 141 surveys was collected by December 2009. Every demographic and measurement question had to be

completed, and the athlete also had to identify himself as either black or white for his survey to be included. Due to these qualifications, seven surveys were excluded from the final data group. The study's sample ($N = 134$) reflected an overall response rate of 42%.

Descriptive Statistics

Various demographic data were collected from participants to build a sample profile. The respondents were asked to identify their ethnicity, year in school, academic major and playing position. In addition, they were asked to identify the ethnicity of their position coach, coordinator, and head coach. This information, along with appropriate tables and figures, is discussed in the following section.

Ethnicity of Survey Participants

The sample's ethnicity profile was 57% black ($n = 76$), ranging from 52% to 56% per team, and 43% white ($n = 58$), ranging from 36% to 48%. Results from each program as well as the sample are shown in Table 1.

Table 1

Ethnicity of Survey Participants

	Black		White		Total	
	n	%	*n*	%	*n*	%
University A	41	56%	32	44%	73	100%
University B	18	64%	10	36%	28	100%
University C	17	52%	16	48%	33	100%
Total - Survey	76	57%	58	43%	134	100%

Athletic Year

The athletic year breakdown for each team was gathered from team academic

advisors in combination with the official fall 2009 team rosters listed on each university's

athletic department website online. Information for each individual school, as well as the

sample, is included in Table 2. In the demographic section of the survey, each participant was

asked to mark their year in school: 48% of respondents were freshmen, 25% were

sophomores, 20% were juniors and 7% were seniors.

Table 2
Athletic Year

	Freshman		Sophomore		Junior		Senior		Total	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%
Survey Participants	64	48%	34	25%	27	20%	9	7%	134	100%

Academic Major

The survey asked participants to write in their academic major. Those who did not

declare a major were classified as "Undecided." The raw data showed 19 distinct majors

which were then re-classified into nine larger sub-groups. To place the academic majors into

broader areas of study, the first separation created was between academic and professional

degrees. Then, based on observation of how many major research universities classify their

majors and current academic research (Fountain & Finley, 2009), the academic degrees were

further broken down.

Table 3

Academic Major Sub-Groups

	Academic	Professional
Sub-Group	*Participant Majors*	*Participant Majors*
Arts and Humanities (2%)	Arts, English	Business (7%)
Biological Sciences (5%)	Biology	Education (2%)
Math and Physical Sciences (0%)	N/A	Engineering/Computer Science (5%)
	African American Studies,	Law (1%)
Social Sciences (31%)	Anthropology, Communications, Economics, History, Policy, Psychology, Sociology	Sport Administration and Management (11%)

The most commonly identified major was "Undecided" (36%, $n = 48$). Social Sciences was second with 31% ($n = 42$), Sports (Management and Administration) had 11% ($n = 15$), and Business had 7% ($n = 10$). All majors that represented 5% or less of the participants were classified as "Other." This category included both Engineering/Computer Science and Biological Sciences with 5% ($n = 6$), both Arts and Humanities and Education with 2% ($n = 3$), and Law with one athlete or approximately 1%. No athletes reported Math and Physical Sciences as their major. Results for academic major are shown in Figure 3.

Playing Position

      Survey participants were asked to indicate their playing position as stated on their team's official roster, with results shown in Figure 4. Standard positions were offered as choices on the survey instrument and coded for data analysis. The highest number of participants ($n = 27$, 20%) identified themselves as offensive line (OL), while – as might be expected – there were only ($n = 6$, 5%) quarterbacks (QB). The tight end (TE) position was not originally offered on the survey, however, a few participants (2%, n = 3) wrote in this position and the researcher did not re-classify their response to a pre-defined position.

Figure 3

Playing Position
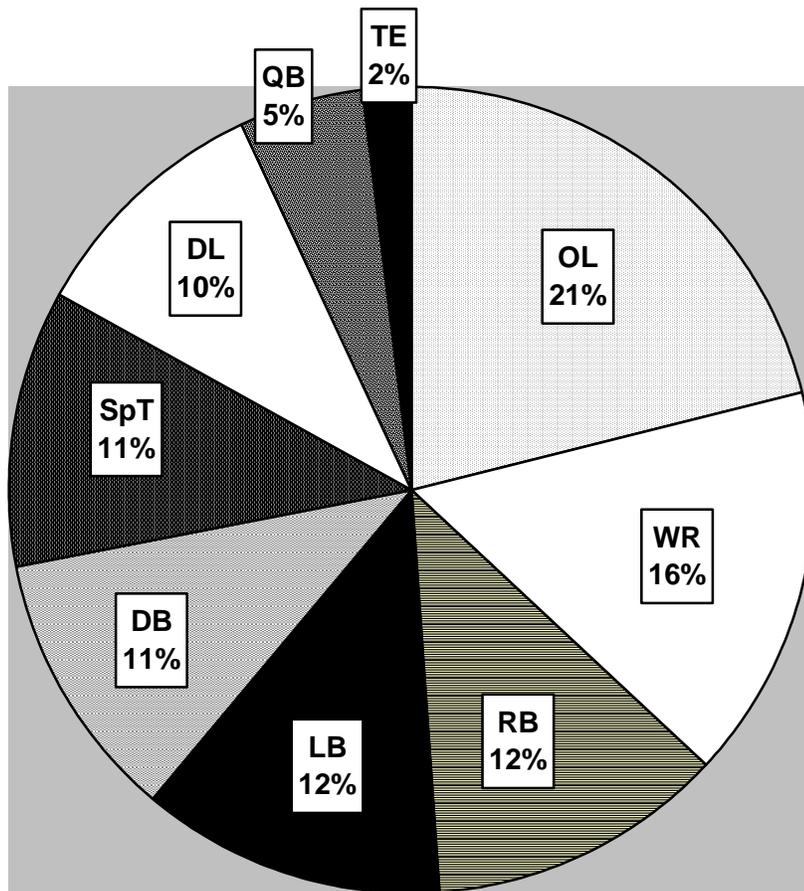
Ethnicity of Position Coaches and Coordinators

       The athletes reported in the survey that the ethnicity of the position coaches was 36%

black ($n = 48$) and 64% white ($n = 86$), with this information presented in Table 5. The

ethnicity of the coordinators was 21% black ($n = 28$) and 79% white ($n = 106$). The survey

reported that all head coaches were white and thus were not included in the data analyses.

Figures 4 and 5

Ethnicity of Position Coaches and Coordinators

Position Coaches   *Coordinators*
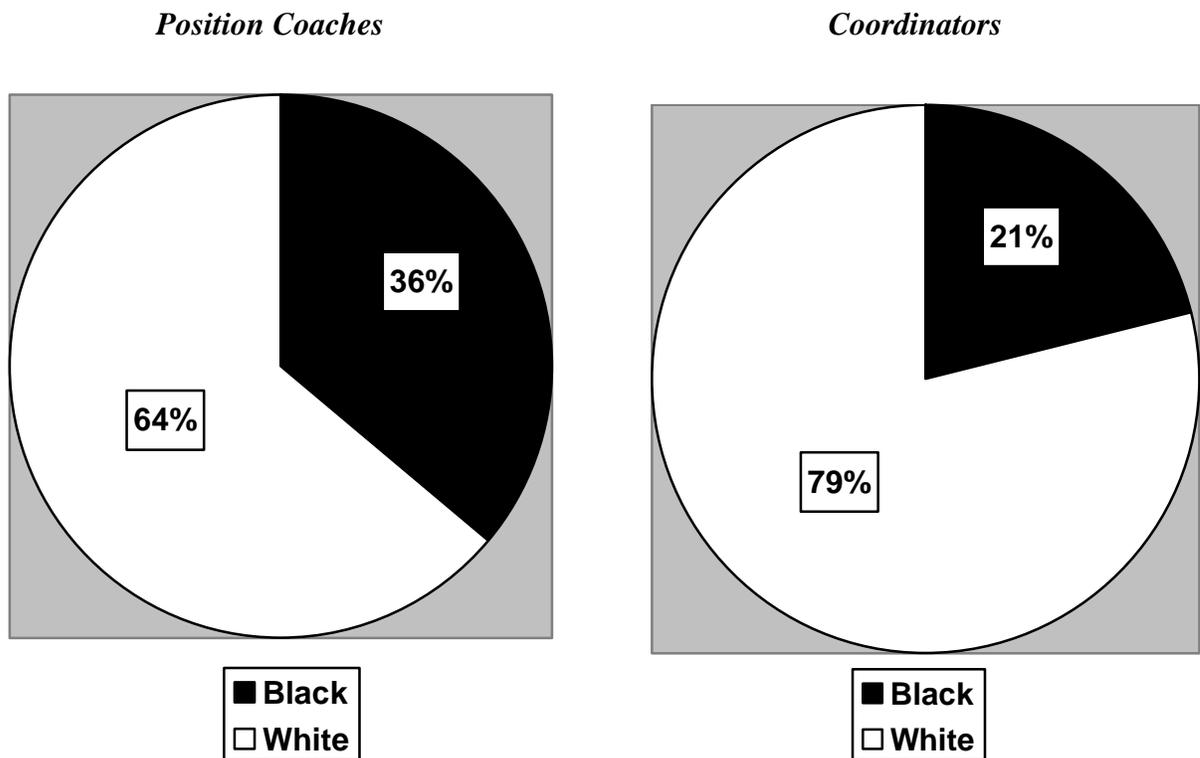
Quantitative Results

Initial survey Likert-scale responses ranged from 1 (strongly disagree) to 7 (strongly agree). Independent samples t-tests were computed and means and standard deviations are presented in Table 5.

Table 4

Summary Table of SCCT Factors

SCCT	Mean		Standard Deviation	
Factors	Black	White	Black	White
Self-Efficacy*	5.223	5.688	1.184	0.824
Expectations*	4.539	4.437	1.223	1.188
Barriers*	3.526	2.828	1.116	1.102
Supports*	4.182	4.414	1.367	1.583
Interest*	3.991	4.362	1.834	1.859
Intent*	3.522	3.569	1.623	1.861

*p = .05 for all data analysis

For research question 1(a): "Is there a difference between black and white collegiate football athletes' level of coaching self-efficacy?" a statistically significant difference was found between black and white players' levels of self-efficacy, t (132) = -2.549, p = .009. Black athletes had a significant lower level of self-efficacy than white football athletes, therefore rejecting the null hypothesis and supporting research hypothesis 1(a).

.   For research question 1(b): "Is there a difference between black and white collegiate football athletes' positive outcome expectations associated with coaching?" a significant difference was not found for this measurement, t (132) = .489, p = .625.

For research question 1(c): "Is there a difference between black and white collegiate football athletes' perceived barriers associated with collegiate coaching?" a statistically significant difference was found in perceived barriers between the ethnicities, t (132) = 3.617, p < .0005. Black athletes perceived more barriers than white athletes, rejecting the null hypothesis and supporting research hypothesis 1(c).

For research question 1(d): "Is there a difference between black and white collegiate football athletes' perceived supports associated with collegiate coaching?" a significant difference was not found for this measurement, t (132) = -.890, p = .375.

For research question 1(e): "Is there a difference between black and white collegiate football athletes' interest in pursuing a college coaching position?" a significant difference was not found for this measurement, t (132) = -1.151, p = .252.

For research question 1(f): ":Is there a difference between black and white collegiate football athletes' intentions to pursue a coaching position?" a significant difference was not found for this measurement, t (132) = 1.153, p = .879.

Research question 2 was: "Is there a significant difference in collegiate football athletes' interest in and intention to become a college coach based on the ethnicity of their position coach or coordinator?" MANOVAs were run for both interest and intent with ethnicity of position coach and ethnicity of player coded for the two levels of ethnicity. No significant differences were found for interest or intent, with complete results included in Table 5.

Table 5

Position Coach and Player: Interest and Intent

	df	F	p
Position Coach (PC) (Interest)	1	.044	.835
Player (Interest)	1	.539	.464
PC * Player (Interest)	1	.336	.563
Position Coach (PC) (Intent)	1	.044	.834
Player (Intent)	1	.137	.712
PC * Player (Intent)	1	1.859	.175

MANOVAs were also run to determine if there was a significant difference between the interest and intent of the athletes to pursue coaching as a career based on their coordinator's ethnicity. No significant differences were found for interest or intent, with complete results included in Table 6.

Table 6

Coordinator and Player: Interest and Intent

	df	F	p
Coordinator (C) (Interest)	1	.012	.914
Player (Interest)	1	.587	.445
C * Player (Interest)	1	.008	.931
Coordinator (C) (Intent)	1	.009	.923
Player (Intent)	1	.096	.757
C * Player (Intent)	1	.091	.764

CHAPTER V

CONCLUSION

Summary

This study sought to answer two questions: (1) Are there any significant differences related to ethnicity in the five factors of SCCT? (2) Is there a significant difference in athletes' interest in and intention to coach as a career based on the ethnicity of their position coach or coordinator? SCCT – utilizing the internal constructs of self-efficacy, outcome expectations, and choice goals and external constructs of barriers and supports – was used as a conceptual framework. The hypotheses for Research Questions 1 (a)-(f) were that black athletes would have a (a) lower level of self-efficacy, (b) foresee less positive outcomes, (c) perceive more barriers and (d) fewer supports, and have (e) less interest and (f) intention associated with collegiate coaching when compared with their white counterparts. The hypothesis for Research Question 2 was that black athletes who have a black coach at any level would have more interest in and intention to become a college coach than black athletes with no black coaches.

The study's results reveal a significant difference between black and white football athletes' level of self-efficacy and a significant difference in their perceived barriers, supporting Research Hypotheses 1(a) and 1(c). There was no significant difference for outcome expectations, supports, or choice goals which were represented by interest and intent.

Outcome Expectations

Bandura (1986) described three forms of outcome expectations: physical, social and self-evaluative. Participants responded to all of these measures on the survey. Given the highly publicized nature of college coaching jobs, it is logical that black and white athletes would anticipate similar outcomes from the coaching profession in terms of compensation, and social approval. Compared to other professions, college football players might be familiar with the job requirements and the rewards that come along with being a college football coach, and would thus have similar expectations of doing that job.

Supports

The absence of a significant difference between black and white football athletes' perceived supports is notable. In contrast to the current study, previous research has contended that black students at predominantly white institutions encounter culturally ignorant students and staff, lack of black faculty, and cultural alienation and isolation (Hawkins, 1989; Nagasawa & Wong, 1999). The most relevant form of support for blacks on college campuses is the black mentor or role model in a leadership position (LaVant et al., 1997). If, according to the research, mentors and role models are not readily available to black athletes, the finding that they perceive no less support then whites suggests they may be finding support through other means. This could be an encouraging sign since both Lent et al. (2003) and Cunningham et al. (2005) found the effects of supports to be stronger than barriers on self-efficacy. This would mean that regardless of the availability of blacks in leadership positions to act as mentors, black athletes could access different sources of support to overcome the barriers they perceive to a particular career path.

Barriers

        The significant findings that black athletes had lower self-efficacy and perceived more barriers than white athletes, as they pertain to coaching professionally, are consistent with previous research on ethnic discrimination in athletics (Cunningham & Sagas, 2005; Fink, Pastore & Riemer, 2001). The barriers that black athletes most likely perceive in the coaching profession include both access and treatment discrimination. The general lack of coaching staff diversity would support black players' perception of access discrimination. Of the few blacks who are coaches they are often in peripheral, non-leadership positions, which suggests treatment discrimination (Anderson, 1993). By seeing a mostly white coaching staff at their school or noticing that the vast majority of head coaches in NCAA DI college football are white, black athletes may perceive that coaching is not a viable profession (Knoppers et al., 1991).

Self-Efficacy

        The study's result that black football athletes had lower levels of self-efficacy than white football athletes is an important finding. Self-efficacy generally refers to people's judgments of their capabilities (Bandura, 1986). Since the SCCT model focuses on task-specific self-efficacy, it follows that belief in one's self related to a specific activity should result in subsequent outcomes, such as choice goals and behavior (Lent et al., 1994). Therefore, if people believe they can be successful in a career path they are more likely to choose a position along that path (Cunningham & Singer, 2009). Conversely, if people have lower self-efficacy and do not believe they can be successful, they are not likely to pursue that specific path (Brown & Lent, 1996). For black players to have significantly lower self-efficacy related to coaching as a career signals they are less likely to purse this profession.

44

Barriers, Self-Efficacy, Interest and Intent

The dual significant findings of black football players perceiving higher barriers and reporting lower self-efficacy is consistent with previous research on SCCT (Cunningham & Singer, 2009). People who perceive considerable barriers tend to internalize this perception and are likely to have lower self-efficacy estimates (Cunningham & Singer, 2005). Both of these findings suggest that black players would have less interest and intention to pursue coaching as a career. However, this study's finding that black athletes had no less interest in and intention to pursue a coaching career than white athletes contradicts previous research (Cunningham & Singer, 2009).

For black athletes to perceive more barriers, have lower self-efficacy, and yet show no less interest in or intention to pursue the coaching profession is puzzling. This contradiction in the results begs the questions: Why would a person pursue a career where they perceive more barriers and have less belief in themselves? Is it possible that black football players believe the benefits of being a college coach far outweigh the costs, so they are willing to encounter barriers and endure potential lowered self-confidence in order to pursue the profession? Or do football players realize that so few make it as professional athletes, and recognize that coaching is one of the few ways for them to stay involved with the game?

The finding suggests that the lack of black head coaches in college football is not for want of interest on the part of athletes, who are considered to be the most eligible pool of applicants (Everhart & Chelladurai, 1998). While black football players have no less interest in or intention to become coaches than white players, the ethnic disparity among head coaches continues (Whiteside, 2010). In order to enact change and increase the number of

college coaches of color, programs designed to boost black players' self-efficacy must be instituted and access and treatment discrimination barriers broken down. Possible programs might involve fostering coaching as a teaching career rather than an emphasis on coaching success being tied to winning. Other ideas would include increasing diversity among athletic department staff, and ensuring that young black men are provided with positive role models and mentorship opportunities within athletic coaching staffs as well as in the greater campus community.

Position Coach and Coordinator Ethnicity

The lack of a significant difference between a player's interest in and intention to become a coach based on his position coach's or coordinator's ethnicity is also noteworthy. These findings suggest that perhaps the coach's ethnicity has no bearing on an athlete's interest in a coaching career. However, it would be an over-simplification to say that ethnicity is the only factor – there is certainly a combination of factors at work. For example, a coach's relationship with a player and his level of perceived authority may be relevant. If an athlete does not perceive the black coach on staff to have authority over the players and among his peers, his presence may not have a significant effect on that player's perception of coaching as a career. Therefore, one possible explanation for the lack of significant effect between coach ethnicity and athlete interest is despite the presence of a black coach who may support or encourage them, black athletes have observed their surroundings and noticed that blacks have a hard time gaining access to and moving up in the profession. In essence, the perceived presence of a significant barrier cancels out the perceived support, leaving black athletes to determine, on their own, choice goals and subsequent behavior.

SCCT Validity

The results of the current study show a lack of strength for the SCCT explanation of how vocational choice is reached. The idea that internal constructs work together, along with the influence of external constructs, to form choice goals and behavior is logical; however, it may be too simple when it comes to choosing a career, especially a career as public and complex as that of a DI college football coach. The finding that black athletes would pursue a career where they perceive increased barriers and have lower self-efficacy only reinforces the complexity of vocational choice and the need for additional study. For members of the college community, it is critical to understand how and why students choose their profession, or even how or why they eliminate choices. This study's findings add to the research on college student's vocational choice and are also relevant to the discussion of the lack of black head coaches in college football. While this is certainly a step towards greater understanding of these issues, there is more research to be done.

<div align="center">

Discussion

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There are several limitations and delimitations to this study as well as additional avenues for future research in the field. The researcher identified four issues that may have impacted results found in this study: geographic location, distribution of survey, year in school, and head coaches. In addition to identifying these boundaries, the following section includes suggestions for addressing these concerns for future studies.

Geographic Location

One limitation is where the data were collected (i.e. all samples came from universities in the same geographic area). Location may affect ethnic breakdown on football teams and within the coaching staff and, even more broadly, within the campus and general

community. The presence of people of color presents potential opportunities for mentorship and a support system for black athletes, which is an acknowledged form of support. This presence may affect black football players' measurements on the SCCT factors by increasing supports and self-efficacy, helping them overcome barriers, and ultimately creating more interest and intention to pursue a specific career. For this reason, this study should be conducted in another geographical area or sampled nationally to include more ethnic diversity.

Sampling Procedure

Another limitation is in the sampling procedure. Preliminary observations of the raw data raised the following concerns. Some participants appeared not to have read the survey instructions and questions since every single answer was the same. For example, in both the interest and intent sections there were three questions: two were positive statements, while a third statement was negative, designed to cross-check the participant's answer on the previous two statements. If a participant had read and understood the instructions, his responses to the first two questions should have been the opposite of his response to the last question. However, that was not the case for some participants. In other cases, participants appeared to have circled certain answers so as to create a zigzag design in the answer grid. These observations raise the issue of how seriously the participants treated this survey.

After the first round of collection when the researcher was able to review completed surveys, the observations of the data made it clear that the script read before survey distribution needed to be altered. Participants needed to be told how important it was to complete every single question and were asked repeatedly to take this process seriously and answer honestly. The researcher found it helpful to be blunt and concise with instructions to

participants. It was also helpful to have buy-in from the research liaison at each university since they already have a relationship with the participants, and have them reinforce the requirements.

The appearance of study participants not taking the survey seriously is certainly a potential limitation of doing this kind of research with this population. It is possible that certain changes in the data collection procedure might improve the receipt of valid surveys for future studies. For example, having the principal researcher present for all survey distribution and collection, giving a more in-depth explanation of the purpose of the study, and also stating the importance of having the participants read the questions thoroughly and reflect honestly on their responses – all of these would improve data collection.

Year in School

There was a greater number of freshmen and a general lack of seniors represented in this study perhaps due to the data collection procedures. At University A, surveys were collected at academic meetings where students registered for classes in the upcoming year and seniors were not required to attend. At Universities B and C, the majority of surveys were collected during study hall, for which a majority of attendees were underclassmen. The lack of seniors included in the sample is another acknowledged limitation of this study. One way to combat this would be to do data collection at all team meetings or simply not at academic meetings or study hall, which are populated mostly by underclassmen.

Another issue was the ambiguity of the phrase used in the demographic section of the survey: "year in school." As previously discussed, DI athletes can be classified by their academic year or by their athletic eligibility. Most student-athletes would identify themselves by their athletic year, while academic advisors and the campus at large would identify them

by their academic year. Moving forward, the survey should ask for their year in school in a different way to remove any ambiguity such as "athletic class" rather than "year in school."

Head Coaches

All schools that participated in this survey had white head coaches. Thus, that factor was not included in the study and could have a major impact on the athletes' measurements of the SCCT factors. Past research has shown the effect of mentorship and support systems on minorities in the workplace by minorities in leadership roles (Gushue & Whitson, 2006). It would be worthy of further academic study to see if the presence of a black head coach has any significant effects on black athletes' measurements of the SCCT factors. Therefore, it is recommended that this study be replicated at schools with black head coaches.

<div align="center">

Future Research Studies

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The current study assumes that head coaches ascended from the ranks of players to assistant coaches to coordinators, but a key link may be missing. One step that is becoming more common for college athletes transitioning into the coaching profession is the graduate assistant position (often referred to as a GA). In college football, most players who want to pursue coaching as a career take a position as a GA with a college program – many times at the institution where they played (Whiteside, 2009). In fact, in 2004, 15 head coaches of the top 25 teams had served as GA's (Whiteside, 2009). The GA position is one that the NCAA not only recognizes, but regulates – requiring GAs to be enrolled in at least 50% of the institution's minimum graduate program studies and allowing the position to be held for at maximum three years (National Collegiate Athletic Association [NCAA], 2009). The NCAA also states that GAs are not to "receive compensation in excess of the value of a full grant-in-aid" (p. 60) and no more than four tickets to football and basketball games. While taking a

GA position is often seen as a natural pathway to coaching, it is also limiting since to take this position applicants must be able to support themselves for at least one full year and be eligible for graduate studies. If the GA position is to become an expected step in the entrance to the coaching profession, this could act as a discriminatory practice.

Another avenue for future research would be to conduct this study at Historically Black Colleges and Universities (HBCUs). There are currently 105 HBCUs in the United States including public and private two-year and four-year universities, medical schools and community colleges (U.S. Department of Education, 2007). These institutions were established with the intention of serving the black community and meeting the needs of black academics (Fries-Britt & Turner, 2002). Previous research has shown that black students attending HBCUs are better integrated into the campus community, academically and socially, than their peers at predominantly white institutions (Allen, 1992; Davis, 1998). This engagement within the campus structure could have a profound effect on the black student-athletes' perceived barriers and supports within a football program. The presence of a predominantly black coaching staff could also have an impact on their measurements on the SCCT scale.

Finally, while additional work using the SCCT framework would be beneficial, it is recommended that in general, more longitudinal work with athletes who enter the coaching profession is conducted. This research would help answer the questions: Do the athletes' anticipated outcomes occur? How long do they stay in the coaching profession? Longitudinal research would not only provide more information on vocational choice by athletes, but also provide insight on the under-representation of minorities in the college football coaching profession.

Conclusion

Coaching college football at the DI level, seen as a prestigious and powerful position by society, continues to be a position held mainly by whites. The lack of black head coaches in college football is still a relevant issue to this day with implications for many individuals. A January 2010 article in the Chronicle of Higher Education discussed this very issue and again called for change. This article stated that seven more black coaches were hired at DI FBS institutions since November 2009, raising the total to 13, but warned it was too early to celebrate (Sander, 2010). With the 13 black head coaches in DI-A, six in DI-AA, and five among the 362 football programs in DII and DIII, the grand total is 24 black head coaches for the NCAA's 583 football programs (Sander, 2010). It is apparent that progress has been made and should be celebrated and yet there is still work to be done.

The importance of this study is the information it provides to people who work with college football athletes and also those who are concerned with the lack of diversity on college football coaching staffs nationwide. It is important to understand how and why college students, specifically the student-athlete population, make their vocational choices and to explore differences that exist between the ethnicities. From the research on student-athlete experience, it is apparent that blacks have different experiences from their white counterparts; this must be addressed by the college community. All institutional faculty and staff, specifically athletic administrators, should provide black student-athletes with opportunities to establish networks and gain experience (Singer, 2005).

The reality is "fewer than one in a hundred" will make a living from their athletic ability (Knight Commission, 1991, p. 27). This reality must be stressed by coaches so student-athletes view their years as an athlete as a way to develop skills and pursue a viable

career after sports. For some, that career may be coaching. For that to happen, there must be support systems in place that will encourage black athletes and help them overcome barriers. If this does not happen, then the dearth of black head coaches in college football will continue to exist. Athletic administrators must support programs that address the specific needs of minority student-athletes and create more successful outcomes for them (Knight Commission, 1991).

Even though his study's results were inconsistent with previous SCCT research and did not conclusively answer if football athletes plan to become college coaches, the findings are relevant. While the process of vocational choice is a complex one, and not easily answered, this does not make research investigating this process any less important. In fact, by going to the source and asking the athletes themselves if they have an interest in coaching as a career, this study fills a void in the academic research addressing the lack of black head coaches in college football and gives a voice to the athletes.

Appendix A. Survey

The following questions focus on activities college coaches would perform. Please rate the

level of confidence you have that you could complete these tasks.

	No Confidence			Complete Confidence			
1. Resist the interference by parents, alumni, and other groups.	1	2	3	4	5	6	7
2. Accurately assess the abilities of your players.	1	2	3	4	5	6	7
3. Change coaching strategies if they did not work.	1	2	3	4	5	6	7
4. Select the players best suited for your strategies.	1	2	3	4	5	6	7
5. Identify individuals and groups who can help your program or team.	1	2	3	4	5	6	7
6. Be self-assured in dealing with problems.	1	2	3	4	5	6	7
7. Modify your strategies according to the strengths and weaknesses of your opponent.	1	2	3	4	5	6	7
8. Determine your coaching strengths.	1	2	3	4	5	6	7
9. Make intelligent coaching choices.	1	2	3	4	5	6	7

Please respond to the following items concerned with the outcomes you might expect from

being a college coach.

	Strongly Disagree					Strongly Agree	
1. Becoming a coach will mean high status.	1	2	3	4	5	6	7
2. I will earn a high salary by becoming a coach.	1	2	3	4	5	6	7
3. I would have a meaningful career if I were to coach.	1	2	3	4	5	6	7
4. I would earn approval from others if I became a coach.	1	2	3	4	5	6	7
5. People close to me think I should become a coach.	1	2	3	4	5	6	7
6. I would have the social support needed to become a coach.	1	2	3	4	5	6	7
7. Becoming a college coach would be very satisfying to me.	1	2	3	4	5	6	7

8. My career satisfaction would be high if I became a college coach.	1	2	3	4	5	6	7

9. Becoming a college coach is important for me to feel complete as a person.	1	2	3	4	5	6	7

Please respond to the following items concerned with the factors that might influence your decision to become a college coach.

	Strongly Disagree					**Strongly Agree**	
1. People with a background similar to mine have a hard time obtaining a coaching position.	1	2	3	4	5	6	7
2. Too many other people are seeking coaching positions for me to have a good chance of obtaining one.	1	2	3	4	5	6	7
3. I anticipate having a hard time obtaining a coaching position because of my demographics.	1	2	3	4	5	6	7
4. Discrimination would make it hard for me to be a coach.	1	2	3	4	5	6	7
5. There is a lack of opportunities to become a coach.	1	2	3	4	5	6	7
6. It would be hard for me to become a coach because there are so few positions available.	1	2	3	4	5	6	7
7. I have the experience needed to become a college coach.	1	2	3	4	5	6	7
8. I have all the training needed to become a coach.	1	2	3	4	5	6	7
9. I have sufficient contacts to help me become a coach.	1	2	3	4	5	6	7
10. I have a large enough network of contacts to make becoming a coach possible.	1	2	3	4	5	6	7
11. My educational background has prepared me for a coaching position.	1	2	3	4	5	6	7
12. I feel as if I know enough people in the field to secure a coaching position.	1	2	3	4	5	6	7

Please respond to the following items concerned your interest in becoming a college coach.

	Strongly Disagree					Strongly Agree
1. Becoming a college coach is something that really interests me.	1	2	3	4	5	6	7
2. I have thought about becoming a college coach in the past.	1	2	3	4	5	6	7
3. I really have no interest in becoming a college coach.	1	2	3	4	5	6	7

	Strongly Disagree					Strongly Agree
1. I intend to become a college coach following graduation.	1	2	3	4	5	6	7
2. I will try to pursue collegiate coaching sometime during my career.	1	2	3	4	5	6	7
3. I have no plans on becoming a college coach.	1	2	3	4	5	6	7

Demographics: Please tell us a bit about yourself

Race: African American _____   Asian _____   Caucasian _____
        Hispanic _____   Native American _____   Other _____

Age: _____ years   Year in School: _____

Major: _____

Position: OL _ RB __ WR _ QB __ DL __ LB __ SpT _

Race of Head Coach: African American _____   Asian _____   Caucasian _____
                     Hispanic _____   Native American _____   Other _____

Race of Position Coach: African American _____   Asian _____   Caucasian _____
                          Hispanic _____   Native American _____   Other _____

<u>Thank you for your participation!</u>

Appendix B. Consent to Participate Form

University of North Carolina – Chapel Hill
Consent to Participate in a Research Study
IRB Study #

Title of Study: Along Racial Lines: A Quantitative Analysis of Football Athletes' Interest in Coaching as a Career

Principal Investigator: Laura Bernhard
Department: Exercise and Sport Science
Phone number: (510) 847-6428, Email: laura53@email.unc.edu
Advisor: Dr. Richard Southall

Dear Participants,

Your participation in a survey of student athletes is needed. As a sport administration graduate student at the University of North Carolina, I am conducting research to understand the desire among football athletes to become a coach. In total, some 200 persons will be asked to participate in this study.

Participation will require about 10 minutes answering the questionnaire. You may refuse to answer any question on the survey if it makes you feel uncomfortable. All data will be dealt with anonymously and no individual taking part in the study will be identified. Your participation in this study is completely voluntary. Further, there are no risks associated with participation. By filling out this survey, you are consenting to participating in this study and attesting that you are of at least 18 years of age. Finally, you will benefit from participating in the study by helping to further the understanding of strategies that can be used to increase the representation of various persons in the coaching profession.

This research study has been reviewed and approved by the Institutional Review Board - Human Subjects in Research, University of North Carolina. For research related problems or questions regarding subjects' rights, the Institutional Review Board may be contacted through 919-966-3113.

If you have any comments or concerns with the study, please contact me via the number or email given above. Thank you for your time and participation; we look forward to your response.

Good luck this season!

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