PERCEPTION OF COLLEGE ADJUSTMENT AND INSTITUTIONAL ATTACHMENT AMONG STUDENT-ATHLETES OF COLOR AT A PREDOMINANTLY WHITE INSTITUTION AND ITS RELATION TO ACADEMIC MOTIVATION

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by

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ABSTRACT

The purpose of this study was to investigate the relation between college adjustment, self-efficacy, academic buoyancy and academic motivation among student-athletes of color at a predominantly White institution (PWI) that participate in Division I sports. Historically, institutions of higher education, founded by White male educators and businessmen, designed their schools primarily for White students. Students of color where not permitted to attend such institutions nor compete against them athletically. After the integration of schools, college administrators and coaches saw the opportunity to recruit student-athletes of color in an effort to create winning teams, fill stadium seats, and to generate revenue. Some PWI campuses were not as welcoming to student-athletes of color because they lacked diversity, some did not foster a welcoming racial or cultural atmosphere, and many were not as inclusive. Some athletes faced discrimination and racism on campus which may have been a factor in their academic motivation. This study examined the perception student-athletes of color have of their non-cognitive factors (i.e. college adjustment, self-efficacy, and academic buoyancy), athletic status, and race and how it influenced their motivation (i.e. intrinsic or extrinsic) toward academics. Twenty-eight Division I student-athletes of color at a large PWI public university participated in the study. Each athlete completed a 20-minute Likert-type survey that asked questions about their college experience, perception of adjustment, self-efficacy, academic buoyancy, and motivation toward academics. The results of the study found college adjustment, intrinsic motivation, and extrinsic motivation toward academics to relate among student-athletes of color. No significant relation was found between the three variables of self-efficacy, academic buoyancy and overall academic motivation as hypothesized by the researcher.
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Alright, time for me to start writing the next chapter of my life. I know you will all be there for the next leg of this journey.

Hmmm…I wonder what would James Bond do?
CHAPTER 1: INTRODUCTION

College sports in the United States have evolved and its rise in popularity has been documented throughout history. From its inception, college sports have offered students the opportunity to play competitively and non-athletes something to cheer for. Due to its growth in popularity, college sports have served to increase revenue and exposure for many colleges and universities around the nation (Donnor, 2005; Zimbalist, 2001). Today, many college sports teams are made up of student-athletes from different cultures that share an arena in pursuit of the same goal of winning competitions. However, this current mixing of races in college sports and on college campuses was not always an accepted practice (Bateman, 2011; Hawkins, 2010; Hodge et al., 2008; Smith, 2000). Most institutions of higher education, prior to the civil rights movement of the 1960s, were made up mainly of White students who attended these colleges and universities. Laws were enacted to prohibit Black, Hispanic/Latino, and American Indians from attending these exclusive institutions. Minority populations were excluded from college classrooms and athletic fields due to segregation practices (Yosso, Parker, Solórzano, & Lynn, 2004).

It may be more common today for colleges and universities to recruit Black, Hispanic/Latino, and American Indian students to play for their athletic programs, but, historically, many schools that demographically and historically identified as predominantly White (Brown & Dancy, 2010) voluntarily excluded minority students from their academic and athletic culture. This lack of acceptance for racially and culturally different students has maintained a long tradition at predominantly White institutions (PWIs) by not creating a sense of belonging and membership on their campuses for minority students (Goodenow, 1993; Goodenow & Grady, 1993).
A period after the Civil War saw many colleges and universities deny minority students admission into their schools due to segregation laws and discrimination practices (Hawkins, 2010). *Jim Crow* laws (Yosso, Parker, Solórzano, & Lynn, 2004) supported segregation of races and made it impossible for minority students to attend White colleges or to seek higher education. Powerful elite White educators started the first colleges in a time when the United States was a racially divided nation. These first PWIs were originally designed to meet the needs of White students and most have remained that way. Even though northern colleges were more open to the idea of accepting Black student-athletes in the 1800 and 1900s, their southern counterparts refused to recruit or roster any minority athletes on their teams (Hodge et al., 2008; Lapchick, 2008; Martin, 2002). In response, minority students sought alternative ways to receive a college education (Hawkins, 2010).

It was the striking down of the Jim Crow laws (Brown v. Board of Education, 1954) in conjunction with the inception of the National Collegiate Athletic Association (NCAA) that made it possible for minority students to be recruited to White college campuses primarily for athletic contribution (Bateman, 2011; Hawkins, 2010; Hodge et al., 2008; Smith, 2000; Washington, 2004; Watt & Moore, 2001). *Brown* (1954) ruling opened the door for coaches at PWIs to recruit racially underrepresented students from underprivileged communities to attend their schools for sports.

Hawkins (2010) points to the NCAA’s influence over collegiate sports as the driving reason why many PWIs opened their doors to minority students. The NCAA encouraged this new trend of recruiting minority students onto predominantly White campuses even though it was not met with open acceptance by all (Hawkins, 2010; Hodge et al., 2008). Student-athletes of color that chose to attend PWIs were often subjected to feelings of alienation and racial
discrimination that openly displayed unwelcome and hostility from White faculty and students on campus (Cooper, 2012; Loo & Rolison, 1986). Student-athletes of color have a history of dissention with PWI campuses and the negative climates has often led to them to leave the school or lowered their academic performance and motivation, reasons that align with Tinto’s (1985) research for why students leave college.

Decreased academic motivation in student-athletes of color may stem from various aspects of their college experience. Some aspects may be due to the lack of social support, no sense of belonging (Goodenow, 1993; Goodenow & Grady, 1993), low self-efficacy (Bandura, 1977), reduced sense of academic buoyancy (Martin & Marsh, 2008) and the inability to attach to their institution (Baker & Siryk, 1984) due to their racial and cultural differences. Unfortunately, a cycle of low graduation and retention rates resulted with higher than average attrition rates for minority students at PWIs.

Since the mandated integration of college campuses and sports, PWIs have made a secondary effort to accept student-athletes of color onto their campuses and into their culture to better help these students feel included. However, the level of attachment some student-athletes of color have to their PWIs remains weak due to this historical trend of exclusion (Hawkins, 2010). Studies have shown cognitive factors, identified as high school grades, GPA, SAT score, family SES, and other academic achievement criterion, are predictors of college academic success for students (Hall, Smith, Chia, 2008). However, that has not been the case for minority students, where studies have found non-cognitive factors, described as attitudinal, emotional, social, and motivational factors, to be more accurate predictors of academic success for minority populations (Hyatt, 2003). This review of the literature intends to examine previous research conducted on student-athletes of color and their experiences at PWIs but will focus on the non-
cognitive factors that aided or impeded their ability to attach to their PWIs and how it affected their academic motivation (Ting, 2009; Thompson, 2010).

**Statement of the Problem**

Predominantly White institutions attract minority students to attend their schools for demographic and academic reasons and offer the opportunity for athletic involvement. In reality, these institutions are not culturally nor racially equipped to reflect and support the diverse needs of these students (Hawkins, 2010). Student-athletes of color enrolled at PWI schools often do not feel included at their colleges and universities because of the racial disparity that exists. In addition, student-athletes of color select PWI schools because of savvy recruiting practices utilized by coaches to lure them to their schools (Chen et al., 2010; Martin et al., 2010; Njororai, 2012). The potential opportunity for a mutually successfully relationship between the institution, its athletic program, and its student-athletes of color often comes at the cost of shrouding the true campus atmosphere that may involve isolation, exclusion, hostility, discrimination, and low persistence and graduation, high dropout rate, and low academic achievement that occur at PWIs among the minority student population.

Researchers (Adler & Adler, 1988; Chavous, 2000; Goodenow & Grady, 1993; Hoffman et al., 2003) conducted studies that looked at minority students’ sense of belonging and attachment to PWIs and how it influenced how students attached to the university, they found a high rate of students reported feelings of isolation and exclusion at these schools. Student-athletes of color are a particular group that find difficulty forming bonds with their predominantly White institutions and struggle to establish a sense of belonging to the college, which increases their risk of dropping out (Bean, 1980). Missing from the literature are studies that looked at the non-cognitive needs of student-athletes of color, which includes their college
adjustment and attachment to their PWIs and how it relates to their academic motivation. Non-cognitive factors have been documented to have significant positive predictive effects on college adjustment and persistence among minority students overall (Ting, 2003; Trevino & DeFreitas, 2014; Sedlacek, 1999).

Authors (Comeaux & Harrison, 2011; Simons, Rheenen, & Covington, 1999) have also informatively written about the predictive ability cognitive factors have on college success with minority students. Comeaux and Harrison’s research showed student-athletes who entered college with precollege characteristics such as good high school grades, a high GPA, high SAT score, and good family socioeconomic status, academic success was positively predicted. Moreover, Simons, Van Rheenen, and Covington (1999) attributed the academic and athletic success of student-athletes to be driven by the desire to avoid failure (i.e. failure-avoidance) or a strong orientation towards success (i.e. success-orientated motivations). Little has been done to look at how non-cognitive factors in student-athletes of color impact their ability to attach to their PWI schools and how it relates to academic motivation.

**Purpose of Study and Research Questions**

The purpose of this study was to examine if there is a relation between college adjustment, self-efficacy, academic buoyancy, and academic motivation. This study explored how student-athletes of color perceive their attachment to their predominantly White institution and how it influenced their sense of belonging. Studies (Chavous et al., 2004; Sedlacek & Adams-Gaston, 1992; Tracey & Sedlacek, 1984) have shown non-cognitive factors such as sense of belonging, social support, emotional support, positive perception of self-efficacy, academic buoyancy, and institutional attachment are prominent factors predictive of positive college adjustment, academic motivation, and persistence in student-athletes of color at PWIs (Hyatt,
Four instruments were utilized in this study to obtain descriptive data on the non-cognitive variables influencing student-athletes of color ability to attach to their school and to be academically motivated. The four instruments were; the Academic Motivation Scale College Version (AMS-C28; Vallerand et al., 1992), the Student Adaption to College Questionnaire (SACQ; Baker & Siryk, 1984, 1989, 1999), the Academic Buoyancy Scale (ABS; Martin & Marsh, 2008), and the General Self-Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995). Each instrument will be briefly described in this section but a thorough overview of each is followed in chapter 3.

The SACQ (Baker & Siryk, 1984, 1986, 1989, 1999) contains four subscales, academic adjustment, social adjustment, personal-emotional adjustment, and institutional attachment, to predict college adjustment and need for psychological assistance in students (Baker & Sirky, 1984, 1986, 1989, 1999). Students capable of adjusting to college develop a better sense of belonging and attachment to their institution that may have a positive effect on their academic performance and motivation (Deci & Ryan, 1985, 1991; Ryan & Deci, 2000). The motivation to perform academically is believed by Deci and Ryan to be the inspiration that leads students to persist towards goal commitment. I utilized the Academic Motivation Scale College Version (AMS-C 28; Vallerand et al., 1992, 1993) that is designed to identify the type of motivation—amotivation, extrinsic, or intrinsic—that moves students achieve.

In addition, gaining better understanding of how student-athletes of color perceive their ability to complete a task and their self-evaluation of their psychological hardiness towards everyday setbacks could also be helpful characteristics that may contribute to college success. Therefore, exploration of the participants’ level of self-efficacy (Bandura, 1977, 1994, 1997) through the use of the General Self-Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995)
measured overall efficacious behavior and belief toward challenging tasks. To measure how student-athletes’ perceived their resiliency toward daily setbacks and challenges, I used the Academic Buoyancy Scale (ABS; Martin & Harsh, 2008, 2009) to explore how psychologically resourceful students rate themselves toward daily academic challenges on campus. The following questions were addressed in this study:

Research question 1:

Does self-efficacy, college adjustment, and academic buoyancy among student-athletes of color relate to extrinsic motivation toward academics?

Research question 2:

Does self-efficacy, college adjustment, and academic buoyancy among student-athletes of color relate to intrinsic motivation toward academics?

**Significance of the Study**

Much attention (Mangold, Bean, & Adams, 2003; NCAA, 2009; Pearson & LeNoir, 1997) has been given to the rise in attrition and the fall in graduation rates among student-athletes of color in comparison to White students overall. White college students have managed to sustain a higher-than-average graduation rate over the years they have also managed to decrease or level off their rate of attrition. This difference is in vast contrast to the rates of minority students overall. One aim of this study was to identify how non-cognitive factors like college adjustment, attachment, self-efficacy, and academic buoyancy may influence the perceptions of student-athletes of color at PWIs to better understand how these factors related to academic motivation.

The findings of this study would benefit colleges and universities that identify as predominantly White institutions (Brown & Dancy, 2010) and have sports programs that
participate in NCAA competitions. College administrators and coaches who often look to attract and retain student-athletes of color to their PWI campuses so they can increase diversity, win games, gain profit, or to offer underrepresented students a chance at a college education, would also benefit from the findings of this study. The information gleaned from this study may increase awareness about the needs of students of color and how coaches can best recruit these students and how colleges can best retain them. I theorize that PWIs who choose to make some necessary changes at their schools to be better at meeting the non-cognitive needs of their student-athletes of color may open the opportunity to increase their chances of retaining them.

Higher retention of student-athletes of color (Bean, 1980; Hyatt, 2003; Mangold et al., 2003) could serve the psychological and racial welfare of the minority students and help PWI campuses meet the potential goals of increasing graduation rates and decreasing attrition rates within this population. Some options to consider would be the implementation of more targeted psychological and counseling programs that address the specific needs of this population along with more comprehensive academic plans to help the minority student community be more successful. College coaches and admissions officers who recruit from urban communities that consists mainly of low-income minority families may also benefit from this study. These officials would be able to gain increased awareness on how student-athletes of color integrate into PWI campuses and based on the information from this study. At that point, they use the information to can make the necessary adjustments to their recruiting strategies in ways to better prepare minority athletes for the transition.

Academic advisers, college sports psychologists, high school counselors, and general psychological counseling professionals could additionally benefit from the findings of this study as it pertains to student-athlete wellness. Sports and general psychological professionals would
gain stronger understanding of the non-cognitive factors that would need to be addressed when working with student-athletes of color to resolve issues around their academic motivation and college adjustment. High school counselors would be better equipped to discuss these issues with college-bound minority students who intend to play sports at a predominantly White institution. Such conversations had at the high school level with future college athletes may help them better prepare for that environment. School mental health and academic professionals at the high school and higher education levels have the most to gain from information obtained from this study; information that helps them design programs to address the needs of student-athletes of color that may influence their decisions to leave college (Tinto, 1985). In addition, the information could be used to help increase minority student attachment to the institution, create a sense of belonging (Goodenow, 1993; Goodenow & Grady, 1993), encourage better adjustment to college (Baker & Siryk, 1984, 1989, 1999), stimulate academic motivation (Deci & Ryan, 1985), and raise overall graduation rates.

**Limitations of the Study**

There are limitations to this study. For one, participants in this study were student-athletes of color only; non-athletes who are of color were not included. The focus of the study was on student-athletes of color who are currently enrolled at a college or university and are considered eligible athletically to play by the NCAA and not students who have withdrawn, failed out, dropped out, who are alumni, or have left to pursue professional athletic careers or other professions. Not looking at minority students overall or former student-athletes understandably narrows the responses to current students only and excludes data from those students who left school or failed to persist; it also excludes responses from those who graduated.
Another limitation of this study was the primary focus on the non-cognitive factors (i.e. social support, sense of belonging, self-efficacy) as instrumental components in minority student-athletes’ academic motivation. Despite traditional studies that have focused on cognitive factors (intellectual) as predictors of college success, the current focus on non-cognitive factors as the determinants for institutional attachment and academic motivation is meant to offer an alternate view. In addition, this study focuses on colleges and universities that demographically identify as predominantly White institutions (PWI) and exclude schools that primarily serve racial minority students such as Historically Black Colleges and Universities (HBCUs) and Hispanic Serving Institutions (HSIs).

This study also did not include PWI schools located in various geographic locations (i.e. rural, urban, suburban) for a comparison study. Also, not explored was how the external environment and surrounding community plays a role in student-athletes of color’s decision to attach or be motivated. Furthermore, student-athletes of color who racially and culturally identify as biracial or mixed and may strongly connect with their White race rather than their Black one will not be partitioned out in the analysis. Biracial identifying students participating in this study may have conflicting responses in this study. Biracial students, who are part White and part another race, may perceive college differently and have personal and social needs that differ from other minority students. Biracial students who strongly identify as White but find themselves not accepted by the White student body neither by the minority student body could provide alternative views if included in this study. The responses to the questions I posed in the survey could serve as rich information for future qualitative study or a mixed-method design study to document in detail their college experiences. However, no interviews were conducted in this quantitative research study.
Not included this study is the data collected on the sexual orientation, religious, and spiritual beliefs of the minority student-athlete participants. These important factors are interlinked with sports history at the college and professional levels. How students identify with their sexual orientation or faith beliefs can also impact how they perceive adjustment and attachment to their PWI campus and how it affects their academic motivation. Lastly, this study did not look at the level of academic rigor or national ranking status of each participating PWI; neither will it take into consideration the student body size (i.e. small, medium, large) on campus. Those factors may also impact the experience of a minority student-athlete and their perception of attachment due to the size and academic rigor and national rank of their school.

**Definition of Terms**

The following alphabetized list contains definitions pertinent to this study.

**Academic Achievement:** A student’s self-regulation of their academic learning, personal growth, and classroom performance (Zimmerman, 1990).

**Academic Adjustment (AA):** One of the four subscales of the Student Adjustment to College Questionnaire (SACQ). The Academic Adjustment subscale measures a student’s ability to deal with various academic demands that are part of the college experience (Baker & Siryk, 1989).

**Academic Buoyancy:** Academic buoyancy refers to an individual’s everyday academic resilience within an academic context. It describes the students' ability to successfully deal with academic setbacks and challenges that occur during the course of school life (e.g., poor grades, competing deadlines, exam pressure, difficult schoolwork; Martin & Marsh, 2008a, 2008b).

**Academic Self-Concept:** One’s knowledge and perception of one’s academic ability (Marsh & Seaton, 2013).
**Adjustment:** The assumption that adjustment to college is multifaceted and has many degrees in which it can be rated as successful or not successful. Adjustment to college also requires students to employ various coping methods to adapt (Baker & Siryk, 1999).

**Attrition:** Students who have enrolled in college but have either not persisted, dropped out, failed out, or not attained a degree (Bean, 1980).

**Cognitive Factors:** An assessment of intellectual factors such as the students’ high school GPA, SAT score, locus of control, and metacognitive skills as predictors for college adjustment and success (Hall, Smith, & Chia, 2008).

**Expectancy-Value:** An individual’s belief to expect success in relation to a task before attempting it. The task has been assessed by the individual to have some value and worth the risk to attempt it or to complete it (Wigfield, & Eccles, 2000).

**General Self-Efficacy Scale:** An individual’s belief that he or she can perform difficult tasks or handle adversity in various areas of their functioning. An individual’s perception of self-efficacy leads to goal setting, persistence, and resilience towards setbacks and obstacles (Schwarzer & Jerusalem, 1995).

**Institutional Attachment (IA):** One of the four subscales of the Student Adjustment to College Questionnaire (SACQ). The Attachment subscale focuses on a student’s satisfaction with the college experience in general and with the college he or she is attending in particular Baker & Siryk, 1989).

**Involvement:** Involvement refers to the amount of physical and psychological energy put forth by a student toward academic and social participation in school (Astin, 1975, 1984).
Minority / Students of Color: Racial and ethnic groups that are not strongly represented in the United States. This label is usually associated with African-Americans, Hispanic/ Latino, Native Americans and Asian American (Simpson & Yinger, 2013).

Motivation: The feeling an individual gets and is moved to complete an action. What motivates the individual to complete the act may be an external reward (extrinsic motivation) or done for internal benefits (intrinsic motivation). Deci and Ryan (1985) see both motives tied to basic human needs for autonomy, competence and relatedness (Deci & Ryan, 1985, 1991; Ryan & Deci, 2000).

Non-Cognitive Factors: Factors that relates to the social, attitudinal, mood, and emotional needs of an individual (Tracey & Sedlacek, 1982; 1985).

Persistence: A student’s effort to move from one grade level to the next. A student’s ability to maintain enrollment each semester and progress towards degree attainment (Peltier, Lade, & Matranga, 1999).

Personal-Emotional Adjustment (PEA): One of the four subscales of the Student Adjustment to College Questionnaire (SACQ). The Personal-Emotional subscale measures how a student feeling psychologically and physically in their attempt to adjust to college (Baker & Siryk, 1989).

Predominantly White Institution (PWI): Are colleges and universities that have 50% or more of their student body comprising of White students and the remainder are students of color. Historically, some PWI schools have only admitted White students in the past, which established them to be recognized as a PWI (Brown & Dancy, 2010).

Retention: An institution’s ability to keep a student enrolled until he or she graduates (Furr, 2002).
**Self-Efficacy:** Perceived self-efficacy refers to an individual’s belief in his or her ability to affect the events of lives. This central belief is the foundation of motivation, personal performance, accomplishments, and overall well-being (Bandura, 1977, 1994, 1997).

**Sense of Belonging:** A student’s perception of belonging and psychological membership to the school environment (Goodenow, 1993).

**Student Adjustment College Questionnaire (SACQ):** A comprehensive questionnaire designed to measure adjustment to college and the need for psychological services in college students (Baker & Siryk, 1989).

**Student-Athlete:** A college student who participates on a NCAA varsity athletic team offered by their institution and competes intercollegiately for that college or university. The student may be attending the university to play sports with the assistance of an athletic scholarship or no scholarship at all.

**Social Adjustment (SA):** One of the four subscales of the Student Adjustment to College Questionnaire (SACQ). The Social Adjustment subscale contains items that pertain to the social demands and expectations of college (Baker & Siryk, 1989).
CHAPTER 2: REVIEW OF THE LITERATURE

History of College Athletics and Student-Athletes of Color at PWIs

During the 1700 and 1800s, minority students were not permitted to attend the top colleges and universities due to segregation practices and Jim Crow laws (Hawkins, 2010). Hawkins detailed his experiences as a college athlete in the South when Blacks were repeatedly denied the opportunity to attend White institutions of higher learning. Blacks have always had unequal access to sports, which explains why they had to form their own professional baseball and basketball leagues (Hodge, Harrison, Burden, & Dixson, 2008). Hawkins explains these reasons to be why many Blacks turned to Historically Black Colleges and Universities (HBCUs) for their higher education. It was their only option. It was not until 1954 that the United States Supreme Court overturned the *Plessy v. Ferguson* (1896) law and enacted the *Brown v. The Board of Education* (1954) ruling that abolished segregation in schools (Hodge et al., 2008).

Part of the reason many minorities were not getting a fair chance at college was in direct relation to the high schools they were attending. Many minority students attended high schools located in urban communities where school buildings had poor infrastructure, unsatisfactory interior conditions, with inadequate teachers and resources (Hodge et al., 2008). The *Brown* (1954) ruling helped begin to change those inequities. Although most schools did not agree with the *Brown* ruling, they still conceded to the law, slowly opening up their doors to minority students. The *Brown* ruling opened up the opportunity for PWIs to view minority students differently. College coaches and administrators started to view minority students as eligible students who possessed the potential to enhance their athletic programs (Hodge et al., 2008; Washington, 2004).
Washington (2004) explored the early history of collegiate athletics at PWIs dating back to the 1780s when prestigious universities only offered sports as a recreational outlet to their students. It was nowhere close to the competitive level of college sports today. At that time schools did not have vast resources or grand facilities to spark student interest in sports. However, by the late 1700s into the early 1820s, interest in playing sports grew immensely on college campuses, particularly at schools such as Yale, Harvard, Amherst, Williams, Brown, Bowdoin, and Dartmouth (Washington, 2004). To address the growth in interest, college presidents and administrators assembled a committee to create rules to help regulate and govern sports competitions. What resulted was the forming of the pioneering major conferences that were named the Big Ten (1895), Ivy League (1898), Big Eight (1908), and the Pacific Ten (1915) (Hodge et al., 2008; Smith, 2001; Washington, 2004).

University administrators recognized the popularity of college sports and how it was able to draw much needed attention and revenue to their schools. Sports increased student body involvement in the school (Astin, 1985) and garnered alumni support and donations. There was a natural opportunity for school officials to capitalize on this trend (Washington, 2004). By the early into the late 1900s, the interest in college sports blossomed and grew to a level where colleges had to expand the number of varsity sports they offered. Initially, many colleges began the expansion of their athletic programs with the most popular sports first, starting with the expansion of the football, basketball, and crew programs, and later offered options such as tennis, swimming, rugby, and baseball (Washington, 2008). With the rapid growth in interest of college sports, university officials saw it was evident there had to be an increased need for more regulation and policy in college competitive sports. This awareness led university presidents to call for the formation of the Intercollegiate Athletic Association (IAA), which later changed its
name to the National Collegiate Athletic Association (Hodge et al., 2008; NCAA; Smith, 2001; Washington, 2004).

The creation of the NCAA brought new regulations, policies, and procedures to college sports that helped make it both safer and more profitable (Hodge et al., 2008; Washington, 2004, Zimbalist, 2001). The current role of the NCAA remains as the main regulator and policymaker for college sports, but it also works to increase marketing, ticket sales, merchandising, and licensure to increase revenue and profit for the colleges it serves (Donnor, 2005; Washington, 2004; Zimbalist, 2001). Larger universities benefit more than smaller schools from the NCAA’s services because their high-profile athletic programs compete on a national scale pitting their star athletes against each other to increase their school’s visibility and revenue.

The NCAA helped to grow the college conferences from a small group of collaborative schools into a national network and elevated their notoriety on a national level. The organization also created conference championship and national championship games that showcased athletes in national tournaments to further meet the growing needs of the dedicated college sports fans and the profit-eager administrators (Washington, 2004). The NCAA was not the first organization to allow student-athletes of color to compete at the college level. It was the smaller National Association of Intercollegiate Athletics (NAIA), formed in 1940 that welcomed such small schools as liberal arts and teachers colleges that first allowed students of color to play (Washington, 2004).

Before the Brown (1954) ruling, and many years after the ruling, most PWIs denied admission of minority students to their colleges and prohibited athletic competitions with other colleges that enrolled student-athletes of color (Hodge et al., 2008). Hodges and colleagues identified the major impetus behind the integration of college sports was the need for college
officials and coaches to create winning programs and to use sports as a means to generate revenue. With the opportunity of financial gain apparent, college officials slowly accepted the notion of admitting minority students into their institutions conditionally on the basis of their athletic talent (Hawkins, 2010; Hodge et al., 2008; Smith, 2001; Washington, 2004). Admitted student-athletes of color were not expected to academically achieve at these PWIs but were expected to help the athletic teams win and bring in a profit from games (Hawkins, 2010).

During the Jim Crow era, it was common practice for colleges in the north and south to deny Blacks and other minorities admission to their schools (Hodge et al., 2008; Martin, 2002). Segregation practices coupled with the racial hostility in the United States at that time spawned a rise in college and universities campuses that contained predominantly White students. Jones (1998) describes this period in America as the *Old American Dilemma*, a time when the nation distinctly resisted the idea of social interaction between Black people and White people, including in athletics, and it held onto the mistaken belief that Blacks were inherently inferior to Whites. Southerners took pride in their discrimination and racist practices, for many in the south saw a clear difference between Blacks and Whites and were unwilling to consider them equals (Martin, 2008).

Southern schools resisted the declaration of the *Brown* ruling and were staunch opponents to the integration of their schools and intercollegiate sports. Many schools implemented unwritten policies and initiatives to forbid White teams from competing with teams that fielded Black athletes (Hodge et al., 2008; Lapchick, 2008; Martin, 2002). Martin discussed what the *gentleman’s agreement* meant between the colleges of the north and the colleges of the south. It was an unwritten agreement between schools on the understanding that northern universities would withhold Black players from their rosters when competing against southern teams. This
agreement was set in place to avoid embarrassment for both schools. The agreement even applied to competitions held up north (Martin, 2002). Even though most southern schools strictly banned minorities from participating in college sports during the Jim Crow era, northern schools, admitted Blacks and other minority students into their universities and allowed them to play sports (Martin, 2002).

Black athletes were treated as second-class citizens on the athletic fields despite being allowed to play in northern schools. Martin (2002) mentions such pioneer Black athletes as Moses Fleetwood Walker, in 1881, who was the first Black athlete in any organized sports who attended Oberlin College, a PWI, and played baseball for the school. William H. Lewis and William T. S. Jackson were the first Black athletes to play football at a northeastern institute, Amherst College in 1889. Later in the 1930s, Jesse Owens was a track star at Ohio State University who became an Olympian in the 1936 Olympics (Hodge et al., 2998, Martin, 2002). Still, these Black pioneer student-athletes were treated with hostility during athletic competitions, especially against southern schools. Opposing teams would commit egregious acts of violence and defamation against Black athletes during competition. Acts such as punching, stepping on, kicking, and even spitting on these players and did so with excessive gang-tackles in football games while they spouted derogatory racial slurs in the process (Martin, 2002). All the while, the same PWI colleges and universities these athletes played for continually refused to defend them as part of their student body (Martin, 2002).

Before Brown (1954) it was common for PWIs to give malevolent treatment to pioneer Black student-athletes and other minority students by not allowing these students to live on campus or eat in the cafeterias—or anywhere on campus for that matter. Jesse Owens, the Ohio State University track star and Olympic athlete, was one of those students not allowed those
privileges on his PWI campus. However, when he was no longer a student on campus grounds, both Black and White fans cheered him for his athletic performance as an Olympian (Hodge et al., 2008). Those mixed messages were customary during more racially divided times in America.

In an effort to win more games, northern colleges continued their recruitment of Black athletes for their athletic programs. This ultimately led to the gradual demise of the gentlemen’s agreement in the 1930s. The fall of this unwritten agreement started in the Big Ten Conference, a prominent northern conference at the time, when the basketball program was on the rise. Many schools in the Big Ten Conference recruited talented minority basketball players who they no longer wanted to sit on the bench during competitions. It became evident that doing so clearly decreased their chances of winning games (Donnor, 2005; Martin, 2002; Zimbalist, 2001). The increase in the number of Black student-athletes who chose to attend northern PWIs created an impression of tokenism on these traditionally White teams (Hodge et al., 2008). As an outcome, the 1970s saw White coaches such as Paul “Bear” Bryant at the University of Alabama and Adolph Rupp at the University of Kentucky—both from southern schools—pioneer the trend of recruiting Black students to play for their programs (Hawkins, 2010; Hodge et al., 2008).

From the 1950s to present, minority students have primarily been recruited to play on revenue-generating sports teams of football, basketball, and track and field. Most minority athletes remain concentrated in those sports that send a message to the athletes that they are capable only of understanding the violent and physically demanding sports (Hodge et al., 2008). In contrast, White student-athletes remain overrepresented in such sports as tennis, swimming, soccer, volleyball, hockey, and golf, to name a few, suggesting the stereotype that these sports cater to highly intelligent and refined people (Hodge et al., 2008; Zimbalist, 2001).
As previously stated, PWIs opened their doors to minority students primarily to play sports and to help their programs win games, gain more exposure, and make more money. Even the inception of the NCAA was charged with the goals of finding ways to increase interest in college sports, help teams to get more wins, and to garner more revenue from its efforts (Donnor, 2005, Zimbalist, 2011). Donnor’s (2005) research examines the history of PWIs and their relationship with the NCAA and how these institutions have long capitalized on the talents of young student-athletes of color for business gains. Donner contends that student-athletes of color look to predominantly White colleges and universities as their chance to play sports and to earn a degree, but also acknowledges other stakeholders involved who harbor different intentions. Some coaches have a greater interest in cash bonuses and incentives for meeting goals such as number of wins, tournament appearances, or championship titles (Zimbalist, 2001) than academic welfare of the exploited minority student-athlete.

The academic and athletic administrators themselves had their focus on the interest of exploiting these students to gain national visibility for their schools from television and radio contracts, marketing and sales of school merchandise, corporate sponsorship, and ticket and concessions sales from the newfound attention. Not to mention the increase in private booster and alumni involvement and with large donations (Donnor, 2005; Zimbalist, 2001). The NCAA is federally registered as a non-profit organization but also gets a piece of the pie. The NCAA boasts revenue gains of $871.6 million from 2011-2012, up to $912.8 million a year later in 2012-2013, but admits that 96% of that revenue is distributed back to the colleges and universities it sponsors (NCAA, 2013). These numbers present a clear understating of how and why college sports have emerged into the high-profit machine they are today, evolving from their very racially discriminative past into a more accepting and diverse present forged off the
The hard work of many minority student-athletes. Many racial issues of the past remain today as student-athletes of color struggle to adjust at PWIs post *Brown v. Board* (1954) ruling.

**Contemporary Issues Student-Athletes of Color Face**

Student-athletes of color continue to battle discrimination on college campuses today as they did in the past. Many athletes of color vie for acceptance at colleges with communities primarily comprised of White students (Carter-Francique et al., 2015; Cooper, 2012; Holmes et al., 2000; Melendez, 2006, 2015). In 2015, the University of Missouri-Columbia (MU) and the University of Oklahoma (OU) were on the news as the epicenters of racial tension between minority students, university officials, and Greek life (Candea & Sunseri, 2015; Tracy & Southall, 2015; Wagner, 2015). At MU, athletes of color on the football team orchestrated a protest along with other non-athletes against the slew of racial attacks that occurred on campus. Their protest called for the resignation of the university president and it was achieved due to officials’ lack of rapid response to the concerns of their minority community on their PWI campus (Tracy & Southall, 2015). At OU, members of the football team of various races, along with some coaches, stood in solidarity and protest to the recording of the racial chant by White male members of the Sigma Alpha Epsilon fraternity who all confidently used racial slurs to demean and exclude Black students from their Greek community (Candea & Sunseri, 2015; Wagner, 2015).

Student-athletes of color deal with negative stereotypes (Cooper, 2012) at PWIs that originate from myths that label these students as *dumb jocks* unable to compete academically. Cooper traces this belief back to the historical theory suggesting Blacks to be innately gifted athletically but intellectually inferior to Whites. Student-athletes of color often face racial stereotypes on PWI campuses that contribute to their poor psychological adjustment, academic
under-performance, and limited personal development (Cooper, 2012). In an attempt to
disconfirm these stereotype threats, Cooper (2012) acknowledges the psychological pressure
these student-athletes put on themselves in order to fit in often backfires leaving these athletes to
feel detached from their university.

Carter-Francque et al. (2015) identified three areas in their study where student-athletes
of color on PWI campuses struggle to fit in. The authors connected these struggles to (a) lack of
a culturally diverse campus where students of color do not have other students of color to
identify with to feel welcomed and included; (b) a trend of student-athletes of color being
recruited from under-resourced schools and neighborhoods, who enter college with decreased
social capital and lower academic preparation for the rigors and expectations of college; and (c)
that most PWIs lack large communities of minority students which raises an issue for student-
athletes of color who may be interested in building social supports. Parham (1993) proclaims
student-athletes of color come up against similar developmental challenges as non-student-
athletes do. However, being an athlete brings additional issues such as (a) balancing athletics and
academics; (b) coping with social isolation; (c) managing athletic success; (d) managing physical
health that includes injuries and rehabilitation; (e) managing relationships with coaches, family,
teammates, peers, and the community; (f) having to adjust to the transition from athletics into the
professional world (Parham, 1993).

Male and female student-athletes of color share similar challenges today as the pioneers
that came before them have. Some contemporary issues currently faced by these students exist in
the areas of recruiting practices by coaches, athletic scholarship offers from PWIs, lowered
academic standards for admission for athletes, and the opportunity to play professionally
(Beamon, 2014; Person, Benson-Quaziena, & Rogers, 2001; Zimbalist, 2001). College coaches
purposely target urban neighborhoods with the goal of finding their next big-time recruit. They patrol impoverished communities to spot the next talented minority boy or girl who is determined to seek a way out of his or her current status (Donnor, 2005; Zimbalist, 2001).

Donner (2005) opens up about the recruiting practice of selecting athletically talented students who are academically poor performers. The culture that is created is one where minority students are admitted into PWI schools to play sports but are unable to compete academically. Many minority athletes are admitted into these high-profile schools with the minimum requirement for academic entrance scores on national tests such as the SAT and ACT, and are often admitted with a lower GPA than their college average (Zimbalist, 2001). This desire to create winning teams and make a profit is far more important to PWI coaches and college officials than the academic success of these athletes (Beamon, 2014). Conditions such as these may suppress minority student-athletes’ feelings of self-efficacy, diminish their academic confidence, and could tifle their ability to socially integrate into a PWI culture. Tinto’s (1985) work would support these reasons as for why students of color leave college.

Student-athletes of color brought onto PWI campuses often end up being exploited (Donner, 2005) for their athletic talents and skin color. The coaches give little consideration when recruiting these young students of the potential effects attending their PWI could have on their college experience; instead, encourage them to commit to attending their institution. Coaches neglect to mention the negative sociocultural and psychological effects students may experience in attendance that could impact them academically and emotionally (Person, Benson-Quaziena, & Rogers, 2001). Sellers, Kumperminc, and Damas (1997) conducted a study on the life experiences of Black female student-athletes to better understand the differences in perceptions these athletes had in comparison to their White female student-athletes, Black female
non-athletes, and Black male student-athletes. Interestingly, the Black female student-athletes reported earning lower grades and having more academic struggles overall than their White female student-athlete teammates reported. As for minority males, Donner (2005) points to Black males who participate in high-profile, revenue-generating sports (i.e. football, basketball) who are brought to campus to drive up competition and to win games. Winning games generates national attention and this attention creates a windfall of alumni and booster support where the increase of donations comes in and the athletic department profits. These profits go on to fund other less popular sports such as crew, swimming, tennis and golf to keep them viable (Donner, 2005).

Researchers Donner (2005) and Zimbalist (2001) make the case that high-revenue sports played by minority student-athletes, in part, help fund the education of White student-athletes who play the less popular sports. Most often, these White student-athletes who play these sports already have strong academic skills, good financial status, and social privilege their minority counterparts do not possess.

In this section on contemporary issues, various topics student-athletes of color face on PWI campuses today are highlighted. Issues such as racism, discrimination, gender, cultural differences, targeted recruiting practices, and feelings of alienation continue to have a major negative impact on minority athletes. In addition, I address several non-cognitive factors that are critical variables that impact the academic progress of these athletes.

**Discrimination and Stereotype Threats Toward Student-Athletes of Color**

Some student-athletes of color walk around their PWI campuses feeling academically and socially inferior to White peers (Cooper, 2012; Pewewardy & Fey, 2004). Cooper (2012) argues the academic, athletic, and social structures of these prominent White colleges and universities
mimic that of US society, meaning they are similar in the ways that Whites are the majority. These structures are designed to hold all the power and make major decisions that exclude minority students’ input and utilize the athletic prowess of these athletes for entertainment, financial gain, and national notoriety (Cooper, 2012). However, student-athletes of color who choose to attend PWIs do so with the likely chance they will experience discrimination and stereotype threats (Cooper, 2012; Hawkins, 2010; Stone, Lynch, Sjomeling, & Darley, 1999).

Prejudice and resentment not only derive from the student body, but faculty as well, often projecting stereotypes of dumb jocks onto student-athletes which assumes these students are unable to do the academic work (Leach & Conners, 1984; Stone et al., 1999). Leach and Conners (1984) seminal study helped explain this exclusion from social networks on PWI campuses to come from a misconception that student-athletes live luxurious lives on campus due to their status and scholarship opportunities. Some faculty members base their stereotype labels on some of the courses student-athletes of color have been known to take that lack academic challenge (Singer, 2005). Faculty and students who continue to disbelieve in the academic ability of student-athletes of color consistently place these athletes in a position to perform poorly as they fight to disconfirm those labels (Stone et al., 1999).

Donnor (2005) offers the issue where student-athletes of color have to manage two worlds while attending PWIs in order to survive. One world consists of the choice to be a student-athlete who can be seen as either the campus hero or campus idiot (Engstrom & Sedlacek, 1991) in the face of his or her peers; the other is being a racial and ethnic minority. Those two worlds collide on campus when student-athletes of color are revered in the athletic arena by alumni, fans, and powerful boosters, and at the same time, these people control the structures that very much deny these student-athletes equal opportunities to earn a degree,
wealth, and power of their own (Donnor, 2005). White fans of college sports may feel student-athletes of color are only at the university to play sports. These attitudes and beliefs generate a school culture and a campus climate that is not inclusive of athletes of color and rejects diversity (Cooper, 2012; Hawkins, 2010; Nora & Cabrera, 1996).

Engerstrom and Sedlacek (1991) attribute feelings of caution and weariness White students exhibit towards student-athletes of color to stem from the historic past between Blacks and Whites. These researchers found White students highly rated behavior to be suspicious when a student-athlete in general received an “A” in a class, hinting at disbelief in their academic capabilities. This academic and athletic resentment spills over to other acts of discrimination. Black student-athletes in D’Aguelli and Hersberger’s (1993) study reported experiencing prejudicial behaviors on campuses such as being spat on, verbally harassed, destruction of personal property, being chased, or physically assaulted were the result of aggressive acts perpetrated by White students intended to isolate and exclude student-athletes from the social mainstream.

Stereotypes applied to student-athletes of color historically originated in Black culture in connection to enslavement (Beamon, 2014; Stone et al., 1999). Historically, Whites identified themselves to be more socialized and proper, even courteous, known to shy away from aggressive athletic competition and confrontation. Conversely, enslaved Blacks, were given labels as being more genetically, physically, and athletically superior (Stone et al., 1999). Even though Whites believed they were intellectually superior to Blacks, and that Blacks were academically inferior, Whites have always explained Black physical superiority to be due to their fitness from enslavement. Characteristics that are genetically passed down through the generations and not learned or developed (Stone et al., 1999). When Stone et al. asked White
student-athletes to rate their Black peers on their perception of intelligence and academic capabilities, they found White students rated Black student-athletes to be less intelligent, less academically prepared, and more temperamental. In contrast, Black student-athletes rated their White peers as less competitive and lacking in athletic skill (Stone et al., 1999).

What is clear from a study by Sailes (1996a, 1996b) is understanding that White students do not expect much when it comes to academic performance from minority student-athletes, or minority students overall. Also, Black student-athletes do not expect much from White students in the areas of athletic skill or competition when it comes to sports (Stone et al. 1999). What cannot be overlooked is the negative impact stereotype threats pose on student-athletes of color academic performance, their sense of belonging, perception of self-efficacy, and academic motivation while on PWI campuses. Minority students in general regularly face stereotype threats from White students where exposure to these threats often leads minority students to experience feelings of anger, aggression, and the desire for militant action. Alternatively, it can also lead students to become withdrawn from the student body and to exhibit self-hating feelings due to the labels (Stone et al., 1999).

Acts of discrimination experienced by minority students on PWI campuses have shown to have detrimental effects on these students sense of self-worth and psychological well-being (Stone et al., 1999). Stereotype threats have the ability to breach the psyche of student-athletes and cause anxiety; anxiety that leads to poor academic and athletic performance. Stone et al.’s (1999) study of White and Black student-athletes completing a golf task after taking a pretest about racial stereotypes found both Black and White participants performed poorly on the task after taking the test. White athletes rated their poor performance to stem from anxieties around their athletic ability in the sport where as Black student-athletes rated their poor performance was
due to their anxieties around their intelligence in the sport (1999). These findings offer the understanding that Black student-athletes fear being judged by their academic abilities for many doubt their academic skills where White student-athletes are warier of their athletic skills and abilities in comparison to their minority peers. These anxieties, according to Stone et al., arise from fear of confirming or disconfirming stereotypes attached to being a minority student-athlete.

Nora and Cabrera’s (1996) research proclaims student-athletes of color who fail to adjust to their PWI colleges and universities interpret their perceptions as the campus being a racially discriminative climate and detect the college campus to be hostile. This may lead to a lower quality college experience for these students. A racially discriminative climate negatively impacts minority student-athletes’ ability to attach to the institution or to persist towards graduation. Nora and Cabrera (1996) acknowledge that student-athletes of color who have access to social supports, people they can be in contact with or can lean on, fare better in their ability to refute perceptions of discrimination that may exist in their college environment. Unfortunately, the reality is that many PWIs do not have supports in place to help minority student-athletes, and minority students in general, to adjust successfully to their college.

**Black Students’ Experience at PWIs**

As discussed earlier, the resistance to allowing Blacks to attend colleges and universities during the Jim Crow era has been historically documented in the US during the times of slavery, racial segregation, and the civil rights movement of the 1960s. During those times in American history, powerful White educators and government officials chartered the early colleges and strategically designed these institutions to cater to a White student body. A majority of colleges and universities in the US demographically identify as predominantly White by makeup, so
many researchers understand the reasons why Black students continue to struggle to feel welcomed on PWI campuses (Hinderlie & Kenny, 2002; Leach & Conners, 1984; Museus, 2008; Sedlacek, 1999). Today, Black students on PWI campuses share feelings of alienation, racism, and exclusion their predecessors felt in the past when they attempted to break past the color barriers for their education (Hinderlie & Kenny, 2002).

Black students have always faced struggles in forming an attachment to their PWI colleges and universities. It is often attributed to the lack of belonging and membership felt at these institutions (Leach & Conners, 1984; Sedlacek, 1999). Researchers who study attachment understand that these bonds are made when students are able to form secure relationships with others. For Black students on PWI campuses, these bonds are difficult to form and hinder their ability to establish a level of attachment to their institution. However, Sedlacek’s (1999) 20-year longitudinal study of Black students’ adjustment to college has shown why these students continue to struggle with the adjustment to college compared to White students, one reason is due to the insufficient enrollment of Black students.

With a different approach to college adjustment, Black students choose to form bonds and seek a sense of community through off-campus resources and organizations (Sedlacek, 1999), which helps to deflect the feelings of alienation and isolation they feel on campus (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999; Hershberger & D’Augelli, 1992; Hinderlie & Kenny, 2002; Museus, 2008; Sedlacek, 1999).

The Black student experience on PWI campuses has carried the underlying tone of a contractual agreement, according to Leach and Conners (1984). This agreement is more prominent between Black student-athletes and their PWI college sports programs; agreement to “play for pay” (Leach & Conners, 1984; p.33), or otherwise stated, the exchange of athletic
talents for a college degree. Leach and Conners liken that reference to the Black non-student-athlete and their PWI, where it is the exchange of their demographic enrollment (being a minority) for the opportunity to attain a college degree. What is neglected from that exchange is the promise that Black students who attend PWIs would get membership into the social networks of the White student body (Museus, 2008). Museus believe these barriers Black students experience on White campuses pose negative factors in students’ abilities to find membership and inclusion on these campuses and their subcultures.

PWI campuses conveyed the message to Black and minority students that they are unimportant, devalued, and not welcomed (Museus, 2008). The historic perception Whites have of Blacks is of academic and intellectual inferiority and the stereotype belief that many Blacks hail from poor urban communities and under-resourced schools (Leach & Conners, 1984). These stereotypes can be impossible to surmount when Black students arrive on campuses already feeling labeled before they have a chance to prove themselves otherwise (Museus, 2008). Museus describes the overwhelming pressures Black students face around their academic abilities to constantly disprove the negative perceptions put upon them by faculty and peers. It is the assumption and perception that Black students are not academically prepared for the academic rigor of college compared to White students.

Cabrera, Nora, Terenzini, Pascarella, and Hagedorn (1999) conducted a study that looked at the perception of the racial climate on campus between White and Black students to see how their experiences compared. Black student participants reported higher feelings of prejudice and discrimination from peers and faculty than their White counterparts. Cabrera et al.’s findings uncovered Black students faced academic and psychological stressors that came from their perceptions of being racially discriminated against in and out of the classroom. The
researchers found these stressors to negatively affect Black students’ academic performance over time (Cabrera et al., 1999; Museus, 2008). What resulted from Cabrera et al.’s study, were Black students reporting feelings of less institutional commitment and attachment that impeded their desire toward degree commitment because of perceptions of prejudice, discrimination, and alienation on their campus.

Coping with racism is part of the cultural adjustment Black students must go through but continues to be a difficult process to navigate at PWIs (Hershberger & D’Augelli, 1992). Hershberger and D’Augelli identified the presence of a social support system—whether it is family, friends, or organization—helped first-year students better cope with the transition into a White student body. These supports allowed Black students to have people to identify with on campus where most of the faculty, staff, and students do not look like them or seem to want them around. White students often interpret the clustering of Blacks and other minority communities and social circles on campus as racial segregation (Ancis, Sedlacek, & Mohr, 2000). In actuality, the reason Black students seek out people similar to their race and culture is to better assimilate to a school that does not represent them and to have these racially homogeneous clusters offers a valuable place of support and cultural validation (Ancis, Sedlacek, & Mohr, 2000; Museus, 2008).

**Latino Students’ Experience at PWIs**

Similar to Black students, Latino students also struggle to adjust to college and form attachments due to lack of social and academic supports. Many studies (Gonzales, 2002; Hurtado, Carter, & Spuler, 1996; Hurtado & Carter, 1997; Rodriguez, Mira, Myers, Morris, & Cardoza, 2003; Schneider & Ward, 2003) show family support and social support play major roles in Latino students’ ability to successfully transition and adjustment at PWIs. A study by
Rodriguez and colleagues (2003) identified family ties to be the primary source of emotional and financial support for Latino students in assisting their transition. In addition, their study also found social support from friends made at the college was the determinant factor for their persistence. These findings meant Latino students who were able to make friends at their PWIs increased their chance of persisting towards graduation due to finding people similar to them who shared their cultural experiences as college students on a PWI campus. Latino students unable to form those friendships appeared to struggle more in their transition and adjustment to college and maintained a lower rate of persistence (Rodriguez et al., 2003).

Schneider and Ward (2003) highlight the importance of family support to Latino students’ capacity to predict these students’ social adjustment and institutional attachment especially if they attend institutions differing from them ethnically and culturally. The understanding that family and social supports serve as strong predictors of Latino students’ successful transition raises more awareness to the negative message PWIs convey when they enroll relatively low number Latino students. In addition, these PWI schools often do not provide adequate support services to help Latino students transition into their campus community to feel included or welcomed. Some other areas Latino students must maneuver are the issues of acculturation and language barriers between them and their predominantly English-speaking peers (Gonzalez, 2002; Schneider & Ward, 2003).

Hurtado and Carter’s (1997) research of Chicano and other Latino students found stresses associated with attending a PWI, notably among freshman students. The Chicano students described feeling racial tension between them and White students, along with feeling psychological sensitivity toward the racial climate on campus. This heightened sensitivity opened the awareness of the Chicano students to notice the majority of the faculty and staff on
their campus to also be White, which elevated the sense of alienation, racism, and discrimination from the student body. These students found it challenging to try to integrate themselves into the college environment with these impressions. Hurtado and Carter concede these factors stymie feeling of belonging and membership when Chicano and Latino students perceive a hostile climate on campus (Hurtado & Carter, 1997; Hurtado, Carter, & Spuler, 1996).

Latino students who highly identify with their culture tend to conflict with their feelings of attaching to their PWI (Schneider & Ward, 2003). Schneider & Ward indicate Latino students highly identifying with their culture may sense less support exists on campus to aid in the acculturation process, where Latino students identifying less with their culture may not have the same perception. A reason high identifying Latino students may feel lack of support on campus connects to underrepresentation of Latino culture on campus. Schneider & Ward also attribute the feeling of alienation to come from the low numbers of enrolled Latino students, which inflates the realization that they have been excluded by the majority race on campus.

A two-year qualitative study by Gonzalez (2002) with two male Chicano students who attended a PWI brought awareness to the topics of the perception of being unwelcome and of omission of membership at their PWI. Gonzalez examined the perceptions Chicano students held toward their PWI and their reactions to the campus culture and broke down their responses into two themes. The themes Gonzalez uncovered were cultural nourishment and cultural representation in the areas of the social, physical, and epistemological worlds on campus. In the social world, the Chicano males described being ignored on campus by faculty and peers along with having no political power on campus. They felt White peers and administration ran all aspects on their campuses. Socially, the males felt marginalized and alienated from their peers and felt they often had to seek permission to do certain activities or be part of events. These
Chicano males often found themselves debilitated by their environment or by others who constantly reminded them that “you can’t do that” or “you are not allowed to do that” (Gonzalez, 2002; pp. 203-204).

The male participants found it difficult to replenish their cultural nourishment for reasons that their campus did not represent their culture, heritage, ethnicity, or race (Gonzalez, 2003). The males viewed everything was “White” (Gonzalez, 2003; p.206) on campus, from the building’s interior décor, its architecture, and the artwork and sculptures positioned around the campus, the participants felt the impression on campus was all White. These physical symbols on their campus were not a cultural representation of them so the struggle to acculturate to the expectations of the White staff and White students was prevalent. Faculty and peers often reminded the participants that English was the preferred language of communication in public and Spanish should be spoken only in private settings (Gonzalez, 2003).

Gonzalez’s (2003) study unveiled how Latino students usually accept the epistemological teachings from a White perspective and not getting the opportunity to hear perspectives from those that reflect their culture. Latino students view this as a limitation to their interpreting of the information taught and battle within themselves on how to connect with it. Moreover, some PWIs fail to offer an opportunity for Latino students to learn more about their culture in an academic setting through the incorporation of Latin music, food, clothing, and other forms of culture into the campus climate.

**American Indian Students’ Experiences at PWIs**

American Indians are a minority group that face similar issues as Black and Latino students that attend PWIs. Some challenges American Indian students face at PWIs is feelings of racism, prejudice, isolation, and exclusion from membership among their White peers.
Yet little research has been done to further study how these factors affect the academic motivation of this group. Lin, LaCounte, and Eder’s (1988) study of American Indian students at PWIs found many students also viewed their campus to be a hostile environment. Upon further review, the American Indian participants in the study perceived hostility on their PWI campus because it lacked a sense of belonging for them that alienated them further and increased the perceptions of the school being a place of contention (Lin, LaCounte, & Eder, 1988).

Researchers (Benjamin, Chambers, & Reiterman, 1993; Lin, LaCounte, & Eder, 1988; Pewewardy & Frey, 2004) studying American Indians in higher education agree on the barriers that impede the academic success of this group. American Indians, in comparison to other ethnic minority groups, post the highest dropout rates and have lower academic performance, comparably (Pewewardy & Frey, 2004). Poor college performance by American Indian students can be connected to under-preparation given at the high school level in combination with poor study habits, responsibility to family, the frequent missing of classes, low economic means, and having to deal with negative stereotype threats from White faculty and peers (Benjamin, Chambers, & Reiterman, 1993; Lin, LaCounte, & Eder, 1988; Pewewardy & Frey, 2004). Many high schools attended by American Indians are poorly resourced which leads to weaker academic standards and college preparation compared to most high schools attended by White students. It is evident that the under-preparation has a negative effect on American Indians academic self-concept at the college level (Marsh, 1993; Marsh & Seaton, 2013; Pewewardy & Frey, 2004).

American Indian students have a higher risk of entering college with a low academic self-concept (Marsh, 1993; Marsh & Seaton, 2013) that sets them up to poorly perform academically and to socially isolate particularly on campuses where a majority of the student body is White
Pewewardy and Frey offer the explanation of why some American Indian students who participated in the study rated ethnic minorities as not being as academically motivated as White students. This viewpoint can be historically explained in the fact that most minority groups have long-suffered marginalization, slavery, oppression, discrimination, and racism by the Euro-American culture over the course of US history (Pewewardy & Frey, 2004).

This objectionable treatment comes from the historic conception of seeing the American Indian as a problem or as savages. American Indians are viewed as a group of people lesser to Whites, which has left an egocentric stain on the memory of some White students on PWI campuses that feeds into the perception of unwelcome and hostility (Lin et al., 1988) on campus.

Moreover, American Indians leaning toward college enroll at an older age compared to traditional students (Pewewardy & Frey, 2004). Some reasons for late enrollment, identified by Benjamin et al. (1993), were late interest and recruitment from colleges along with deep familial responsibility. It is noteworthy that colleges traditionally have not prioritized recruitment of American Indian high school students for higher education, so they often do not consider attending college right out of high school (Benjamin et al., 1993). This creates a perception among American Indian high school students that college is not a viable option for them, or they are not wanted or allowed to attend (Benjamin et al., 1993). American Indian students who strongly identify with their culture can feel a pull to remain connected to family and community responsibilities such as ceremonial events where they may have high absenteeism from their classes to attend (Benjamin, Chambers, & Reiterman, 1993; Lin, LaCounte, & Eder, 1988; Pewewardy & Frey, 2004). Frequent absences for family issues or ceremonial events can be seen negatively from faculty and students; labeling the behavior as immature and a display of low-commitment to academic achievement (Benjamin et al., 1993).
Researchers continue to study American Indian students in higher education, highlighting those who attend PWIs. As the attrition rates remain staggering at these types of schools among this group, research confirms higher dropout rates occur among American Indians highly identifying with their traditional Indian culture than among those who identified as less traditional (Benjamin et al., 1993). Colleges tepidly recruit and under-enroll American Indians to the point they almost have a non-existent presence on most campuses, and when more than half drop out or fail to graduate—those who remain take an average of over six years to graduate compared to the general student body (Pewewardy & Frey, 2004).

At a closer look, the barriers stack up against this ethnic minority group that deter their academic success and motivation at PWIs. Facing constant issues of acculturation, language barriers—where many American Indians are denied the comfort and freedom to speak their native language on campus—along with high enrollment in remedial college courses in response to inadequate preparation in high school, it is understandable why the motivation to persist often wanes, for many, their determination erodes (Pewewardy & Fey, 2004). The American Indian culture encourages attitudes and behaviors that reflect calm, quiet, observation, and peace, which contrasts with the message White students energetically portray on campuses of being outspoken, outgoing, loud, and academically competitive (Benjamin et al., 1993).

**Female Student-Athletes of Color**

Female athletes have faced more obstacles in the world of sports compared to males. In their enduring quest for equal opportunity, national recognition, and athletic respect deserved as competitors, they have mainly seen their efforts impeded by sexism, class, and social status perpetuated by a male-dominated society. Bruening, Armstrong, and Pastore (2005) argue female athletes of color, in particular, have had their voices silenced throughout the history of sports.
Bruening et al. describes the silencing of Black female athletes’ voices to occur when administration and other individuals in power fail to provide equal and adequate exposure for women as they do for male student-athletes. Minority male student-athletes face comparable barriers and acts of discrimination as minority female student-athletes; however, because they are males they generally have been more accepted than minority females. Minority female student-athletes are represented in two minority group statuses, minority females and female athletes (Bruening et al., 2005; Person, Benson-Quaziena, and Rogers, 2001). This dual minority label has caused the experiences of minority female student-athletes to be disregarded and diminished in the literature of sports compared to their minority male counterparts (Bruening et al., 2005).

Minority female student-athletes have historically taken on an invisible status due to their gender, race, and lack of opportunities to compete at the high school and college levels (Bruening et al., 2005; Person, Benson-Quaziena, and Rogers, 2001; Stuarowsky, 2011). Prior to the 1970s, less than forty percent of girls participated in high school sports (Bruening et al., 2005). That meant even less girls had the opportunity to play at the college level even if they wanted to. The opportunities for female athletes overall have grown since the implementation of Title IX law under the Public Education Act of 1972 (Person et al., 2001; Stuarowsky, 2011). The passing of the Title IX law required institutions to provide equal opportunity and accommodations for females to participate in athletics as they would for males. The law required federally funded schools (e.g. elementary, secondary schools and colleges) to provide financial support and resources to all student-athletes regardless of their sex (Person et al., 2001; Stuarowsky, 2011). It resulted in girls and women gaining better access to educational opportunities through sports that was traditionally reserved only for boys and men (Stuarowsky,
Prior to Title IX, less than one percent of funding from college athletic programs went to women’s sports (Person et al., 2001).

Even with federal legislation set in place, it was still not enough to offset some of the negative experiences faced by minority female student-athletes. There would be backlash from secondary schools, colleges, and universities—especially predominantly White institutions—that emanated from the implementation Title IX, depicting these PWI colleges and universities as “White gatekeepers” (Bruening et al., 2005) resentful toward the federal law. Minority female student-athletes for years, fought against the backlash to equally participate in sports, both at the secondary and collegiate levels. What negatively culminated were stereotypical labels being placed on these female student-athletes calling them lesbians and accusing them of “acting like men” (Person et al., 2001). Person et al. saw these labels lead some female student-athletes to succumb to unfavorable behaviors such as eating disorders and nutritional health issues, and to experience sexual harassment from peers and the fans of their sport.

Bruening et al.’s (2005) findings argue that the discriminative effects minority female student-athletes experience on college campuses can leave them feeling as the outsider within, which is a term coined by author Hill Collins. Collins defines the use of the term to describe how one may feel to be invited into a group, but not be fully accepted by the group (as cited in Bruening et al., 2005). In this case, Title IX federally mandated females equal access to athletics as males. Black females on PWI campuses felt invited to play for their sports programs but were not completely accepted nor included by the student body or the athletic department due to race and gender.

Bruening et al. (2005) found disparities between minority female student-athletes and their media coverage when measured against the males’ coverage. Female sports programs in
general, and at all levels, received less media exposure and offered less female role models for young girls who were in professional sports. The media and some college sports fans continue to take female sports less seriously than male sports. It is not uncommon for young black female athletes to be less likely to have the opportunity to play high school sports compared to their White suburban female counterparts (2005).

**Black Male Student-Athletes**

Minority male student-athletes who attend PWIs enter into an athletic system not set up to meet their social needs or support their cultural identities (Killeya, 2001). Much attention has been placed on Black male student-athletes for this group having an increased rate of being academically at-risk on PWI campus and is demonstrated by the low graduation and retention rates compared to White male student-athletes (Beamon, 2014). A recent study by Harper, Williams, and Blackmon (2013) that investigated Division I-A, high-profile, revenue-generating sports programs (e.g. men’s football and basketball) in major conferences; found Black male student-athletes graduated at a rate of 50% in a six-year span compared to 67% of all student-athletes (in all sports), compared to the rate of 73% of undergraduate students overall. Harper et al.’s findings argue that these major PWI colleges and universities are graduating only half the Black male student-athletes they enroll, revealing the barriers these student-athletes still face in their attempt both to play sports and persist toward a degree.

Beamon (2014) acknowledges that Black male student-athletes often battle against acts of discrimination and negative racial, gender, and athletic stereotypes while at these PWIs. Despite the historical challenges Black student-athletes have surmounted in order to be able to participate in college and professional sports, they still face systemic issues rooted in structures of institutionalized racism and biases that hold the belief that the Black man is inferior and is
merely just a dumb jock (Beamon, 2014; Donnor, 2005; Harper et al., 2013; Killeya, 2001; Person and LeNoir, 1997; Singer, 2005). Black male students are ambitiously recruited by coaches from PWIs who practice the selection of students from poor urban neighborhoods often from a single parent, low-income homes who are desperately seeking college opportunities for their sons (Donnor, 2005; Person & LeNoir, 1997; Person et al., 2001).

When the recruitment process concludes and the student agrees to attend the PWI, the transition to a majority White campus follows and this phase has consistently been the most difficult for the minority male to adjust to. Researchers (Donnor, 2005; Person & LeNoir, 1997; Person et al., 2001) explain this transition the minority male student-athlete goes through as one filled with mixed feelings—feelings of anxiety, fear, isolation, and abandonment that follow at the ending of the recruiting process. Suddenly, these males do not get the high-level of attention from the coaches as before, during the recruiting process, and now they have to adjust to a new culture and status of being just another student on campus. In this case, these campuses they have committed to usually are predominantly White where they are now invisible to the student body where a year ago they used to be the superstar in high school, embraced by a neighborhood and culture familiar to them (Donnor, 2005).

Black male student-athletes make up about one-third of the total number of student-athletes in all NCAA college athletic programs (Person & LeNoir, 1997). Person and LeNoir interpret this number as one of every nine Black male students on a predominantly White college or university campus to be an athlete. Black male student-athletes explain the reasons for not feeling included, attached, or a sense of belonging to their PWI to come from the lack of exposure to leadership opportunities on their sports teams and within the university. Furthermore, these students are usually assigned majors with limited academic merit compared
to their White counterparts. Black male student-athletes are also being enrolled in courses less challenging than their White male student-athlete peers. These practices have become accepted in the handling of Black male student-athletes at PWIs which do not help to combat the high attrition rates and low retention and graduation rates that plague this group of students (Person & LeNoir, 1997; Singer, 2005)

**Recruiting Practices**

The recruiting practice of bringing minority students to PWI campuses on athletic scholarships has grown significantly over the past four decades. This practice coaches at PWIs engage in has added to the struggles minority students face in their attempt to integrate (Tinto, 1987) themselves into these institutions. The NCAA encourages colleges to offer athletic scholarships to athletes of color who may not have otherwise gotten the chance to attend college (Rosenthal, 2003). The reality is, on average, those students who do not have the opportunity to attend college predominantly tend to be minority children from poorer schools and communities. College coaches from PWIs have made it regular practice to scout and recruit minority high school students particularly from urban schools and communities (Hawkins, 2010). Njororai (2012) recognizes that many Black students may view their athletic ability as a way to earn a scholarship to go to college. These recruiting practices increase the chances for minority students who earn athletic scholarships to end up at a PWI and increase the risk of these students turning their full attention to sports compared to academics.

There are a higher number of White coaches than minority coaches at the Division I level (Bozeman & Fey, 2013). Bozeman and Fey realize that this leads to the phenomena where more White coaches are out recruiting student-athletes of color than there are coaches of color that may look like them. White coaches may capitalize on the opportunity many minority families
seek, which is to be able to send their child to college on an athletic scholarship (Hawkins, 2010). Moreover, many coaches have found recruiting success by selling the dream of great athletic success to minority students where they can have packed arenas, achieve celebrity-like status, and gain the potential opportunity to play professionally (Hawkins, 2010; Njororai, 2010). The dearth of minority coaches at the college level compared to White coaches unfairly sets the advantage to White coaches who are employed at PWIs to have a stronger presence in the recruiting game (Bozeman & Fey, 2013). With less representation of minority coaches in college athletics, this could lead to moments of less support given to student-athletes of color when they seek the connection and understanding from their coaches. Minority coaches are better positioned to understand Black males and their socialization at a young age to play football or basketball to increase their chances of playing in college or going pro (Beamon, 2014; Donner, 2005; Zimbalist, 2001). Even with the knowledge that many young Black males play sports to draw the attention of college coaches, these coaches use their aspirations of an athletic scholarship to get the upper hand in the recruiting process.

Coaches will often minimize to these students the emphasis of maintaining a satisfactory GPA and the importance of good SAT scores to be admitted to the college (Martin et al., 2010). Zimbalist (2001) reports in his book well-known practices of big-time college coaches from large universities using money and the promise of exposure to pro scouts to lure the interest of prospective students to their schools. Donner’s (2005) study uncovers the practice coaches and admissions offices conduct of lowering or loosening the academic expectations for admissions for student-athletes with a high percentage of those benefiting from this practice to be students of color. Student-athletes of color were admitted into many prominent White colleges and universities on their academic talent and not academic merit, schools they would not have been
accepted to otherwise (Donner, 2005). It was almost common practice in some high profile, major conference schools to admit football players with SAT scores 200 points lower than non-athletes (Donner, 2005). This loosening of admissions standards by PWI universities and their coaches increasingly entices academically underprepared minority student-athletes, usually from urban schools, to attend their institutions that have little or no support for their cultural and social needs.

Chen at colleagues (2010) chart a growing trend of increased budget spending by PWIs in their recruiting efforts of less academically prepared students in exchange for acquiring highly talented athletes. Moreover, these colleges and universities continue to build state-of-the-art athletic facilities in a fervent effort to attract athletically talented student-athletes of color to their institutions (Chen et al., 2010). This contract formed between colleges and their prospective athletes forms an agreement to exchange their athletic skills and abilities for a college experience and degree (Leach & Conners, 1984). Beamon (2014) understands why outsiders of the college athletics community would see these programs as athletic farms for young student-athletes of color because many of them have been brought in to help the athletic programs and to be a pipeline to the pros with little care for their academic achievement, cultural development, and campus membership.

These contemporary issues help to highlight the context of the current educational and athletic environments student-athletes of color struggle to successfully navigate. A full discussion around the importance of non-cognitive factors and its impact on academic motivation will be had in the upcoming section. Such non-cognitive factors such as sense of belonging, institutional attachment, and the establishment of social, and faculty support will be argued and how it influences these students’ ability to adjust to college and persist toward gradation at PWIs.
Critical Variables

Non-cognitive Factors That Affect Minority Students’ Academic Motivation

Past studies have looked at high school grades, GPA, SAT score, and family socioeconomic status (Gaston-Gayles, 2004) as predictors of college adjustment and success. Those previous studies also relied on cognitive factors (intellectual) such as academic skills, critical thinking ability, test-taking skills, and family economic status as measures to predict persistence and graduation rates in minority college-going students. Minority students, however, fare better in academic achievement when studies (Chavous, Harris, Rivas, Helaire, & Green, 2004; D’Aguelli & Hershberger, 1993; Killeya, 2001; Lotkowski et al., 2004; Njororai, 2012; Rodger & Summers, 2008 Sedlacek, 1999; Sedlacek & Adams-Gaston, 1992;Tracey & Sedlacek, 1985; Trevino & DeFreitas, 2014) looked at non-cognitive (attitude or motivational) factors as predictors for college adjustment and academic performance in general.

Research (Chavous et al., 2004; Sedlacek, 1999; Sedlacek & Adams-Gaston, 1992;Tracey & Sedlacek, 1985) has shown non-cognitive factors such as self-concept and institutional satisfaction to be as significant predictors for minority students as cognitive factors. Non-cognitive factors are identified as students’ (a) academic self-confidence; (b) achievement motivation; (c) sense of institutional commitment and belonging; and (d) ability to establish some social support (Gaston-Gayles, 2004; Hyatt, 2003; Lotkowski et al., 2004). By design, PWI campuses historically have not supported the non-cognitive needs that are important to minority students and minority student-athletes’ that aid their adjustment and sense of belonging to the institution. Instead, the lack of support for these critical non-cognitive factors has posed a barrier in these students’ ability to academically thrive (Rodgers & Summers, 2008).
Researchers D’Aguelli and Hershberger (1993), Trevino and DeFreitas (2014), and Njororai (2012) agree that Black and Latino students make the greatest cultural transition from their home life to college life at a PWI. This move away from family and friends causes acute stress (Njororai, 2012) on minority students; they find themselves moving from one culture where they were the majority race, to a campus culture populated primarily by White students (D’Aguelli & Hershberger, 1993). In an effort to understand the factors that influence academic achievement and adjustment for Black students at White colleges, Tracey and Sedlacek (1984) recognized non-cognitive variables as a top predictor for grades, retention, and graduation rates over a six-year period after matriculation (Killeya, 2014; Sedlacek, 1999).

Sedlacek and Brooks (1976) first hypothesized the seven non-cognitive variables critical to minority students’ academic success in college. After an evaluation of the initial seven variables, Tracey and Sedlacek (1984) later added the eighth and created the Non-cognitive Questionnaire (NQC) that measured these variables. Those eight variables are 1) self-concept, measures a student’s ability to understand his or her own culture and how it exists in the larger majority culture and system and measures strong self-feeling, strength of character, and determination; 2) self-appraisal, measures students ability to accept personal deficiencies and ability to work hard at personal development; 3) understanding and dealing with racism, a students’ personal experience with racism, how to handle those situations and how to combat racism in his or her environment, 4) community service; student’s involvement in his or her cultural community and/or campus clubs and organizations, 5) prefers long-range goals instead of short-term or immediate goals, measures student’s ability to postpone immediate gratification and impetuous actions; 6) availability of strong support person, student has identified someone to turn to in a time of crisis; 7) successful leadership experience, measures student’s past
leadership experience and ability to organize or influence others; and 8) nontraditional
knowledge, ability to find creative ways of learning outside of the traditional system (Sedlacek,
1999).

Minority students have struggled to academically excel and to gain membership on PWI
campuses due to flawed design of institutions that rewards the cognitive needs of the majority
student body. According to Sedlacek (1999), minority students with a strong cultural self-
concept who can bridge both their culture and the White culture on campus and are able to form
relationships tend to find more success in college, remain in college, and have increased
persistence. Minority students unable to do so and who struggle with self-concept and racism
find difficulty developing a community and tend to leave college (Tinto, 1987; Sedlacek, 1999).
Sedlacek believes student-athletes should be seen as nontraditional students and treated that way
too. Student-athletes, and in particular, student-athletes of color tend to have their own sub-
culture on college campuses and they maneuver and deal with certain issues differently that non-
student-athletes. Student-athletes of color interact with systems, and these systems are usually
run by White coaches, White athletic administrators, and White university officials that may pay
little to no attention to the non-cognitive needs of these minority students (Sedlacek, 1999).

Sense of Belonging: Minority Students Struggle Between Attachment vs. Alienation

Minority students struggle with the contemplation of attaching to their PWIs or socially
alienating themselves from them. Numerous studies (Adler & Adler, 1988; Alvarez, Johnson,
Inkelas, Soldner, Leonard, Rowan-Kenyon, & Longermeam, 2007; Chavous, 2000; Chen,
Ingram, & Davis, 2014; Freeman, Adnerman, & Jensen, 2007; Goodenow & Grady, 1993;
Hausmann, Schofield, & Woods, 2007; Hoffman, Morrow, & Salamone, 2002; Loo & Rolison,
1986) looked at the effect sense of belonging and institutional attachment have on students’
academic motivation and achievement. Hausmann et al. (2007) defines sense of belonging as the psychological sense of inclusion an individual feels as a valued member of the college community. These studies found minority students who fail to attach to their institutions, whether due to lack of involvement (Astin, 1999) or feelings of alienation (Cooper, 2012; Loo & Rolison, 1986), run the risk of poor academic progress or dropping out (Hyatt, 2003). A student’s sense of belonging to his or her college or university has been directly linked to academic motivation and achievement (Freeman et al., 2007; Goodenow & Grady, 1993).

Astin’s (1999) Student Involvement Theory (SIT) outlines the importance of students to be physically involved on campus, which the author connects to higher college adjustment. Students who were more involved experienced better grades and higher persistence compared to those who were not (Astin, 1999; Goodenow & Grady, 1993). Students who felt a greater sense of self-efficacy in their academic work also had a higher sense of belonging and attachment to their schools (Freeman et al., 2007). Goodenow and Grady’s (1993) study of urban students and the impact of their sense of belonging to their school and its relationship to academic motivation found those students who reported a higher sense of belonging and attachment to their schools were more likely to be motivated and academically engaged compared to those who had a lower sense of belonging or attachment.

When minority students feel they belong to their schools and that their peers and faculty respect and value them, these students will view school to be more worthwhile and academic success to be a goal worth striving for (Goodenow & Grady, 1993). When minority students find people they can turn to who support their success, root for them to achieve, Goodenow and Grady found these students to have a reason to persist and did better overriding the negative thoughts of wanting to dropout. Unfortunately, feeling a sense of belonging and institutional
attachment does not always occur; some minority students are unable to adjust to college and socially alienate themselves from the White student body (Loo & Rolison, 1986).

Hoffman et al. (2003) argues the issue student-athletes of color face at PWIs is not integrating well at their schools. The ability to feel a sense of belonging or attachment to their universities lacks due to diminished university support of their cultural and racial identity. When minority students have a sense of valued involvement—what Hoffman et al. describes as a) the establishment of functionally supportive relationships on campus, and b) the belief that faculty compassionately care about the minority student beyond just being a face in the crowd—these students increase their attachment to the university along with their academic motivation. According to Goodenow and Grady (1993), minority students who are unable to identify with their schools and attach to their institution, even at the minimal level, such as feeling welcomed, respected, or valued by others, run a greater risk of leaving the school.

Minority students who leave college (Tinto, 1985) tend to be ones who could not attach to their intuition but instead, alienated and isolated themselves while they attended. Loo and Rolison’s (1986) study sought to understand the differences in perceptions between Black and Chicano students in comparison to White students on the racial climate at a PWI. Their study revealed Black and Chicano students felt less integrated into their campus’ social network than White students. The study found Black and Chicano students perceived the campus to be less culturally reflective of them and their values as opposed to the White students. Not surprisingly, 63% of the White students reported they perceived the campus to be supportive of minorities where only 28% of the Black and Chicano students agreed. The remaining Black and Chicano students thought their campus was unsupportive of their culture (Loo & Rolison, 1993).
These results seem to indicate that minority students differ in their perceptions of university support from their White peers. What can result in this differing of perception are more minority students choosing to leave their PWI campuses because they do not fit in or they feel socially alienated (Loo & Rolison, 1986). When White students drop out of college, reports Loo and Rolison, it can be due to academic factors. However, when minority students drop out of college, it is usually connected to sociocultural alienation and lack of university or peer support.

Chen et al.’s (2014) study helped to identify student engagement and student satisfaction as factors that largely depended on how supportive and friendly Black students felt about their campus environments. Black students who strongly identify with their race and culture and see it as central to their identity will have a greater need to feel racial and cultural support on their campuses. Black students who attended a PWI reported their support at these schools to no be as strong (Chavous, 2000). Adler and Alder (1988) believe it is the school’s responsibility to assist students in their process of attachment to the institution. This can be accomplished through helping minority students feel more welcomed through providing more diverse representation on campus. By doing so it would demonstrate to these students of color that their institution has respect and appreciation for their values and could create sense of membership (Adler & Adler, 1988).

Socio-cultural alienation offers a good explanation as to why students of color drop out of school (Loo & Rolison, 1986). Loo and Rolison see this social estrangement that minority students engage in as a response to the climate and culture of the PWIs they attend. The lack of inclusion serves as the reason many minority students physically and emotionally alienate from the institution. Alvarez et al. (2007) credits residence halls on PWI campuses as places not as
tolerant to diverse backgrounds and cultures when living space should feel like a place of membership and belonging. Furthermore, minority students who are able to reach out and identify a faculty member or coach they can form a positive relationship with can associate that member with the PWI as something positive. Those students who do so tend to have a higher sense of belonging and attachment to their institution (Freeman et al., 2007).

For student-athletes, participating in college sports may naturally isolate them from their peers (Astin, 1999) and the rest of the university community. Student-athletes of color who fully commit to performing well in athletics risk poorly integrating with the rest of the student body and are more likely to alienate socially (Loo & Rolison, 1986). Some student-athletes of color come to their colleges and universities with their identities already foreclosed as an athlete and not a student, harboring great dreams of playing in the pros (Beamon, 2014). Attitudes and beliefs such as these do not build bridges that connect to the student body; instead, they accomplish the opposite. Faculty and fans may hold the belief that these athletes are special and entitled due to their status which adds to the social alienation minority student athletes already feel (Hawkins 2013, Zimbalist, 2001).

For years, PWI coaches have maintained a strong recruiting presence in communities with populations high in minority students looking to attend college. Many college coaches should be mindful of the recruiting practice of luring minority students from one culture to another for it results in the potential struggle for these students to decide between attaching to their school or socially alienating themselves. Either decision has a lasting effect on these students’ academic and athletic college experience if they do not feel they belong.

Impact of Critical Variables on Persistence and Graduation Rates
The ability to retain minority students has been an ongoing concern for predominantly White colleges and universities. Officials at PWIs continue to seek ways to increase the retention of minority students through initiatives and programs to address the call for more diversity (Hyatt, 2003). Graduation rates for minority students have historically been lower than their White counterparts (Person & LeNoir, 1997). The attrition rate is 1.3 times higher for first-generation minority students whose parents were not college educated (Sheridan & Hackett, 2013). Person and LeNoir call for further research to be done on persistence rates of minority students in an effort to identify some impeding factors.

Tinto’s (1987) seminal study on why students leave college opened new awareness into the reasons why students fail to persist and even why some depart. Tinto’s work identified factors that helped to explain reasons why students who successfully transitioned from high school to college were able to persist due to being (a) engaged in learning activities; (b) having a positive view of the teaching, advising, and the coursework; and (c) having some sort of contact with faculty. Tinto added students able to establish a balance of academic and social involvement, in agreement with Astin’s (1985) theory on school involvement, also reported higher rates of persistence.

However, students do leave college, and those departures negatively affect a university’s retention numbers. Students leave college for various reasons, some may leave temporarily and then later choose to reenter; others may leave for good (Tinto, 1987, 1993). What matters most is why students leave, Tinto’s work on college departure found students left college in the face of academic difficulties, social isolation, stress from the high school to college transition, and shock of the college. Not to mention leaving home was difficult to adjust to for these students and they had poor goal commitment to finish. Students who failed to successfully adjust to college (Baker
& Siryk, 1984) and the transition often left the first 6-8 weeks of their first semester (Tinto, 1987, 1993).

Other reasons come into play to explain why students do not persist. Tinto (1987, 1993) notes that some students may take a moment to reevaluate the importance of a college education and how relevant it is to their future goals. Some may leave to seek employment instead, others may find the pull to return home, back to a familiar community too strong, and some chase other non-college activities. Dutch anthropologist Arnold Van Gennep’s (1960) classic study documented in his book *The Rites of Passage* is used by Tinto to further explain student departure. Van Gennep simplifies it to three reasons students fail to persist at most tasks in life, in this case related to college. Those reasons are (a) *failure to separate from the past*, students who are unable to separate themselves from past home and social lives risk not successfully transitioning into the college setting, (a) *failure to transition well*, students who are unable to accept the notion that a transition has occurred and fail to integrate well with the new setting and new people also run the risk of leaving; and (a) *failure to incorporate*, students who do not adapt to the new setting or interact well with the things in the new setting or fail to gain membership within the new group increase their chances of leaving college (Tinto, 1987, 1993).

When race is involved, Astin (1975, 1982) acknowledges Black students to have always had a higher dropout rate than White students. Astin’s explanation for why some minority students successfully persist in college can be connected to attending a college or university similar to their social, cultural, and academic interest and background. This could include the school’s location, the size of the town it is in, religious options available, and the racial makeup of the campus (Astin, 1975, 1982). There is very little research to support the thought that
students persist better if they attend colleges with students of similar academic abilities (Astin, 1975).

The reality remains that graduation rates for minority students flounder in comparison to the rates of White students. A study conducted by The Education Trust (2013) on the college graduation gap between minority students in comparison to White students revealed it narrowed by less than a percentage point 2003-2013; the student graduation rate was at 5.7% in 2003, and rose up to 6.3% in ten years for minority students (Camera, 2015). White college students’ graduation rate in 2013 was 64% when compared to 50% for minority students (Camera, 2015; Education Trust, 2013). This recent study confirms the lag minority students have behind White students in persistence and graduation rates, which has changed little over time.

Astin’s (1975, 1982) study revealed factors that predicted college persistence and ability to graduate for minority students was rooted in high school academic preparation, strong study habits, good high school GPA and grades, aptitude test scores, ability to self-assess tutoring need, high academic self-concept, parental income and occupation, and the racial makeup of the students’ former high school. Those factors positively correlated with good academic performance, though other critical aspects such as the amount of financial aid, poor choice in, and low approval of residential environment all contributed to minority students’ attrition rates (Astin, 1974, 1982). Tinto argues that a students’ general perception of incongruence with the college; meaning, the college is not a fit, mismatched, and does not meet the needs, interests, or preferences of the individual can lead to low retention of that student and increase the chance of departure (1987).

Graduation rates for student-athletes of color who participate in NCAA Division 1-A sports hover just over 50% (Hackett & Sheridan, 2013; Harper et al., 2013; NCAA, 2013).
Hosick (2015) proclaims since 2001 the NCAA has used a graduation monitoring system called the *graduation success rate* (GSR) to track the graduation progress of student-athletes. The GSR has shown an increase for Black male student-athletes to be up 18 points to 69%, and up 12 points for Black female student-athletes to 83% (NCAA, 2013). These numbers show promise for student-athletes of color graduation rates where the NCAA would argue it to be significant progress. However, the percentage of student-athletes of color overall who graduate within 6 years only remains slightly over 50% as reported from 2007 to 2013 (Hosick, 2015; NCAA, 2013).

Even as graduation rates among student-athletes of color have risen since 2007 (Hosick, 2015), coaches continue to recruit academically underprepared students to their PWIs. What this demonstrates is a greater number of student-athletes of color attend these colleges with the intent to play sports rather than the focus goal to attain a degree (Milem & Berger, 1997). Mangold et al. (2003) argues that successful college sports programs may negatively impact the graduation rates of student-athletes overall, but argues the rates for student-athletes of color seem to be higher than the average.

Hyatt (2003) expresses that even if student-athletes of color are able to demonstrate high commitment to the university but have low academic ability, the students may persist to a point until they become academically ineligible and could be forced out of school. Student-athletes of color often face difficulty adjusting to the college environment. Many often clash with the campus culture and fail to attach to the school because they experience discrimination or racism, which makes these students more likely to academically underperform and fail to remain enrolled (Bean, 1980; Hyatt, 2003; Mangold et al., 2003).

**Impact of Non-cognitive Factors on Attachment**

To further understand the impact non-cognitive factors had on student learning, Thompson (2010) wanted to know how much of a role family support played in first-year students’ adjustment to college. The researchers found family support helped first-year students earn higher grades. Hyatt (2003) and Lotkowski et al. (2004) found non-cognitive factors also greatly influence how successfully minority students adjust to college. Melendez (2015) reports non-academic and socio-emotional challenges can have opposing effects to minority students’ academic development and sense of belonging. Non-cognitive issues such as dealing with romantic relationships, coping with being away from home, family, and friends, making college and community connections, and being more involved on campus (Astin, 1984) are pivotal concerns for minority students who attend PWIs (Lotkowski et al., 2004; Melendez, 2015).
Ting’s (2003) study of first-generation students of color found students who are able to have their non-cognitive needs met maintained their college enrollment. In addition, he also highlighted the importance of community service and involvement on campus (Astin, 1999) in helping minority students gain a greater sense of belonging and attachment to their schools and community. With minority student-athletes, Thompson (2010) argues that social support from family, coaches, and teammates helps these student-athletes better cope with injury recovery and stressful moments, and proved to be overall beneficial to their mental welfare.

It is common for studies to look at cognitive factors (intellectual) such as GPA, SAT scores, and parental education level and income, as major contributors to minority student-athletes’ academic achievement and persistence. However, Thompson (2010) points to the importance of non-cognitive factors and identified 5 types of social support family can offer to student-athletes of color to aide their adjustment to college and help increase their motivation to achieve, which are (a) *emotional support*, the offering of mental and psychological support; (b) *informational support*, when family provide information to student in order to gain access to things, such as how to start a bank account, or where to find a local church near campus; (c) *tangible assistance*, often given in the form of money, clothing, or accessories; even helping to build or repair something is beneficial; (c) *task appreciation*, family members attend events, games, or visit campus to support or cheer on the student-athlete has been shown to be encouraging; and (d) *esteem support*, family members who offer support and encouragement to the student to remind them they are capable of being successful despite other social messages they hear. Nonetheless, little has been done to study minority student-athletes’ perceptions of attachment to their PWI and how it relates to their academic motivation.
An area where minority students face hardship at PWIs is with the conflicting feeling of whether or not the college is the right fit for their experience. PWI campuses tend to represent the culture and climate of the majority race and not those of the minority race. Researchers (Adler & Adler, 1988; Alvarez et al., 2007; Chavous, 2000; Chen et al., 2014; Freeman et al., 2007; Goodenow & Grady, 1993; Hausmann et al., 2002; Loo & Rolison, 1986) who have studied minority students’ sense of belonging on PWI campuses report a negative relationship between minority students’ perception of membership and attachment to the university and academic motivation. Freeman et al. (2007) agree that minority students who feel a sense of efficacy in their academic work are inclined to have a higher sense of belonging to their school. Acceptance by the majority culture on PWI campuses further increases the sense of membership minority students seek when they attend colleges and universities with a large White student body. Minority students with a high sense of belonging to their schools were found to be more engaged academically (Goodenow & Grady’s, 1993) than those who were not.

Research links better academic performance to students who are highly motivated (Deci & Ryan, 1985; Deci et al., 1991; Ryan & Deci, 2000). Academic motivation is the impetus behind students’ desire to academically achieve and be more involved in school (Adler & Adler, 1988; Astin, 1999), and desire to persist toward graduation (Mangold et al., 2003; Morrow & Ackerman, 2012). Minority students who possess a greater sense of belonging to their institution and engage in positive faculty interaction, who also have peer support, have been found to be significant predictors of academic motivation according to a study by Morrow and Ackermann (2012). Deci et al. (1991) characterize academic motivation to be a student’s will to achieve in academics and the demonstration of value for the learning process. Academically motivated
students demonstrate self-determined attitudes and are more likely to stay in school compared to those who are not (Deci et al., 1991; Phinney et al., 2005).

Researchers Deci et al. (1991) and Vallerand et al. (1989, & 1989, 1992, 1993) seminal work on academic motivation and its impact on education and learning viewed motivation to occur in three aspects: intrinsic, extrinsic, and amotivation. Intrinsic motivation occurs when an individual attempts a task for his or her own internal sense of purpose or personal reward. In contrast, extrinsic motivation is led by the need for external reward or the fear of punishment, the avoidance of negative consequence, simply the need for recognition. Amotivation is the absence of motivation overall (Deci & Ryan, 1985). Deci, Vallerand, Pelletier, and Ryan (1991) continued the work started by Deci and Ryan in academic motivation and found students who voluntarily engaged in their school work and learning tend to be better at solving problems and had an increased sense of worth.

Baker and Siryk (1985) developed the Student Adaption to College Questionnaire (SACQ) in the attempt to measure non-cognitive factors that often influence students as they navigate their adjustment to college. The SACQ comprises four subscales that measure these non-cognitive factors in the areas of academic adjustment, social adjustment, personal-emotional adjustment, and institutional attachment. Melendez (2015) agrees that the SACQ subscales accurately measure the non-cognitive factors that shape minority students’ perception of attachment to PWI schools. Although studies that utilized the SACQ found the subscales overall to all be important to student adjustment, the perception of institutional attachment in particular best explained a majority of the variance in why minority students choose to persist (Adler & Adler, 1988).
How attached student-athletes of color feel to their college affects how well they connect to the student body, university faculty and staff, and ultimately, their involvement in the community (Astin, 1999). Minority students who score low on the SACQ (Baker & Siryk, 1985) in institutional attachment and report low university satisfaction (Chen et al., 2014) could indicate their chosen institution to not be a fit leading to low academic motivation, or worse, to possible dropout (Feldt, 2011). Institutional attachment is the sense of fit and inclusion a student feels toward their institution, along with the institution’s ability to satisfy the racial, cultural, and social needs for students to be academically effective (Adler & Adler, 1988; Astin, 1999; Beyers & Goossens, 2002; Dahmus et al., 1992; Feldt, 2011; Lotkowski et al., 2004; Rodger & Summers, 2008; Njororai, 2012; Melendez, 2015). Chavous (2000) analyzed responses from Black students who closely associated to their racial and cultural identities and found they tend to have better academic outcomes at PWIs when engaged in organizations on campus that represent their race and culture. In contrast, Chavous found student-athletes of color on PWI campuses not able to get their non-cognitive needs met perceived feelings of threat from the campus climate and had lower self-esteem challenges.

**Impact of Variables on Student-Athletes of Color**

Student-athletes of color whose non-cognitive needs go unmet stand the chance of not attaching to their PWI, which hampers their adjustment and motivation. Feeling isolated is a consequence that is also experienced by students in response to the racial climate on campus (Steinfeldt et al., 2010). Predominantly White institutions are racially homogeneous and cue student-athletes of color to assimilate into the majority culture to fit in and try to survive (Steinfeldt et al., 2010). The pressure to fit in socially requires the dispersion of cognitive and affective energy by student-athletes of color in order to negotiate these issues, compared to
White student-athletes who do not have to and can direct that energy elsewhere (Steinfeldt et al., 2010). This aligns with studies that show student-athletes of color deal with challenge in finding membership on PWI campuses and forming relationships with White peers (Holmes et al., 2000).

Without a sense of belonging, minority student-athletes’ perception of discrimination on campus may be heightened (Engstrom & Sedlacek, 1991; Tinto, 1997, 1993). The racial and cultural climate on a PWI campus can convey unwelcome, racism, low academic expectation, and the mythical dumb jock belief (Hyatt, 2003; Martin et al., 2010). These initial perceptions majority students could have of student-athletes of color can contribute to their sense of self-efficacy (Bandura, 1977, 1994, 1997), ability to academically achieve, or discourage attachment to the school. Weak relationships with faculty and staff also hinder personal and emotional connections and serve as stressors that can lead to discord (Melendez, 2008).

Chen et al. (2010) studied responses from 583 college athletes where 33% reported feeling negatively perceived by professors; 59% perceived being negatively viewed by non-athlete students, and 62% reported faculty members to have made a negative remark about athletes in class (Njororai, 2012). Such negative perception of student-athletes places a barrier between them and everyone else. Moreover, when student-athletes of color perceive negative feelings, there is detrimental impact on their sense of inclusion and belonging and they are less likely to attach to their institution, possibly leading to a decrease in their academic motivation. PWIs traditionally have been slow to respond to the concerns of student-athletes of color on the issues of racial and cultural discrimination, and this unhurried response sets students up for potential academic disengagement (Njororai, 2012).

Furthermore, PWI administrators and their slow response to the social and emotional needs of student-athletes of color can be linked to the power these institutions have traditionally
held (Martin et al., 2010). The White elitism culture that is conventionally put on display by these institutions discourages student-athletes of color from feeling accepted; some even feel threatened (Hawkins, 2010; Martin et al., 2010). What results in response to this sustained campus culture is a decrease in minority student-athletes’ commitment (i.e. goal, academic, degree, career; Hyatt, 2003), academic motivation (Dogan, 2015; Schunk, 1991), desires to persist (Allen, 1999; Krotseng, 1992; Mangold et al., 2003), and desire to graduate (Chen et al., 2010; Holmes et al., 2000; Hyatt, 2003; Martin et al., 2010; Melendez, 2008; Njororai, 2012; Nora & Cabrera, 1996; Steinfeldt et al., 2010).

The ethnic composition of an institution matters to student-athletes of color (Nora & Cabrera, 1996). The disparity exists in the number of faculty that teaches at PWIs; many tend to reflect the student body majority in race and culture. So many of them are White. Martin et al.’s (2010) work with African American males looked at their experiences on PWI campuses and revealed that these Black males would prefer to have more staff of color at their university to enhance their college experience. Martin et al. argue that PWIs should put forth a determined effort to recruit and retain minority coaches, educators, and administrators for it is found to be helpful in the engagement of minority students and student-athletes and links have been made to improvement of their academic achievement and college experience (Nelson et al., 2007). An institution with a diverse staff provides an opportunity for these members to serve as role models for student-athletes of color as they move through their academic career and their transition into the work world.
Theoretical Framework

Student Involvement Theory

Alexander Astin (1984) created the Student Involvement Theory (SIT) as a developmental theory to describe college students’ level of institutional involvement. SIT serves as a predictor of academic success and social integration on the basis of how physically active students are within their university and learning. Astin based his theory off Freud’s concept of *cathexis*, which is defined by Freud as the concentration of mental energy on one particular person, idea, or object (1984). Freud posited the idea that people invest psychological energy in things outside of themselves (Astin, 1984, 1985, 1999). A longitudinal study conducted by Astin in the 1970s examining factors that influence persistence found full-time attendance, engagement in clubs, sports, and other extracurricular activities, studying hard, residing on campus, and positive student and faculty engagement were key factors that helped maintain student enrollment (1984).

SIT (Astin, 1984) proposed the higher a student’s level of involvement is within his or her school often leads to better academic, social, and emotional adjustment (Baker & Siryk, 1984). SIT may be used to gauge the amount of physical and mental energy a student commits to his or her academic experience. Therefore, a highly-involved student would expect to see positive results from time spent studying, being on campus, interaction with faculty and peers, and engagement in clubs, organizations, and extracurricular activities. A concept Astin and colleagues (Holmes et al., 2000; Njororai, 2012), believe closely connects to academic achievement in students.

SIT positions the individual with a central role in the determination of the extent and nature of his or her personal growth. This correlates to the quality of effort or level of
involvement with the resources provided by the institution (Astin, 1984, 1985, 1999; Fischer, 2007; Holmes et al., 2000; Njororai, 2012). There are five postulates of SIT offered by Astin, which are:

“1) involvement refers to the involvement of physical and psychological energy in various objects; 2) involvement occurs along a continuum, meaning the display of different degrees of involvement at different times; 3) involvement has both quantitative and qualitative measures; for example, amount of involvement in academic work (hours spent) can be measured quantitatively, whereas qualitative measurement would gauge whether the student comprehends the reading assignment or was off daydreaming; 4) the amount of student learning is directly related to the quantity and quality of student involvement in the educational program; and 5) for an educational policy and practice to be effective, it must directly be related to increasing student involvement in the school” (Astin, 1984; p. 519).

How motivated a student is about his or her education directs the amount of time and energy he or she will put toward their learning. Students who feel their school is a fit and feel attached are more likely to be involved in their learning and favorably view their college experience (Astin, 1984; Njororai, 2012; Holmes et al., 2000). This corroborates studies that have found the level of involvement for Black students who attend White colleges to be lower than for Black students who attend Black colleges (Astin, 1984). Holmes et al. (2000) acknowledges the benefit students receive from deeper involvement in their institutions makes a difference in whether students complete their degree programs compared to students less involved.
SIT attempts to explain how the active involvement of student-athletes of color in sports should lead to higher academic success. Astin (1984) found students involved in athletics had a degree of satisfaction with their education experiences in the institution’s academic reputation, its intellectual environment, student friendships, and for the administration (Astin, 1984, 1985, 1999; Fischer, 2007). SIT views involvement as the root to student retention and persistence, making student-athletes enmeshed with their sports ideal proponents to confirm the positive impact involvement has on attachment, persistence and academic achievement (Astin, 1984; Holmes et al., 2000). However, with minority student-athletes, that theory has not always been the case.

**Self-Determination Theory**

Motivation has been widely studied in education (Rowell & Hong, 2013) in the attempt to better understand academic performance in students. Steinmayr and Spinath (2009) acknowledge the psychological factors that may influence student behaviors and achievement; nonetheless, motivation toward schoolwork has been looked at the most. Motivation has been linked to the foundation for academic development and student achievement in schools. Deci and Ryan’s *Self-Determination Theory* (SDT; 1985) identifies these behaviors to be built on the concepts of volition, intentionality, or will by the individual. The researchers characterize SDT as being motivated or moved to do something, where the individual feels the need to produce a behavior for personal or external reward (1985, 1991; Ryan & Deci, 2000). In contrast, SDT describes a person who is uninspired and has no drive to act, to be considered unmotivated, labeled as amotivated (Deci & Ryan, 1985; Ryan & Deci, 2000).

Yet, SDT suggests people have varying amounts of motivation and different kinds of motivation. SDT believes motivation to exist in a person in two forms, by how much motivation
they have and what type of motivation they possess (Ryan & Deci, 2000). Researchers (Deci & Ryan, 1985, 1991; Deci, Vallerand, Pelletier, & Ryan, 1991; Rowell & Hong, 2013; Ryan & Deci, 2000; Vansteenkiste, Lens, & Deci, 2006) attribute human behavior to intrinsic or extrinsic motivation that aids in a person’s ability to start or complete a task for reasons genuine to them (intrinsic) or to gain a reward (extrinsic). Deci and Ryan (1985, 1991) purports extrinsically motivated behaviors exist along a continuum spanning between amotivation and intrinsic motivation (Baker, 2004).

SDT is useful in explaining students’ motivational levels and in identifying why some students desire to perform well in school while some do not. Self-determination theory places emphasis on behaviors that are intentional or motivated. With SDT being adopted in educational settings, the concern is how to get students motivated to learn for the value of learning and how to self-regulate those behaviors, not to feel pressured or controlled (Ryan & Deci, 2000). Deci and Ryan (1985) view the answer for educators is to help students regulate their behaviors based on the internalization and integration of values. Internalization is the act of taking in a value or regulation, while integration is the process in which the individual translates the regulation into his or her own identity and incorporates it into his or her attitudes and behaviors. Ranging from the extent to which they are self-determined, the types of extrinsic motivation are external regulation, introjection, integrated regulation, and identification; each will be later explained (Baker, 2004; Deci & Ryan, 1985, 1991; Ryan & Deci, 2000).

These types of motivation explain the difference between self-determined behaviors, which are controlled types of intentional regulation, versus amotivated behavior, which is the absence of motivation. In this case, it would result in compliance or defiance. Motivated actions are self- determined to the extent that they are engaged in volitionally and endorsed by one's
sense of self (Deci & Ryan, 1985, 1991). Deci et al. believes self-determined behavior to be the individual’s choice, however, if the behavior is externally controlled, the result of the regulatory process is compliance, which could lead to behavioral outbursts.

Self-determination theory fits for this study because it allows me to identify attitudes and behaviors of the student-athletes of color that affect their motivation toward academics. This theory helps to characterize the level and type of motivation (Ryan and Deci, 2000) student-athletes of color may identify with allowing for the opportunity to clearly sift out the type of motivation—intrinsic, extrinsic, or amotivation—that moves the student. In order to better understand the different types of motivation, each will be described. Walker et al. (2006) reported findings in their study that students who identified with their academics had stronger correlations with intrinsic motivation, self-efficacy, and meaningful cognitive processing, all factors that contributed to their academic engagement.

**Intrinsic Motivation, Extrinsic Motivation, and Amotivation**

Whether a student is intrinsically (internally) motivated or extrinsically (externally) motivated to academically achieve is based on that individual’s personality and environmental perspective (Vansteenkiste, Lens, & Deci, 2006). Intrinsically motivated behaviors are done for the individual’s own pleasure and satisfaction and the completion of a task is attributed to the person’s own performance. Intrinsically motivated people participate in activities that are of interest to them and do so of their free will and volition. Intrinsic motivation can also be linked to a person’s need to satisfy a psychological need for competence, autonomy, and relatedness (Ryan and Deci, 2000). However, Ryan and Deci are careful to remind us that some people may be intrinsically motivated toward certain activities and others may not, but not everyone is intrinsically motivated for any particular task.
Contrary, Deci and Ryan (1985, 1991) and Deci et al. (1991) emphasize extrinsically motivated behaviors to be rooted in nature and often done for external reward. Extrinsic motivation contrasts with intrinsic motivation because extrinsically motivated behaviors are performed not out of personal interest but intent to receive praise, validation, or avoidance of consequence (Deci & Ryan, 1985, 1991; Ryan & Deci, 2000). This form of motivation makes the individual feel more controlled or coerced into performing the task. Previously stated, extrinsic motivation exists on a developmental continuum with different types of motivation ranging between amotivation and intrinsic motivation.

The different types of motivation described by Deci and Ryan (1985, 1991) and researched by other colleagues are (a) external regulation, behaviors that are performed to meet the needs of external demands or to gain a reward; (b) introjected regulation, occurs when people conduct actions with a feeling of pressure or coercion in order to deflect guilt or anxiety; more autonomous, or self-determined types of extrinsic motivation are; (c) identification, happens when individuals personally identify with the importance of the behavior allowing them to regulate their own actions and thoughts; and (d) integrated regulation, integration takes place when identified regulations have been adopted to self. This is only possible if the individual is able to self-examine and synthesize his or her values and needs. The more a person is able to internalize the reasons for his or her behavior and apply it to self, the more extrinsically motivated behaviors become self-determined (Ryan and Deci, 2000).

Researchers Ryan and Deci (2000) do not suggest that an individual has to progress through each stage of internalization and regulation, or move from autonomy to controlled, or vice versa, but one can take on a new behavioral regulation at any point of the continuum (2000). This idea of a continuum helps to better understand when an individual internalizes motivation
behavior can vary from amotivation to compliance to active personal commitment toward a task or an instruction (Ryan and Deci, 2000).

Theorists Ryan and Deci (2000) describe motivation to move along a continuum from amotivation, extrinsic motivation, to intrinsic motivation. Amotivation exists on the continuum because it explains why some may not be inclined to act. Deci and Ryan (1985, 1991) and Ryan and Deci (2000) define amotivation as a state absent of the intention to act where the individual may lack personal connection to the task. The researchers connect amotivational beliefs to individuals not valuing the task, feelings of incompetence to complete the task, or the belief that completing the task will not produce the desired outcome (Ryan and Deci, 2000). Baker’s (2004) study on the types of motivation and its impact on college adjustment, well-being, and academic motivation found college students who reported higher amotivation along with lower intrinsic motivation had higher stress and poorer adjustment to college life. Amotivated individuals feel neither controlled nor autonomous compared to those who feel either intrinsically or extrinsically motivated (2004).

In this study, I examined the perceptions student-athletes of color have of their attachment to their PWI institution and how it relates to their motivation toward academics. My hypothesis is that student-athletes of color whose non-cognitive needs go unmet are less likely to feel attached to their institutions, less likely to be involved in their schools (Astin, 1984), and have decreased motivation to achieve academically. Ryan and Deci (2000) add, in accordance to the self-determination theory, a person who is intrinsically or extrinsically motivated can fully internalize a regulation and be more autonomous but to do so means he or she must grasp the meaning and worth of the task. What results is the feeling of competence, relatedness, and autonomy from completing the action or task (2000).
In reference to academic motivation and achievement, Vansteenkiste, Lens, & Deci (2006) have linked motivation not only to psychological health, but also to learning, achievement, and persistence in academic settings. Experimental studies in educational learning have shown learning activities performed by students who are intrinsically motivated encouraged deeper processing of the material and better conceptual understanding. Intrinsically motivated learners also sustained their learning over the short and long-term persistence of the task compared to extrinsically motivated learners. Conversely, extrinsically motivated students did not learn the material for conceptualization rather for short-term rote memory (Vansteenkiste, Lens, & Deci, 2006).

**Expectancy-Value Theory of Academic Motivation (EVT)**

Before a task is attempted, individuals usually assess a few things; one is their self-efficacy (Bandura, 1977, 1994, 1997) or belief that they can do the task, another is the value of the task and completing it, and also, what they expect as an outcome from completing the task. Eccles, Adler, Futterman, Goff, Kaczala, Meece, and Midgley (1983) created the *Expectancy-Value Theory* (EVT) on the concept that individuals assess tasks and activities on these principles before attempting them. EVT is based on the premise of individuals’ expectancies for success and value they attribute as important determinants to their motivation to perform achievement tasks (Eccles et al., 1983; Wigfield, 1994; Wigfield & Eccles, 1992, 2000). Eccles et al. developed the expectancy-value model in an attempt to explain why some school-age children perform academically well, have stronger persistence, and choose to engage in difficult achievement tasks on the basis they predicted success in the completion of those tasks and expected positive results; in turn; their subjective beliefs gave the task greater value (Eccles et al., 1983).
Eccles et al., (1983) based the theory off Atkinson’s (1957) early work on achievement motives. Atkinson’s research examined people’s motivation for completing tasks and found their motives to be linked to the desire to achieve and the desire to avoid failure. Atkinson believed individuals engaged in achievement behaviors because they are determined by achievement tasks that are connected to the expectancy for success and reward. In addition, Wigfield and Eccles (1992, 2000) attribute belief in the ability to complete an activity and evaluation of how well they do in that activity depends on the extent of their value for it (Wigfield, 1994). Expectancy and value are influenced by specific beliefs around the task based on one’s ability beliefs, perceived difficulty of a task, and personal goals (Eccles et al, 1983; Wigfield & Eccles, 1992, 2000)

EVT has been used in numerous studies (Eccles, Adler, Futterman, Goff, Kaczala, Meece, & Midgley, 1983; Wigfield, 1994; Wigfield & Eccles, 1992, 2000; Wigfield, Tonks, & Klauda, 2009) on its effect on academic motivation and achievement in students. Early elementary students have the ability to distinguish their beliefs about what they are good at and what they value in different areas of achievement (Wigfield & Eccles, 1992, 2000; Wigfield et al., 2009). In short, at an early age students deem what is academically worth achieving is based on the value they attribute to the task and the expectancies of its outcome. Further expanding the expectancy-value theory, Eccles and colleagues (1983) posited four components of subjective values individuals give tasks that are 1) attainment value, which incorporates identity issues where individuals see the task as important and central to their own sense of self; 2) intrinsic value, comes from the enjoyment one would gain from doing the task, similar to self-determination theory (Deci & Ryan, 1985, 1991); 3) utility, describes how a task fits into the individuals’ future plans, is there extrinsic motivation to complete the task (Deci & Ryan, 1985,
1991); and 4) cost, what is the sacrifice for completing the task, what must the individual risk or do to accomplish the task? These four components fundamentally undergird the subjective values students attribute to their involvement in school and Eccles et al. view these as the basis of a student’s decision on whether to engage in academic work or not.

Many student-athletes of color choose to enroll at PWIs because of strong recruiting practices from influential coaches. Students attend these institutions with academic and athletic expectations and aspirations. According to the expectancy-value theory of academic motivation, student-athletes who expect to academically perform well in school will and those who do not expect to will not (Eccles et al., 1983; Wigfield & Eccles, 1992, 2000; Wigfield et al., 2009). The way in which student-athletes of color perceives their expectations in school determines if they find school to be of value or not (Eccles et al., 1983). Student-athletes of color who expect less from their college will have less value in their college experience which can lead to the perpetuation of student-athletes of color leaving college (Tinto, 1984) and academically under-performing.

**Connecting the Theories**

These theories represent the framework that best explained my hypothesis in this study. The role of student-athlete connects these students to a sport they participate in at their college or university and through athletic membership; these student-athletes are involved in their school according to Astin’s (1975) student involvement theory. Their participation in sports enables them to be physically involved in school, leading to increased positive adjustment to college, greater opportunity for institution, and higher rate of academic motivation and achievement.

Eccles et al. (1983) proposed the logic where students who expect to do well at a task and view the task to have some value, are more likely to attempt the task and successfully
accomplish it. In addition, the more a student perceives the task to be valuable the more they expect a greater reward as an outcome, hence, more effort would be attributed to the task. In this case, my theory is that student-athletes of color who chose to attend PWIs did so with the expectancy to do well athletically and academically. These students evaluated their school of choice—although predominantly White—and decided it to be the best opportunity for them to achieve their athletic and academic goals. This culminates as a valuable choice to him or her.

While in attendance at the university, I hypothesized that student-athletes of color remain at the university because they are motivated to achieve personal goals. Those goals can range from trying to remain athletically eligible, to gain the chance to play for their team, to be drafted to play professionally, to goals where some students just want to persist to another year, to attain a degree, or to position himself or herself for a good career post graduation. These goals move from being an extrinsic motivator toward being more internal, making the shift to become an intrinsic motivator (Deci & Ryan, 1985, 1991; Ryan & Deci, 2000) to progress.

Figure 1 depicts my conceptual framework depicting all three theories working in conjunction to impact academic motivation. My conceptual framework also show my hypothesis that student-athletes of color who chose to attend PWIs may or may not get their non-cognitive needs met which can help to explain if these unmet needs impact their perceptions of attachment to their institution leading to a change in their academic motivation. My theory purports that being a student-athlete should lead to increased academic motivation due to the athletic connection and commitment student-athletes of color have at their college or university.
Influences on Academic Motivation

The type of motivation (Deci and Ryan, 1985, 1991) individuals have toward academics is dependent on their level of involvement (Astin, 1984) in college. My hypothesis is that student-athletes who feel a stronger sense of belonging (Goodenow and Grady, 1993) and attachment to their institution (Baker & Siryk, 1984) will also likely be highly academically motivated. It is also the researcher’s belief that additional influences impact student motivation to engage academically. Students experience internal influences such as their perception of self-efficacy (Bandura, 1977, 1994, 1997), self-evaluation of expectancy-value for task engagement and completion (Eccles et al., 1983; Wigfield & Eccles, 1992, 2000), and their sense of academic buoyancy (Martin & Marsh, 2008). As students decide to engage or disengage from their college, other influential factors act on the decision to be motivated or not.
Self-Efficacy

Researchers (Bandura, 1977, 1994, 1997; Bong, 2001; Dogan, 2015; Schunk, 1991; Zimmerman, 2000) have identified self-efficacy to be a meaningful predictor of academic performance in students. Albert Bandura (1977) created the theory of self-efficacy on the principal of an individual’s ability to create personal efficacy. Bandura proposed that persons with a strong sense of self-efficacy believe their behaviors lead to specific outcomes. This belief hinges on the individual’s judgment in his or her ability to successfully execute necessary behaviors to produce desired outcomes. However, Bandura distinguished outcome expectations from efficacy expectations for he believed individuals might believe in a distinct course of action that may produce a desired outcome but may doubt whether they can perform the necessary action to accomplish the task (1977).

Persons with low self-efficacy will try to avoid situations that seem threatening and may opt to get involved with situations where they are likely to succeed (Bandura, 1977). In other words, perceived self-efficacy directly influences one’s motivation in activity choice. In this case, student-athletes of color enrolled at PWIs may decide to engage in their campus socially and academically if the expected outcome would be positive. However, they will refrain from attachment to the school and increased academic effort if their level of self-efficacy is low (Bandura, 1977; Zimmerman, 2000). Bandura concluded that a person’s strong belief in his or her self-efficacy correlated to a stronger effort toward an activity.

If student-athletes of color alienate themselves from their PWI environment they chance jeopardizing their academic performance. They also risk reinforcing self-debilitating fears and behaviors in regards to their efficacy (Bandura, 1977). Meaning, if students choose not to engage in campus activities, instead distancing themselves from campus involvement, may develop
defeating attitudes about their ability to succeed there. Bandura argues individuals who have the ability to succeed at challenging or threatening activities can better reinforce their self-efficacy compared to those who do not.

There are four sources of efficacy expectations posited by Bandura that are 1) *performance accomplishment*; 2) *vicarious experience*; 3) *verbal persuasion*; and 4) *emotional arousal*; however, for this study, this researcher wishes to focus on the efficacy expectation of performance accomplishment. Personal accomplishment can serve as a source of efficacy for the individual because it influences his or her sense of personal mastery acquired from the experience of the activity (Bandura, 1977; Schunk, 1991; Zimmerman, 2000).

Zimmerman (2000) looked at the relation of self-efficacy to academic motivation and found students who identified more as self-efficacious took on more challenging tasks than students who identified as inefficacious. A student’s sense of self-efficacy positively impacts academic motivation, directing students to readily participate in their schoolwork, so they tend to work harder, persists longer, and display less negative emotional reactions when they encounter academic struggles (Zimmerman, 2000). Furthermore, self-efficacy correlates with a high school or college student’s choice of majors, success in course work, and perseverance toward a degree (Zimmerman, 2000). Zimmerman supports self-efficacy as a benefit to student academic motivation and its capacity to help students mange academic tasks and to regulate their emotional reaction to stress, anxiety, and depression (Bandura, 1997; Zimmerman, 2000). In addition, self-efficacious behaviors have been linked to a sense of agency and learning motivation allowing students to self-regulate, set goals, and self-monitor in reference to their academic performance (Zimmerman, 2000).
In conjunction with Zimmerman (2000), Dogan (2015) also recognizes the influence of self-efficacy on academic motivation and student engagement in school. Dogan’s study of middle and high school students found students with high engagement in school also equaled higher self-efficacy in those students. Dogan’s study also revealed academic performance in a positive relationship with cognitive engagement, emotional engagement, academic self-efficacy, and academic motivation in these students. These findings add to the body of work that supports the argument of self-efficacy being a strong predictor of academic performance (Bong, 2001; Dogan, 2015; Shunk, 1991). In summary, student-athletes of color at PWIs who have low perceptions of their personal self-efficacy are more likely to academically underperform due to lack of motivation and view their school to not be a fit.

**Academic Buoyancy**

Students’ reactions to stressful academic situations may also have an effect on their academic motivation (Deci & Ryan, 1985, 1991; Ryan & Deci, 2000; Vallerand et al., 1991) and school involvement (Astin, 1984). Researchers commonly describe a student’s ability to bounce back from academic adversity as being resilient; however, theorists Martin (2013) and Marsh (2008, 2008) put forth the term academic buoyancy to characterize the psychological capability to manage everyday setbacks. Martin (2013) explains academic buoyancy as a student’s capacity to overcome setbacks, challenges, and difficulties faced in daily academic life. Distinct from academic resilience, which has been described as the ability to overcome acute and chronic educational situations, academic buoyancy is more relevant in frequent low-level negative academic situations (Martin & Marsh, 2008).

Academic buoyancy better defines the psychological state of a student and his or her overall well-being as it relates to learning (Martin & Marsh, 2008). It is a concept that can be
used to explain whether a student has the ability to adapt to minor stressful situations rather than just being resilient as a response. According to the theorist, resilience is a direct response to extreme adverse cases students may periodically encounter where academic buoyancy describes more frequent but less extreme problematic setbacks they deal with in school life (Martin, 2013; Martin & Marsh, 2008).

Researchers (Martin, 2013; Martin & Marsh, 2008, 2008; Martin, Ginns, Brackett, Malmberg, & Hall, 2013; Putwain, Connors, Symes, & Douglas-Osborn, 2012) further characterize academic buoyancy as relevant to an individual’s poor academic performance, the ability to deal with stress and daily pressures, and an attack on personal confidence due to poor grades (Martin & Marsh, 2008). Overall, academic buoyancy relates to the dips in student motivation and school engagement over time and how they deal with feedback based on their academic performance.

Martin and Marsh (2008) present the notion that academic buoyancy can be used to predict academic resilience in students when considering how to order the progression. The theorists strongly believe that an individual can be resilient but not be academically buoyant; however, they have found academically buoyant students tended to also have higher academic resiliency. A study of high school students conducted by the researchers who sought to find out if buoyancy could predict the negative outcomes of anxiety, failure avoidance, and uncertain control in these students in their schooling found academic buoyancy directly predicted academic resilience. Academic buoyancy also predicted anxiety, failure avoidance, and uncertain control in these high school students. These findings can be interpreted that students who demonstrate low academic buoyancy tend to not deal well with everyday setbacks and challenges in the academic environment, and could lead to poor behavioral and cognitive management in stressful situations (Martin, 2013, Martin et al., 2013; Martin & Mash, 2008).
More studies on academic buoyancy reveal students have frequent experience with daily academic challenges rather than major academic adversity further reinforcing Martin and Marsh’s (2008) argument that buoyancy predicts resilience, and not the other way around. Other identified factors that influence academic buoyancy in students are a) psychological factors, b) school and engagement factors, and c) family and peer factors. As defined by Martin and Marsh’s (2008) study, psychological factors include self-efficacy (Bandura, 1977), control, sense of purpose, and motivation (Deci & Ryan, 1985). School and engagement refer to students’ participation in class, educational aspirations, school enjoyment, teacher relationships, extra-curricular activity (Astin, 1984), strength of curriculum, and value placed on school. Lastly, family and peer support provides a positive bond with an adult; having an informal network of friends, caring parents, and connection to a social network (2008). These three factors are commonly found in academically buoyant individuals who are able to effectively manage their behavior during minor academic setbacks and social pressure.

A clear connection can be made for student-athletes of color personal perception of their academic buoyancy based on the identified contributing factors of psychological factors, school and engagement, and family and peer factors (Martin et al., 2013; Martin & Marsh, 2008) and their ability to be academically motivated at their school or to be moved to be more involved on campus. Putwain, Connors, Symes, and Douglas-Osborn (2012) argue there needs to be a positive relationship between academic buoyancy and adaptive educational outcomes that include greater self confidence in students, future planning, academic persistence, and lower anxiety due to greater sense of control. For this study, the researcher hypothesized student-athletes of color who demonstrate high academic buoyancy would also have higher academic motivation, better college adjustment, and increased institutional attachment.
Summary

In summary, numerous studies (Comeaux & Harrison, 2011; Geiser & Santelices, 2007; Hoffman & Lowitzki, 2005; Hurtado, Carter, & Spuler, 1996; Lotkowski, Robbins, & Noeth, 2004; Simons, Van Rheenen, & Covington, 1999) traditionally used cognitive factors such as high school grades, GPA, aptitude tests, family socioeconomic status, and parent education as predictors of college persistence and success. However, those studies demonstrated cognitive factors to be better predictors for majority students rather than for minority students who attend college. Alternative studies that have looked at non-cognitive factors among minority students revealed positive impact on college adjustment, retention, and college success along with predictive effects on students’ sense of belong, institutional attachment, self-efficacy, academic buoyancy, and academic motivation. In this study, I examined the influence of non-cognitive factors on student-athletes of color and their perception of attachment to their PWI schools and how it may affect their academic motivation. I used several questionnaires to gather data from student-athletes of color who attend PWI schools and participate in college sports. I hypothesized that student-athletes of color whose non-cognitive needs are being met would have more attachment to their institution and increased motivation to academically achieve.
CHAPTER 3: METHODOLOGY

The methodology of this study is presented in this chapter. The purpose of the study, research design, variables investigated, reliability of the instruments used, procedures used for data collection, and data analyses are presented. This chapter concludes with a brief summary of the study’s process.

In this study, I examined student-athletes of color and their perception of adjustment and attachment to their predominantly white institution and its relationship to academic motivation. Non-cognitive factors such as academic adjustment, social adjustment, and personal-emotional adjustment, institutional attachment (Baker & Sirky, 1984, 1989), general self-efficacy (Bandura, 1977; Schwarzer & Jerusalem, 1995), and academic buoyancy (Martin & Marsh, 1998) were the instruments used to measure the independent variables in this study to see if relation existed between those variables and academic motivation in student-athletes of color. The theory I held was that student-athletes of color with high perception in these non-cognitive areas will be better adjusted to college and stand a greater chance of developing sense of belonging and attachment to their PWI.

It is my belief that an increased sense of attachment to the PWI would positively relate to academic motivation in student-athletes of color in his or her desire to achieve (Deci & Ryan, 1985; Vallerand et al., 1991). Over the past twenty years many studies (Pearson & LeNoir, 1997; Mangold, Bean, & Adams, 2003; NCAA, 2009) focused attention on cognitive factors (intellectual) as predictors for college success in students overall and how it contributes to attrition rates of student-athletes of color. The research from these studies states the rise in attrition and decrease in graduation rates, when compared to white students, is due in part to under preparation at the high school level. My assertion was that the involvement student-
athletes of color have with their college sport can lead to feelings of attachment to their PWI, and to better adjustment to the school which should associate with higher academic motivation.

Previous studies focused on the academic performance of student-athletes of color in accordance to their high school GPA and SAT scores as predictors of academic adjustment and persistence, which led researchers to believe those factors alone predicted success rates for minority student-athletes in college. This fostered the belief that these factors led to higher graduation rates. However, little is known about how student-athletes of color perceive their attachment to their PWIs and whether or not they feel the school meets their non-cognitive needs. More needs to be known about how these students perceive the school to identify with them racially or culturally. The college or university’s lack of racial and cultural identification with the student-athletes of color may negatively affect his or her perception of their self-efficacy and lower their desire to be academically motivated.

Previous research has also sought to understand institutional attachment and loyalty to a university (Adler & Adler, 1988), institutional attachment (Baker & Siryk, 1984), and sense of belonging (Goodenow & Grady, 1993), along with other non-cognitive factors and their impact on the perception of inclusion at PWI’s (Hyatt, 2003) for minority student-athletes. Some studies have looked at how cognitive factors (i.e. intellectual factors, academic performance, academic achievement) and the discrimination student-athletes of color experience at PWIs (Mangold et al., 2003; Cooper, 2012) have influenced persistence. Despite all, little research has been done on student-athletes of color at PWI’s that looks at their perception of college adjustment and institutional attachment and how it relates to their academic motivation. In this study, I answered these research questions:
RQ1: Does self-efficacy, college adjustment, and academic buoyancy among student-athletes of color relate to extrinsic motivation toward academics?

RQ2: Does self-efficacy, college adjustment, and academic buoyancy among student-athletes of color relate to intrinsic motivation toward academics?

Research Design

A correlational research design, which is recommend by Bordens and Abbott (2011) when the researcher wants to determine if two or more variables associate with each other and wishes to establish the directions, magnitudes, and forms of the observed relationships, was used in this study. The variables of interest are observed and measured in order to collect data. Correlational research involves the observance of multiple variables in the attempt to determine a relationship between or among them (Bordens & Abbott, 2011). In this study, the following instruments measured the non-cognitive factors that served as the independent variables in this study. The instruments are the Student Adjustment to College Questionnaire (SACQ; Baker & Siryk, 1984, 1986, 1989, 1999), the General Self-Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995), and the Academic Buoyancy Scale (ABS; Martin & Marsh, 2998). Those instruments measured if a relationship existed between the independent variables and academic motivation the dependent variable (Deci & Ryan, 1985; Ryan and Deci, 2000). The dependent variable in this study was measured by the Academic Motivation Scale College Version (AMS-C28; Vallerand et al., 1992, 1993) (see Figure 2).

To establish a correlational relationship between two or more variables, the values from the independent variables and the values from the dependent variable are tested (Babbie, 1990;
Bordens & Abbott, 2011). When using correlational research to determine a relation, Bordens and Abbott label the variable used to predict the correlation as the *predictor variable*, and the variable whose value is being predicted is called the *criterion variable*. However, for this study, I examined if an association existed between the independent variables (i.e. SACQ, GSE, ABS) and the dependent variable (i.e. AMS-C 28) as it pertains to the type of motivation (intrinsic, extrinsic) (Creswell, 2014).

Figure 2: Conceptual Framework

Note: The study investigated the relation between the independent variables of Student Adjustment, General Self-Efficacy, and Academic Buoyancy and its relation to Academic Motivation; Intrinsic or Extrinsic.

There are several advantages to using a correlational research design according to researchers Babbie (1990) and Bordens and Abbott (2011). The authors view the use of a correlational research design as beneficial in the initial exploratory stage of a research project.
The correlational approach gives researchers the ability to identify potential causal relationships that could allow for rich hypotheses to be developed and later tested experimentally. Moreover, correlational research designs do not allow the manipulation of variables; for in this design, variables are observed in their natural setting (Bordens & Abbott, 2011). However, the benefits gained from the use of the correlational research design can also be viewed as its limitations. A correlational research design accomplishes its objective primarily through observation of the variables of interests in its natural state. This means, the researcher cannot control the environment or the external variables, nor can the researcher manipulate the participants to obtain desired outcomes (Babbie, 1990; Bordens & Abbott, 2011; Creswell, 2014).

**Internal and External Validity of A Correlational Research Design**

Measures used in a correlational study focus on the variables of interest set by the researcher. Therefore, the research questions I posed in this study were evaluated and measured through the instruments I selected. In addition, in reference to external validity, the outcomes of a correlational design may be generalizable for this method studies samples directly from the population in its natural setting, it lacks manipulation or control unlike an experimental design (Bordens & Abbott, 2011). A study’s design can be seen as valid if the study adequately measures and reflects the concept being examined according to Babbie (1990).

However, some threats to the internal and external validity of the correlational research design approach exist. Bordens and Abbott (2011) identify confounding variables to be a threat to the internal validity of a correlational research design. Confounding variables occur when two or more variables combine in such a way that their effects cannot be separated to determine its effect on the criterion variables (Bordens & Abbott, 2011; Creswell, 2014). A threat to the external validity of a correlational research design can occur when the results of the study are not
generalizable beyond the participants of that study because the sample may be too specific (Bordens & Abbott, 2011).

Participants

Participants recruited for this study were student-athletes of color that attended a large, public university nestled in a suburban community located in a northeastern state. This PWI has 850 student-athletes who participate in 31 varsity sports that compete athletically at the NCAA Division I level. Student-athletes of color from all sports and academic years were invited to participate in the study. Of the 850 total student-athletes at this school, 187 self-identified as students of color (22%), 28 of those student-athletes of color (15%) participated in this study with ages ranging from 18-21. Of the 187 students-athletes who self-identified as being a racial minority, 125 (67%) of them are males and 62 (33%) are females. Students who identified as 17 years of age or younger were not permitted to participate.

The 28 student-athletes who participated in the study made up 15% of the population of student-athletes of color at this institution (N=187). Of the 28 participants, higher participation came from males (57%, n=16) and slightly lower participation from females (43%, n=12). However, the 12 female participants represented 19% of all female athletes of color (n=62), while the 16 male participants represented 13% of all male athletes of color (n=125). In regards to their academic standing, 64% (n=18) were freshman, 18% (n=5) were sophomores, 14% (n=4) were juniors, and 4% (n=1) were seniors. Despite being open to graduate students, none participated. The racial breakdown of the participants in the study was reported at 50% (n=14) Black/African American, 21% (n=6) Hispanic/Latino, 21% (n=6) Asian, and 4 % (n=1) Native Hawaiian/Pacific Islander or other (see Table 4).
In addition, all participants were student-athletes of color enrolled at the university and were in good academic standing. All participants met university and NCAA requirements for academic and athletic eligibility of their sport. Each student-athlete of color self-reported his or her GPA to be 1.80 or higher and enrolled in 12 or more credit hours, holding a full-time status. These are the minimum requirements the NCAA set for athletic eligibility (NCAA, 2017).

**Variables**

**Independent Variables**

The goal of this study was to determine if a relation existed between the independent variables, also labeled as non-cognitive factors, and the dependent variable, academic motivation. Three instruments were used to measure the independent variables in this study, they were the Student Adjustment to College Questionnaire (SACQ; Baker & Siryk, 1984, 1989, 1999), the General Self-Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995), and the Academic Buoyancy Scale (Martin & Marsh, 2008a, 2008b, 2009). It was hypothesized that the responses by the student-athletes of color on the SACQ, GSE, and ABS instruments would determine if significant relationships between the independent variables and academic motivation—measured by the Academic Motivation Scale College Version (AMS-C28; Vallerand et al., 1992,1993)—existed.

The SACQ (Baker & Siryk, 1984, 1986, 1989, 1999) utilized a Likert-type scale to examine four facets of college adjustment in students which are identified in the following four subscales: academic adjustment, social adjustment, personal-emotional adjustment, and institutional attachment (Feldt, Graham, & Dew, 2011). Feldt et al. and colleagues (Baker, & Siryk, 1986; Credé, & Niehorster, 2012; Dahmus, Bernardin, Bernardin, 1992) report reliability coefficients for the SACQ sub-scales range from .77 to .95. The GSE (Schwarzer & Jerusalem,
measured the perceived self-efficacy in each participant in their perceived ability to adapt to daily hassles. Its reliability coefficient ranges from .76 to .90 and has been correlated with anxiety, depression, and academic motivation. Lastly, the Academic Buoyancy Scale (Martin & Marsh, 2008a, 2008b, 2009) assessed academic buoyancy self-reported by the participants which evaluated their perception of their ability to handle daily academic setbacks. Studies reported ABS to have a reliability coefficient range of .73 to .90.

**Dependent Variable**

Numerous studies have looked at academic motivation in college students and how it may have an effect on performance, achievement, retention, and graduation rates. Academic motivation can serve as an early predictor for student attrition or as an early detector of student academic success and persistence (Deci & Ryan, 1985, Vallerand et al., 1989, 1992, 1993). Deci and Ryan (1985) explained academic motivation in their Self-Determination Theory to be composed of three types of motivation: extrinsic, intrinsic, and amotivation. Extrinsic motivation is demonstrated when the person completes an activity for external reward. In contrast, an internally motivated activity is completed for personal reasons and internal rewards. The absence of any motivation is called amotivation (Deci & Ryan, 1985; Vallerand et al., 1989, 1992, 1993).

For this study, academic motivation served as the dependent variable measured by the AMS-C28 (Vallerand et al., 1989, 1992, 1993). I sought to determine if a relationship existed between the dependent variable of academic motivation and the independent variables (the non-cognitive factors) of college adjustment, self-efficacy, and academic buoyancy as it pertains to the intrinsic or extrinsic motivation toward academics among student-athletes of color. Various previous studies (Cokley et al., 2001, 2015; Stover et al., 2012) examined the relationships among academic motivation, college adjustment, and academic performance with the use of the
AMS-C 28. These studies reported a reliability coefficient of .70 to .86, supporting that the scale has the ability to accurately decipher student motivation. This indicates that students who rated themselves highly intrinsically or extrinsically motivated may have a greater tendency to be more successful academically, along with having higher rates of persistence. In contrast, students who self-reported as having low academic motivation tended to not fare well in their academics, social interactions, and not be as emotionally stable (Baker & Syrik, 1984, 1986, 1989, 1999; Deci & Ryan, 1985; Vallerand et al., 1989, 1992, 1993; Cokley, 2001, 2015).

**Instruments**

**Student Adaption to College Questionnaire (SACQ)**

Baker and Siryk (1984, 1986, 1989, 1999) designed the Student Adaption to College Questionnaire (SACQ) to assess student adjustment to college and possible need for psychological services in first-year students. The researchers wanted to know if well-adjusted students overall fare better in college than poorly adjusted students and the its influence on their academic performance and social interactions. According to Feldt et al. (2011), the SACQ can be used for a variety of purposes ranging from measuring overall adjustment to college to identifying psychological needs. The SACQ was initially developed as an assessment used to identify students who could benefit from early psychological interventions in the first year of college to help with adjustment. Baker and Siryk set the goal of the SACQ to be used as a tool to inform institutions on how to address the needs of those students who may need psychological support (1984, 1986, 1989, 1999). The SACQ is licensed under Western Psychological Services and formal permission was requested for use by the researcher for this study. Permissions was granted after a fee was paid and an agreement signed.
The SACQ is a self-report instrument with the purpose of evaluating how students adjust to college (Dahmus, Bernadin, & Bernardin, 1992). The instrument has 67 items, is 2-pages in length and uses a 9-point Likert-type response format that takes approximately 20-minutes to complete. Students responded to the 67 items by selecting one of the nine points that range from applies very closely to me to doesn’t apply to me at all. The questions examined students’ adjustment to the college environment by focusing on whether they feel the school is a fit academically and socially or not (Baker & Siryk, 1984, 1985; Dahmus et al., 1992; Krotseng, 1992; Beyers & Goossens, 2002; Feldt et al., 2011). There are four principal subscales that make up the SACQ: academic adjustment (24 items), social adjustment (20 items), personal-emotional adjustment (15 items), and institutional attachment (15 items).

Baker and Siryk (1984, 1986, 1989, 1999) describe each subscale individually, labeling the academic adjustment subscale as a measure of a student’s ability to successfully cope with the various educational expectations (i.e. school work, social interactions, depression) and characteristics of the college experience. The social adjustment subscale contains items that examine the interpersonal and societal demands of college. The personal-emotional subscale focuses on how a student feels psychologically and physically. While the institutional attachment subscale addresses students’ satisfaction with the college experience in general, and establishes a sense of fit with the college or university he or she attends. The SACQ can be given individually or in a group setting, and can be administered electronically or by paper (Dahmus et al., 1992).

**Reliability and Validity of the SACQ**

All four subscales have proven to be internally consistent at Cronbach’s alpha >.80 in several studies (Baker & Siryk, 1984, 1986, 1989, 1999; Dahmus et al., 1992; Krotseng, 1992; Beyers & Goossens, 2002; Feldt et al., 2011). Numerous studies have found the Coefficient
alpha values for the academic adjustment subscale range from .81 to .90; the social adjustment subscale ranges from .77 to .86; the personal-emotional adjustment subscale ranges from .85 to .91; and a range of .92 to .95 for the institutional attachment subscale (Dahmus et al., 1992). The full-scale alphas range from .92 to .95 (Baker & Siryk, 1984, 1986, 1989, 1999; Dahmus et al., 1992; Krotseng, 1992; Beyers & Goossens, 2002; Feldt et al., 2011). The SACQ asks closed-ended questions that directly relate to its purpose in understanding student adjustment, which makes it vulnerable to students appearing more or less adapted to college (Dahmus et al., 1992).

However, Beyers and Goossens (2002) find the SACQ subscales to have valid statistically significant correlations to other measures such as academic motivation, depression, psychological separation from parents, and grade point average. Dahmus et al. (1992) reports a relationship between the criterion-related or construct validity evidence of the SACQ subscales with real-life behaviors. Their study reported a significant positive correlation (.17 to .53, p<.01) found between academic adjustment and GPA, along with a significant negative correlation (-.23 to -.34, p<.01) between personal-emotional adjustment and whether students sought psychological services. For the institutional attachment subscale there was a statistically significant correlation with student attrition rates (-.27 to -.41, p<.01). The social adjustment subscale had modest support.

The SACQ was an accurate instrument for this study because it focused on the four aspects of college adjustment this researcher hypothesized contribute to academic motivation in student-athletes of color. Numerous studies (Beyers, & Goossens, 2002; Crede & Niehorster, 2012; Feldt et al., 2011; Dahmus et al., 1992; Krotseng, 1992) that have used the SACQ have shown the measure to correlate college adjustment and institutional attachment with academic motivation and persistence. Student-athletes of color in this study who scored high on the SACQ
tended to have greater adjustment and attachment to college, which translated to higher motivation toward their academics. If these student-athletes of color felt closely connected to their institution they were more likely to perform better academically and choose to remain at that college. Alternatively, students who scored low on the SACQ demonstrated more risk for low academic motivation, low academic performance, less institutional attachment, greater need of psychological services, and an increased risk for leaving the school (Astin, 1985; Baker & Siryk, 1984, 1986, 1989, 1999; Deci & Ryan, 1985, 1991, 2000; Tinto, 1985).

Using the IBM Statistical Package for Social Sciences (SPSS, version 24) software to analyze the reliability of the SACQ instrument and its subscale items, results found all items to range between .78 and .93 for this study (see Table 1 & Table 2). The instrument’s reliability coefficient for this study was high along with its subscale items. Simply put, the items of the SACQ instrument accurately measured student adjustment among the participants of this study.

**General Self-Efficacy Scale (GSE)**

The General Self-Efficacy Scale (GSE) was designed by Schwarzer and Jerusalem (1995) initially in the German language, but has since been translated into 33 languages with over 20,000 participants from various countries. The GSE was created to assess individuals’ general sense of perceived self-efficacy with the goal to be able to predict if that individual is able to handle life’s stressful events. The scale is designed for use with adolescent and adult populations; however, it is not recommended for use with persons under the age of 12 (Schwarzer & Jerusalem, 1995). The GSE is effective in assessing an individual’s belief in their performance of difficult tasks or ability to cope with stress and adversity in different domains (Schwarzer 1992; Schwarzer & Jerusalem, 1995). The questions asked in the GSE are designed
to address the issues of coping and dealing with setbacks attributed to positive internal stability within an individual (Schwarzer & Jerusalem, 1995).

Schwarzer (1992), much like Bandura (1997) and colleagues, believe a strong perception of self-efficacy leads to increased goal setting, effort investment, and persistence in the face of obstacles and personal challenges. In this study, self-efficacy was used as an independent variable to investigate how it related to academic motivation in student-athletes of color. The GSE contains 10-items that are self-administered by participants who select from 4 choices in response to a Likert-type scale ranging from 1 = no true at all, 2 = hardly true, 3 = moderately true, and 4 = exactly true, and take up to 4 minutes to complete. The researcher scored the GSE assessment by summing up the responses to the 10-items to produce a composite score ranging from 10 to 40. Examples of questions posed on the GSE were: “I can always manage to solve difficult problems if I try hard enough”, “It is easy for me to stick to my aims and accomplish my goals”, “When I am confronted with a problem, I can usually find several solutions”, among others (Schwarzer & Jerusalem, 1995).

Reliability and Validity of the GSE

The GSE measure has been used internationally for over two decades, and has been found suitable in its prediction of responses to life changes and the mental health of individuals (Schwarzer & Jerusalem, 1995). Studies by Bong and Clark (1999) and Pintrich and De Groot, 1990) have looked at self-efficacy in relation to academic motivation among students, and reported a correlation between these variables. In this study, the investigation looked at student-athletes of colors and their perceptions of self-efficacy at a PWI and how it relates to their academic motivation. Over the years, samples from 23 nations have been collected all with a Cronbach’s reliability coefficient ranging from .76 to .90, with the majority in the high .80s. A
report of criterion-related validity has shown the GSE to have a correlation with positive
coefficients favorable with emotions, dispositional optimism, and work satisfaction. The GSE
had negative coefficients connected to depression, anxiety, and stress (Schwarzer & Jerusalem,
1995).

Using the SPSS software to analyze the reliability of the GSE instrument the results
found and Cronbach’s alpha for all items to be .87 for this study (see Table 1). The instrument’s
reliability coefficient for this study is high stating that the items of the GSE instrument
accurately measured self-efficacy among the participants of this study.

**Academic Buoyancy Scale (ABS)**

The Academic Buoyancy Scale (ABS; Martin & Marsh, 2008a) was developed to assess
aspects of students’ academic buoyancy, self-efficacy, control, anxiety, academic engagement,
and teacher-student relationships. Martin and Marsh define academic buoyancy as students’
ability to effectively deal with setbacks that comes from life and academics. Academic buoyancy
closely relates to academic resilience, but has distinction from it as academic resilience deals
with chronic barriers that appear critical to a person’s welfare, whereas academic buoyancy
refers to everyday, more frequent minor setbacks and stressors that come with life (Martin &
Marsh, 2008a, 2008b, 2009). The ABS is a 4-item instrument that is self-administered and takes
less than 3 minutes to complete. Students can choose answers from a Likert-type that ranges
from 1 = *strongly disagree* to 6 = *agree/agree strongly*. An example of a question on the ABS is “I
think I’m good at dealing with schoolwork pressures”.

**Reliability and Validity of the ABS**

The ABS instrument has a reliability coefficient for all factors (i.e. self-efficacy, control,
an academic engagement) that ranges from .70 to .90 with a mean of .80. Many (Martin & Marsh,
studies that have used the ABS instrument as a measure and report it to be both reliable and normally distributed and accurately predicts a variety of academic outcomes in high school students. Martin’s (2013) study of academic buoyancy and academic resilience among 918 Australian high school students found academic buoyancy predicted academic resilience when it came to completing schoolwork, dealing with poor grades, and engaging and not the other way around. Martin and Marsh’s (2008b) study on workplace and academic buoyancy in school personnel and students found academic buoyancy to account for .38 percent of the variance as it relates to self-efficacy in students.

I hypothesized that students who rate themselves high in their academic buoyancy will have a more positive outlook on their self-efficacy and academic abilities, which will translate into higher academic motivation, greater academic achievement, and a better outlook for attachment to their PWI campus, even as a minority. The researcher’s theory is that high academic buoyancy leads to a brighter perspective of being able to persist on a campus that is has predominantly White students.

I used the SPSS software to analyze the reliability of the ABS instrument, the results found Cronbach’s alpha for all items to be .80 for this study (see Table 1). The instrument’s high reliability coefficient indicates the items of the ABS instrument accurately measured academic buoyancy for the participants in this study.

**Academic Motivation Scale College Version (AMS-C28)**

The Academic Motivation Scale (AMS) was initially designed by Vallerand et al. (1992) to measure academic motivation of French-Canadian students. When first developed, it was...
called the *Echelle de Motivation* (EME; Vallerand et al., 1989). It later expanded from its original design and has been translated into English (AMS) and other languages for numerous studies on academic motivation (Cokley et al., 2001; Cokely, 2015; Stover et al., 2012; Vallerand et al., 1989, 1992, 1993). The AMS is based on the tenets of Deci and Ryan’s (1984) Self-Determination Theory (SDT) that outlines three types of motivations that contribute to a person’s desire to learn (Cokley, 2015). SDT identifies intrinsic motivation, extrinsic motivation, and amotivation as the primary motivational factors in learning (Deci & Ryan, 1985). The AMS has been released publicly by the developers for free use for ongoing research in academic motivation in education. A copy of the scale can be obtained from the Internet and may be duplicated numerous times without authors’ permission. The authors require researchers to reference their work when data is published (Vallerand et al., 1989, 1992, 1993).

For this study, the Academic Motivation Scale College Version (AMS-C 28; Vallerand et al., 1989, 1992, 1993) was used. The AMS-C 28 was designed to measure the academic motivation of college students, but its foundations are rooted in the original academic motivation scale (AMS; Vallerand et al., 1989, 1992, 1993). The AMS-C28 is a 28-item scale that measures intrinsic motivation, extrinsic motivation, and amotivation, contains 7-subcales that measure the 3 types of motivation in an individual, and takes between 8-10 minutes to complete. The subscales of the AMS-C28 that measure intrinsic motivation are: Intrinsic Motivation to Know (IMTK), Intrinsic Motivation to Accomplish (IMTA), and Intrinsic Motivation to Experience Stimulation (IMTES). The three subscales that measure extrinsic motivation are: Extrinsic Motivation Extrinsic Regulation (EMEXR), Extrinsic Motivation Introjected Regulation (EMINTJ), and Extrinsic Motivation Identified Regulation (EMID). Amotivation is measured by one subscale (AM).
Students had the option to choose answers from a 7-point Likert-type scale ranging from 1=does not correspond at all, to 7=corresponds exactly. Some questions asked on the AMS-C28 were; “Because I experience pleasure and satisfaction while learning new things” (IMTK), and, “Because I think that a college education will help better prepare me for the career I have chosen” (EMID), and, “Honestly, I don’t know; I really feel that I am wasting my time in school” (AM) (Cokley, 2015).

**Reliability and Validity of the AMS-C28**

The academic motivation scale (AMS) has an internal consistent Cronbach’s alpha that ranges from .60 to .86 (Vallerand et al., 1992, 1993; Cokley, 2015). Numerous studies (Cokely et al., 2001; Cokely, 2015; Stover et al., 2012; Vallerand et al., 1989, 1992, 1993) that used the AMS and the AMS-C28 have found correlations between intrinsic motivation, academic motivation, and achievement in students. The scores have been found to be generally consistent with a mean test-retest correlation of .75 over a one-month period (Vallerand et al., 1992, 1993). Cokley (2015) believes the AMS’s construct validity to be stable through other correlational analyses that involved perceived competence, concentration in class, academic performance, and academic self-concept. Those findings also replicated the results of the AMS in the areas of motivation (Vallerand et al., 1989, 1992, 1993).

The AMS-C28 has been used in numerous studies over the years to measure the influence motivation has on the academic performance of college students. The researcher chose to use this measure in this study for its clear interpretation of what type of motivation(s) a student would have toward their academics. The hypotheses of this researcher is that student-athletes of color who score high on the AMS-C28 would self-identify as being highly motivated toward academics and have a higher sense of adjustment and deeper attachment to their PWI. Students
with low scores on their motivation subscales will be identified as having low motivation for academics, poor adjustment, and correlate negatively with poor academic performance and achievement. This could lead to less attachment to their institution, increased risk of dropping out, or the need for intervention services (Baker & Siryk, 1984, 1986, 1989, 1999; Tinto, 1985).

Two descriptive analyses were run on the AMS-C28 for this study. The first analysis was to obtain the Cronbach’s alpha for all 28 items of the AMS-C28 instrument that resulted in a reliability coefficient of .89. The second was conducted to obtain the reliability coefficient for the AMS-C28 instrument with 24 items not including the amotivation items (n=4); a Cronbach’s alpha of .94 resulted (see Table 1). I made the decision to remove the four amotivation items for the following reasons, (a) removing the items increased the reliability of the instrument for this study, (b) the focus of this study was to investigate the academic motivation based on intrinsic and extrinsic motives. The instrument’s high reliability coefficient for this study demonstrated the AMS-C28 as an instrument that accurately measured academic motivation among the participants of this study.
Table 1  
*Reliability Coefficients for the Instruments*

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Subscales</th>
<th>α</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>SACQ</td>
<td>Academic Adjustment</td>
<td>.93</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Social Adjustment</td>
<td>.83</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Personal-Emotional</td>
<td>.88</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Institutional Attachment</td>
<td>.78</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.67</td>
<td>7</td>
</tr>
<tr>
<td>ABS</td>
<td></td>
<td>.80</td>
<td>4</td>
</tr>
<tr>
<td>GSE</td>
<td></td>
<td>.87</td>
<td>10</td>
</tr>
<tr>
<td>AMS-C28</td>
<td></td>
<td>.89</td>
<td>28</td>
</tr>
<tr>
<td>AMS-C28</td>
<td>(excluding Amotivation</td>
<td>.94</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>items)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic</td>
<td>Motivation</td>
<td>.92</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>IMTK</td>
<td>.72</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>IMTA</td>
<td>.80</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>IMTES</td>
<td>.91</td>
<td>4</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>Motivation</td>
<td>.90</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>EMID</td>
<td>.79</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EMINTJ</td>
<td>.89</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EMEXR</td>
<td>.88</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: N=28; The AMS-C28 IMK = Intrinsic motivation for knowledge, IMTA = Intrinsic motivation toward accomplishment, IMTES = Intrinsic motivation for experience stimulation, EMID = Extrinsic motivation, identified regulation, EMINTJ = Extrinsic motivation, introjected regulation, EMEXR = Extrinsic motivation, external regulation.
Table 2
Reliability Coefficients of the SACQ Subscale Clusters

<table>
<thead>
<tr>
<th>SACQ subscales</th>
<th>Clusters</th>
<th>( \alpha )</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Adjustment</td>
<td>Academic motivation</td>
<td>.79</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Academic environment</td>
<td>.88</td>
<td>5</td>
</tr>
<tr>
<td>Social Adjustment</td>
<td>Social nostalgia</td>
<td>.61</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social environment</td>
<td>.72</td>
<td>3</td>
</tr>
<tr>
<td>Personal-Emotional Adjustment</td>
<td>Psychological</td>
<td>.69</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Physical</td>
<td>.63</td>
<td>6</td>
</tr>
<tr>
<td>Institutional Attachment</td>
<td>General attachment</td>
<td>.86</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: \( N=28 \), the SACQ is a 67-item scale with 4 subscales (academic adjustment, social adjustment, personal-emotional adjustment, institutional attachment). Each subscale has items that group into clusters. Only the clusters with high reliability are represented in this table. Some clusters are not represented in the table.

Procedures

Recruitment

This research study was conducted at a large public university located in a rural community located in a Northeastern state. After several attempts to recruit participation of various Division I PWIs through email solicitation to athletic departments for participation, one school responded favorably and agreed to allow me to have access to their student-athletes of color. This PWI boasts a nationally recognized Division I athletic program and is a member of a top NCAA conference. The football and basketball programs generate high revenues and receive most of the media attention, but these teams also have the most student-athletes of color.

Recruitment for participation occurred in multiple ways over a four-month period.

Prior to active recruitment of participants, I drafted an electronic letter of recruitment geared toward student-athletes of color with the URL to the survey embedded into the letter and
hyperlinked for easy access and activation. The first approach to recruitment took place in fall semester in December 2016. I solicited participation from student-athletes who were enrolled in a first-year experience (FYE) course required by the university to be taken. These courses were for student-athletes only, and were instructed by academic advisers who were employed by the athletic department. Many of these instructors also had these students on their caseloads. Prior to the letter being sent to course instructors, I was invited to attend each class to present a brief recruitment speech to encourage participation. The electronic recruitment letter was later emailed to the course instructors from the researcher who then posted the letter as an extra credit assignment on the digital classroom interface.

The second approach to recruitment occurred at the start of the spring semester in mid-January 2017. A 3-minute recruitment video was filmed by my colleagues and I in an attempt to explain the study; what was being investigated, the reasons why it was taking place, and how the student-athlete could help. The goal of the video was to increase exposure and accessibility to the study through the use of social media, which is a popular form of entertainment and information gathering for college-age students today. The video was uploaded to YouTube, and a URL which led to the video was generated by the website developer. The resulting video included an embedded link to the survey, enabling students to click on the link after viewing.

I distributed the YouTube link (https://youtu.be/gCUCb8_cIH8) to the phones of 130 student-athletes of color, who received a text through the use of the JumpFoward software (Sangamon, Chicago, 2017). JumpForward is a software company purchased/leased by the athletic department. Its software stores the demographic and contact information of each student-athlete at this particular university where the study took place. The company [JumpForward] describes their service on their website (www.jumpforward.com) as follows:
“JumpForward is a comprehensive software solution that helps athletic departments communicate and operate more efficiently. First, JumpForward’s Unified Athletic® Department gets everyone in the department (student-athletes, coaches, staff, and the AD) onto the same platform where they can: access and share forms, communicate via text or email, design workflow processes, and securely connect to campus information systems. Then, JumpForward’s integrated solutions offer a suite of products for the day-to-day software needs of specific users. Finally, the Predictive Analytics Vault™ provides a data strategy for your program’s strategic plan.” (www.jumpforward.com).

The final method of recruitment occurred in March 2017 prior to spring vacation break. Using the JumpForward software I sent a reminder email that included the recruitment letter, survey link, and YouTube recruitment video link to the listserv of the 130 identified student-athletes of color. This was the last attempt to lobby participation from this population. Access to the survey was closed a week after the final email was sent out, so that data analysis could begin.

**Sampling Method and Sample Size**

Convenience sampling method was utilized in this study because of the pre-existing relationship I had with the athletic department at this particular university. Researchers Sedgwick (2013) and Peterson and Merunka (2014) support the use of convenience sampling as a non-random, non-probability method to gather a homogenous sample. Peterson and Merunka find college students to be good samples to use for study because of the homogeneity in age, education, and identity. This makes college students, and in this study, student-athletes of color
at a PWI, easier to compare than other groups due to their demographic and psychological characteristics (Peterson & Merunka, 2014).

Sedgwick (2013) notes the potential limitations to convenience sampling, but finds it useful in the recruitment of participants due to its ease. Convenience sampling can be used in synchrony with most research designs (Sedgwick, 2013). Sousa, Zauszniewski, and Musil (2004) acknowledge that convenience samples may be biased due to the fact that most participants do not reflect the population from which they come from. Most convenience samples voluntarily participate, which tends to attract individuals who feel strongly about the issue in question or who possess a desire to participate in the study.

Sousa et al. accept that convenience samples could be problematic with certain statistical considerations (2014). Researchers suggest the best way to work with the issues convenience samples bring is to compare their responses and results with the population from which they came from to determine the variability of the data (Babbie, 1990; Bordens & Abbott, 2011; Cohen & Cohen, 1983; Creswell, 2014; Sousa et al., 2004; Tashakkori & Teddlie, 2003;).

In advance, an a priori power analysis using the G*Power 3.1 calculator (Faul, Erdfelder, Lang, & Buchner, 2007) determined the significant amount of participants needed for this study. The G*Power 3.1 calculator suggested a sample size of $n=128$ student-athletes of color to participate in this study for a recommended effect size of .25 and a standard error of .05, in order to achieve power of .80 (Faul et al., 2007).

**Data Collection**

Prior to data collection, approval from the Internal Review Board (IRB) was obtained (see Appendix). I requested licensure permission from Western Psychosocial Services (WPS) for the rights to use the SACQ (Baker and Siryk, 1989) instrument (see Appendix) in the study.
Permission was granted by WPS after fees paid. All instruments (e.g. GSE, ABS, AMS-C 28) were manually entered into the Qualtrics (Provo, UT) software for distribution and data collection. The combination of all 4 instruments and instrument items yielded a survey that contained 109 questions participants answered along with an additional 26 questions that focused on informed consent and participant demographics. The survey took participants 20-25 minutes on average to complete.

The Qualtrics software generated a random but specific URL link specific to this survey which was used to electronically distribute and collect the data. Miller and Salkind (2002) support the use of questionnaires for data collection, for they find a well-designed questionnaire can yield accurate data. However, Miller and Salkind do acknowledge that though the use of questionnaires has both advantages as disadvantages, it also boasts some disadvantages. For example, respondents also tend to ignore the questionnaires and not complete them (Miller & Salkind, 2002). Participant sample was low (N=28) for this study for reasons stated by Miller and Salkind. It is possible that student-athletes of color at this PWI lacked interest in the survey topic or simply ignored the email correspondence I sent in an effort to recruit and encourage participation.

Tashakkori and Teddlie (2003) advise researchers who choose to utilize questionnaires in a quantitative study, to have all participants complete the same survey; each individual answers the same items with no variations to the questionnaires to minimize major variance in responses. The survey utilized in this study employed a Likert-type method to answer questions that gave participants a range of answers to choose from. Quantitative questionnaires are designed to use closed-ended questions and structured in a way to not allow personal reflection or further explanation by participants (Tashakkori & Teddlie, 2003). Miller and Salkind (2002) cautions
researchers that it is in their best interest to design and use questionnaires that are easy to read by participants, and to be mindful that questionnaires inquiring objective information have higher response rates while those looking for subjective information have the worst.

The study took place at a large public university located in a Northeast state in the US nestled in a rural area. The university offers 31-varsity sports at the Division I level with over 850 athletes who compete at this nationally recognized athletic program. The demographic makeup of this university, as reported on its website, lists 63% of its student body as White identifying. This classifies this institution as predominantly White in accordance to researchers Brown and Dancy’s (2010) definition. Twenty-eight (N=28) student-athletes of color from all academic years and various sports participated in the study.

Student-athletes of color were recruited for participation through various methods. I worked in collaboration with the instructors of the first-year experience (FYE) courses to encourage them to offer the survey to their student-athletes of color for extra credit points. This initial approach saw a spike in participation from freshman student-athletes of color because of the extra points incentive, and their attention was isolated because many instructors offered class time to complete the survey. In addition, a letter of recruitment (see Appendix) for participation was sent via an email listserv obtained from the athletic academic services department of the PWI.

The study was conducted in a single-phase manner over a 4-month span of time. Data collection began the final two weeks of the fall semester in December 2016 and concluded after spring vacation break in March 2017. Participation was voluntary and students who chose to participate, as stated previously, accessed the survey electronically via a link specifically generated for this study by the Qualtrics software. Once the link was accessed and survey started,
participants were made aware of informed consent. A random numeric ID was generated (e.g. #555556666) for each participant by the Qualtrics software to maintain confidentiality and to preserve anonymity.

No gifts or financial compensation was offered to students who completed the survey. A Financial or gift compensations of any kind were not offered to student-athletes in consideration that they may be in violation of NCAA *amateurism* policy. That policy states that student-athletes are amateurs and not professionals and cannot be compensated in any way that benefits or rewards them for their athletic talents or gives them an advantage (NCAA, 2013). Student-athletes anonymously completed the survey. Students who did not participate or submitted incomplete surveys were not be penalized.

**Data Analysis**

Upon completion of the data collection process, each anonymous response from participants was entered into SPSS (IBM SPSS, version 24) and descriptive analysis of the data was obtained. The number of participants was 28 which was 100 participants short of the suggested sample size obtained from the G*Power 3.1 statistic calculator (Faul et al., 2009) when the *a priori* calculation was used. Researchers Babbie (1990), Hartwig and Dearing (1979) suggest the use of univariate, bivariate, and multivariate analysis when finding the results of a correlational study.

**Descriptive Analysis**

Univariate data analysis examines the distribution of variables, one variable at a time. This analysis method visually and numerically inspects the data to look at the descriptive analysis of the data, meaning its distribution, central tendency, dispersion, and whether the variables are continuous or discrete in the study (Babbie, 1990; Hartwig & Dearing, 1979).
When analyzing data univariately, I looked at frequency distributions, averages (e.g. mean, median, mode), skewness, standard error, range of responses, and whether variables were continuous or concrete (Babbie, 1990). Univariate data, if normally distributed, when analyzed should have a *bell-shaped curve* that includes all outliers (Hartwig & Dearing, 1979). During analysis, outlier responses were taken into consideration and inspection for skewness was also conducted. The data would be considered skewed if the skewness is divided by the standard error skeweness and the result is $\geq 2$. For this study I applied a univariate analysis to determine the distribution, the central tendency, and the power of the variables. All were normally distributed.

**Bivariate Analysis**

A bivariate analysis was conducted to examine if a relationship existed between the independent variables (i.e. SACQ, GSE, ABS) and the dependent variable (i.e. AMS-C28). The process of stratifying the data allowed for each variable to be looked at individually, allowing one to view how it interacts with the dependent variable (Babbie, 1990). It is recommended to create a scatterplot of the data and have a line drawn that is the *best-fitting* straight line which represents the trend of the data points in the plot (Bordens & Abbott, 2011). The data were represented in a correlational matrix that portrayed the causal relationship between the variables (Hartwig & Dearing, 1979; Bordens & Abbott, 2011). Hartwig and Dearing notes the use of multivariate analysis requires the researcher to start with the relationship determined between the variables from the bivariate analysis and to obtain their residuals. The residuals are then plotted against the variables in the attempt to explain some of the structure (1979). For this correlational research study, the correlation matrix was the better method to use to investigate the existing relationships.
Correlational Matrix and Hierarchical Regression

A correlation matrix was generated for this study revealed some positive relationships between the independent variables and the dependent variable. Correlational analysis is a method that allowed me to find which variables strongly associated with each other (Baker & Inventado, 2014). Baker and Inventado supports the analysis of a dataset through correlations using the if-then rule to be able to explain that if one variable occurs, then so will the other. The conclusion would be a strong positive or negative relationship occurring between variables. The goal in using a correlation matrix for analysis is to find positive or negative linear correlations between variables (Baker & Inventado, 2014). Several positive correlations were found in this study and will be discussed in chapter 4.

Another method of multivariate analysis that was not used in this study, but could be applied to future research, is regression analysis. Regression analysis can be used when the researcher wants to explain how multiple independent variables act upon the dependent variables, and how the independent variables predict the dependent variable. This compared to bivariate analysis, which uses one independent variable at a time to examine how it relates to the dependent variable (Babbie, 1990). Researchers interested in testing theoretical assumptions and examining the influence of several independent variables, in a sequential way, on the dependent variable, would use hierarchical regression which is designed to test such specific, theory-based hypotheses. Hierarchical regression can determine the relative importance of independent variables, and may be judged on the basis of how much it adds to the relationship to the dependent variable. (Pedhazur, 1997; Petrocelli, 2003). Petrocelli (2003) reports hierarchical regression possesses the ability to focus on the change in the dependent variable and the correlation associated with independent variables. When entered later in the analysis it can be
determined which independent variables overly contributed to the outcome variables that are entered earlier in the analysis.

In addition, hierarchical regression focuses on the change in predictability associated with independent variables that are entered later in the analysis, over and above those independent variables entered earlier in the analysis. Hierarchical regression would be helpful in understanding how the multiple independent variables of the SACQ, GSE, and ABS instruments predict academic motivation intrinsically or extrinsically. This method of analysis allows future researchers to identify the variables that explain the variance in academic motivation in student-athletes of color. Researchers, Gelman and Hill (2007) provide an explanation, as a researcher may want to know the extent to which measures of positive expectations about counseling and client attendance rate predict therapy outcome over and above preexisting psychopathology variables. In such a case, hierarchical regression analysis would be appropriate, provided preexisting psychopathology variables are entered into the analysis first, followed by positive expectations about counseling, and, lastly, attendance rate.

**Summary**

The methodology of this study is summarized in the table below (see Table 3). Stemming from the research questions posed earlier in the chapter, brief descriptions of the research design, participants, instruments (independent and dependent variables), and analysis are proposed.
### Clarification of participants, Instruments, and variables

<table>
<thead>
<tr>
<th>Research Method</th>
<th>Participants</th>
<th>Independent Variables</th>
<th>Dependent Variable</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlational</td>
<td>Student-athletes of color (all genders, all academic years, all sports) from a PWI, NCAA Division I athletic program</td>
<td>Student Adjustment to College Questionnaire (SACQ) (academic adjustment, social adjustment, personal-emotional adjustment, institutional attachment)</td>
<td>Academic Motivation Scale College version (AMS-C28) (Intrinsic or Extrinsic)</td>
<td>IBM SPSS (Univariate: Descriptive Analysis; Bivariate: Correlation Matrix)</td>
</tr>
<tr>
<td>Research Study</td>
<td></td>
<td>General Self-Efficacy Scale (GSE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Likert-style survey</td>
<td></td>
<td>Academic Buoyancy Scale (ABS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>electronically</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>distributed via</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualitrics.com link</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 4: RESULTS

This chapter presents the results of the preliminary data analysis and cleaning, a summary of the univariate analysis procedures, and the bivariate analyses. The chapter concludes with a summary of the findings. The purpose of this research study was to investigate the perception student-athletes of color had of their college adjustment and institutional attachment to their PWI, and to determine if a relationship to academic motivation exists. Correlation analysis was used to answer the following research questions:

RQ1: Does self-efficacy, college adjustment, and academic buoyancy among student-athletes of color relate to extrinsic motivation toward academics?

RQ2: Does self-efficacy, college adjustment, and academic buoyancy among student-athletes of color relate to intrinsic motivation toward academics?

What I hypothesized as an expected result of this study was that independent variables of college adjustment, general self-efficacy, and academic buoyancy would strongly relate in a positive direction to both types of academic motivation. Stated differently, it was predicted by the researcher that student-athletes of color who perceive themselves to be well-adjusted to college and attached to their PWI would also have a high perception of their motivation toward his or her academics. The study found college adjustment correlates with academic motivation, both intrinsically and extrinsically. However, general self-efficacy and academic buoyancy resulted in no significant correlations with overall academic motivation among student-athletes of color.
Preliminary Analysis

Data Cleaning

The survey was created for this study through the use of the qualtrics.com software. The instrument items were manually uploaded as a Likert-style survey into the software and electronically distributed collected. The results were exported from the qualtrics.com software into spreadsheet form and used for analysis in SPSS. There were 106 responses to the survey, 76 of those respondents did not meet the criterion for inclusion. The remaining 28 met the criterion for inclusion because they self-reported as student-athletes of color; their data was used for analysis. Of the 28 participants higher participation was received from males (n=16, 57%) compared to females (n=12, 43%) and more involvement came from freshman (64%) than other academic years.

Missing Data, Reverse Coding, and Exclusion of Amotivation Items

Of the 28 responses in the data set, 2 participants omitted responses to two items in the survey. With correlation research design studies it is recommended to use the pairwise deletion method (Allison, 2002; Statistics Solutions, 2017) when missing values exists in the data. According to Statistics Solutions (2017), pairwise deletion maximizes all data available by an analysis-by-analysis basis to increase the power of the analysis. However, pairwise deletion was not used for missing data in this study, instead, the SPSS mean replacement of missing values method was used. The two missing values were replaced with a mean value of the values from neighboring responses from that participant (UCLA, 2017).

Several items on the SACQ instrument had to be reverse-coded prior to analysis. The SACQ posed several negatively keyed questions reverse-coded by the researcher which left unattended would have negatively influenced the reliability of the instrument items and the
correlation between variables. The four amotivation items on the AMS-C28 instrument were not included in the data analysis.

**Descriptive Analysis**

Descriptive analysis of the data was conducted in SPSS with the results reported in Tables 4 and 5. Descriptive analysis found the data to be normally distributed with a higher number of males, Black/African American, and first-year student-athletes who participated in the study.

Table 4

*Demographics of Participants*

<table>
<thead>
<tr>
<th>Demographics</th>
<th>N</th>
<th>Participants</th>
<th>Males</th>
<th>Females</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of student-athletes of color at this PWI</td>
<td>187</td>
<td>125</td>
<td>62</td>
<td>(Males=67)</td>
<td>(Females= 33)</td>
</tr>
<tr>
<td>Total number of Student-athletes of color who participated in this study</td>
<td>28</td>
<td>16</td>
<td>12</td>
<td>(Males=57)</td>
<td>(Females=43)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black/African American</td>
<td>10</td>
<td>4</td>
<td>6</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>5</td>
<td></td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Native Hawaiian, Pacific Islander, or Other</td>
<td>1</td>
<td>1</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Academic year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>10</td>
<td>8</td>
<td></td>
<td>64.3</td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td>4</td>
<td>1</td>
<td></td>
<td>17.9</td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td>2</td>
<td>2</td>
<td></td>
<td>14.3</td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>0</td>
<td>1</td>
<td></td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Males made up 57% of participants in this study but 13% of the population of overall male student-athletes of color at this PWI. Females made up 43% of the participants of this study but 19% of the overall female student-athletes of color at this PWI.
Table 5
*Descriptive Analysis for Independent and Dependent Variables*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Instruments</th>
<th>Subscales</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td>Academic Adjustment</td>
<td>134.91</td>
<td>21.57</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social Adjustment</td>
<td>116.18</td>
<td>23.94</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Personal-Emotional</td>
<td>80.83</td>
<td>17.26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adjustment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Institutional Attachment</td>
<td>42.63</td>
<td>8.82</td>
</tr>
<tr>
<td></td>
<td>SACQ</td>
<td>383.42</td>
<td>62.32</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ABS</td>
<td>19.36</td>
<td>5.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GSE</td>
<td>33.00</td>
<td>4.16</td>
<td></td>
</tr>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
<td>AMS-C28</td>
<td>128.14</td>
<td>23.79</td>
</tr>
<tr>
<td></td>
<td>AMS-C28 (no</td>
<td>Amotivation items)</td>
<td>117.71</td>
<td>14.65</td>
</tr>
<tr>
<td></td>
<td>Intrinsic Motivation</td>
<td></td>
<td>54.71</td>
<td>4.49</td>
</tr>
<tr>
<td></td>
<td>IMTK</td>
<td>20.75</td>
<td>5.23</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IMTA</td>
<td>18.18</td>
<td>6.37</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IMTES</td>
<td>15.79</td>
<td>13.66</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extrinsic Motivation</td>
<td></td>
<td>63.00</td>
<td>4.92</td>
</tr>
<tr>
<td></td>
<td>EMID</td>
<td>21.64</td>
<td>6.34</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EMINTJ</td>
<td>18.50</td>
<td>5.19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EMEXR</td>
<td>22.86</td>
<td>25.93</td>
<td></td>
</tr>
</tbody>
</table>

Note: *N*=28; Skewness Std. Error=.441; Kurtosis Std. Error=.858; The AMS-C 28 measures intrinsic motivation, extrinsic motivation, and amotivation. IMTK = Intrinsic motivation for knowledge, IMTA = Intrinsic motivation toward accomplishment, IMS = Intrinsic motivation for experience stimulation, EMID = Extrinsic motivation, identified regulation, EMINTJ = Extrinsic motivation, introjected regulation, EMEXR = Extrinsic motivation, external regulation.
Bivariate Analysis

Correlation Matrix

A correlation matrix of the results was constructed using SPSS to find significant relationships between variables. According to Minitab Express Support (2017), the strength of a correlation is due to its magnitude and direction. This means the closer the correlation is to +1 or -1 the stronger the correlation. A correlation close or equal to “0” indicates little or no correlation between variables (Minitab, 2017). Results are presented in Table 6.

Table 6
Correlation Coefficients Between Independent and Dependent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. College Adjustment</td>
<td>1</td>
<td></td>
<td>.34</td>
<td>.45*</td>
<td>.38*</td>
<td>.44*</td>
</tr>
<tr>
<td>3. Academic Buoyancy</td>
<td></td>
<td>1</td>
<td>.07</td>
<td>.19</td>
<td>-.08</td>
<td></td>
</tr>
<tr>
<td>4. Academic Motivation overall (no Amot)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.93**</td>
</tr>
<tr>
<td>5. Intrinsic Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.68**</td>
</tr>
<tr>
<td>6. Extrinsic Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: N=28; * Significant at the p< 0.05 level (2-tailed). ** Significant at the p< 0.01 level (2-tailed). AMS-C28 (no Amot)= Academic motivation scale college version, excluding amotivation items. AMS-C28 (INT)= Academic motivation scale college version, intrinsic motivation. AMS-C28 (EXT)= Academic motivation scale college version, extrinsic motivation.

This study found general self-efficacy and college adjustment are correlated ($r=.41, p <.05$). General self-efficacy and academic buoyancy are correlated ($r=.48, p <.05$). Academic motivation (excluding amotivation items) and college adjustment are correlated, $r=.45, p <.05$. Intrinsic motivation and college adjustment are correlated ($r=.38, p <.05$). Extrinsic motivation and college adjustment are correlated ($r=.44, p <.05$). Additionally, correlation between intrinsic motivation and extrinsic motivation existed ($r=.68, p = <.05$).
Summary

The results of this study addressed the research questions posed. Correlations exist despite magnitude and were found between college adjustment and academic motivation, intrinsically and extrinsically. Although I hypothesized that all independent variables will relate to the dependent variable, no significant correlations were found to exist between general self-efficacy, academic buoyancy, and academic motivation. The findings of this study are discussed in chapter 5.
CHAPTER 5: DISCUSSION

The findings presented in chapter 4 will be discussed in this chapter in addition to addressing the two research questions posed. A discussion on the significant findings, limitations, implications, and recommendations for future research are presented. The chapter closes with a conclusion of the study.

The purpose of this study was to quantitatively determine how student-athletes of color who attend a PWI perceive their adjustment and attachment to their college and how these perceptions are related to academic motivation. A survey was used to collect data from minority student-athlete participants at a Division I university located in a suburban area of a northeastern state with a high enrollment of White students. The goal of the study was to find any relationships that may exist between students’ perception of adjustment, attachment, academic buoyancy, and self-efficacy and academic motivation. Two research questions guided this study:

RQ1: Does self-efficacy, college adjustment, and academic buoyancy among student-athletes of color relate to intrinsic motivation toward academics?

RQ2: Does self-efficacy, college adjustment, and academic buoyancy among student-athletes of color relate to extrinsic motivation toward academics?

Discussion of Findings

Research Question 1: Correlation Between College Adjustment and Intrinsic Motivation

The results of the data analyses determined a correlation existed between college adjustment and intrinsic academic motivation. There are various reasons student-athletes attend college; the obvious ones are sport-related, and for some, a chance to earn a degree. The findings of this study demonstrate how student-athletes of color who highly rate their adjustment to
college as being part of their internal desire to academically perform. The high adjustment and intrinsic reasons allow them to take advantage of the opportunity to gain knowledge. D’Lima, Winsler, and Kitsantas (2014) find individuals often possess both intrinsic and extrinsic reasons for their attempt to accomplish a task. Intrinsic motives support reasons why students remain engaged during a lecture, attain higher SAT scores, perform better academically, and seek goal mastery (D’Lima et al., 2014).

Connected to Deci and Ryan’s (1985) Self-Determination Theory (SDT), these researchers posit academic motivation to be on a continuum on which an individual moves from low (amotivation), to completing a task for external reward (extrinsic motivation), to more internal and personal reasons, such as knowledge-gain (intrinsic motivation). The student-athletes of color who responded to this study reported a high adjustment to their PWI and being intrinsically motivated in their academics. Simons, Van Rheenen, and Covington (1999) describe intrinsically motivated student-athletes in another way, adding to their intrinsic motivational characteristics the idea that they are also *Success-Oriented* and *Overstrivers*. Success-Oriented student-athletes who are also Overstrivers, according to Simons and colleagues, are highly motivated to succeed academically and tend to have higher academic performance in school (1999). Their findings agree with Deci and Ryan’s Self-Determination Theory on student intrinsic academic motivation.

Researchers Eccles et al., (1983) and Eccles and Wigfield (2002) pioneered the Expectancy-Value Theory (EVT), which supports the findings of this study. Student-athletes of color who find intrinsic value in a college education are more likely to adjust better and have more personal reasons for attending and persisting. Student-athletes of color who have high intrinsic value expectations from attending college and more *grit* (Strayhorn, 2013) also tend to
have clearer current and future goals and are more determined to achieve their career goals (Eccles and Wigfield, 2002).

Research Question 2: Correlation Between College Adjustment and Extrinsic Motivation

A correlation was also found between college adjustment and extrinsic academic motivation. The results found participants had greater identification toward extrinsic motivation in comparison to intrinsic motivation when it came to college adjustment. It is evident student-athletes enroll in college for the high athletic competition, the chance to perform in front of large crowds, the media exposure, to receive an athletic scholarship, and the potential to play professionally. Those externally driven reasons could explain why a student-athlete of color in this study would attend a large Division I PWI for sports. Those reasons stated could apply to the participants of this study and why their adjustment at their institution could be due to potential external rewards connected to their athletic status. According to D’Lima, Winsler, and Kitsantas (2014), extrinsic motives engage students in academic performance but at a shallow level and do not promote strong autonomy in college students.

In line with Deci and Ryan’s (1985) SDT, extrinsically motivated behaviors are driven by the need for acceptance by others, external reward, or fear of punishment or failure. Simons et al. (1999) label extrinsically motivated student-athletes as Failure-Avoiders and Failure-Acceptors. Their study found students labeled as Failure-Avoiders and Failure-Acceptors were more committed to the athletic role and lacked deeper commitment to academics. The participants of this study, however, appeared to channel their athletic motives positively and carried them over into their college adjustment. Simons et al. (1999) study found student-athletes that were more committed to athletics had less intrinsic motivation, identified as having less academic self-worth, and found more reasons to explain their poor academic performance.
Nonetheless, the student-athletes of color who participated in this study may also attribute their college adjustment to their involvement in a college sport (Astin, 1999). Astin’s Student Involvement Theory (SIT) introduced some elements the researcher believed helped students achieve academic success. Those elements of SIT are (a) the amount of physical and psychological energy expended on the academic experience, (b) physical involvement in campus activities, such as sports or events, and (c) the involvement in social groups and organizations on campus (Astin, 1999). It is possible the athletic role and status these student-athletes of color have on their PWI campus allowed for them to be more adjusted and the opportunity to play sports may have provided the extrinsic motivation to engage in the campus community and in the classroom.

Researchers Hawkins (2015), Flowers (2004), Berger and Milem (1999) conducted studies on Astin’s Student Involvement Theory with Black/African American students, some on PWI campuses and found those students reported more involvement in their campuses was beneficial to their college experience. Flowers (2004) interviewed black students on a college campus who identified their involvement in their college has helped with their persistence. Furthermore, a study by Berger and Milem (1999) reported Black/African American students who increased their involvement on their PWI campuses had lowered dropout rates and increased persistence. In addition to these studies, there is extensive literature on student-athletes of color who found academic and social benefits on their campuses from their athletic status, which supports Astin’s theory.

Student-athletes extrinsically motivated and well-adjusted to college may find utility value (EVT; Eccles et al., 1983) from the college experience and the sport. Eccles and Wigfield (2004) suggest students who assess a task to have utility value engage in the task not because
they particularly enjoy it, but because they need to do it to pursue other interests, appease others, or for social benefits. The authors acknowledge that individuals will also consider the *cost* of the task, or risk, in achieving the goal or value (EVT; Eccles et al., 1983; Eccles and Wigfield, 2004). If the risks are too high, and a negative result or failure is imminent, it is likely the individual will not attempt the task. It is possible that the participants of this study may have assessed the utility value of attending college and playing sports to have some worth and the cost of doing so was within their level of risk.

**Additional Correlations**

The outcome of this study did not find correlations among all independent variables and the dependent variable academic motivation. Strong correlations were found between college adjustment and academic motivation, with no significant correlations found between academic motivation and general self-efficacy and academic buoyancy. I hypothesized that all independent variables would relate to academic motivation in student-athletes of color, however, correlations were found between the independent variables that may also contribute to college adjustment and attachment in the student-athletes of color that participated in this study.

**Relationship Between Self-efficacy and College Adjustment**

The results found a relationship between self-efficacy and college adjustment. Student-athletes of color who perceived their efficacy to be high may have better adjustment to college. The belief in their ability to accomplish tasks as an athlete and as a student allows for better adjustment and attachment to their PWI campus. Crisp, Taggart, and Nora (2015) found students who were well adjusted in high school tend to translate those skills and abilities to the college level. It is possible these student-athletes of color who previously found athletic success at the secondary level transferred those skills from high school to college to aid in their adjustment.
**Relationship Between Self-Efficacy and Academic Buoyancy**

The results found a correlation between self-efficacy and academic buoyancy. This could imply that students with a strong belief in their abilities to complete goals and accomplish tasks may be better able to transfer those beliefs and skills toward academics. It is possible these student-athletes may also have applied them to situations that dealt with schoolwork challenges, professor interactions, and academic stress. Those student-athletes of color who appear to have established an attitude of resilience, determination, cooperation, and have a sense of perseverance may also attribute the development of these character traits to athletics and have skillfully also applied them to the classroom.

**Limitations**

In addition to the limitations presented in chapter 1 of this study, several delimitations and limitations are acknowledged by the researcher in this study, which make the internal and external validity susceptible. The use of discretion is suggested when making generalizations based on the findings of this study due in part to the following reasons: (a) There were a small number of participants used in this study. Based on the calculation of the G*Power calculator (Faul, Erdfelder, Lang, & Buchner, 2007) the anticipated $N$ for this study was 128 participants to achieve .80 power. Twenty-eight of the 850 student-athletes at this PWI participated in this study. That is 3.3% of the student-athlete population at this university and 15% representation of the student-athletes of color population. A population at the suggested size of 128 may offer a better representation for generalization. (b) Due to the small number of participants the study lacked greater representation of each race by gender and academic year. In addition, this study did not ask students how they socially identify racially, culturally, or ethnically. The survey asked students to select a racial demographic or category they may genetically identify as due to
family lineage. It is possible some student-athletes of color may genetically identify as one race but socially and culturally identify as another. (c) A majority of the participants were freshmen student-athletes with less participation from juniors and seniors, and none from the graduate level. This offers a skewed perspective on how students adjust over a college career. It is possible the high participation from freshman could have influenced the results of the study to show higher levels of adjustment and academic motivation due to possible optimistic views new students may have about their college experience. (d) The instruments used in this study did not ask many specific questions on academic performance, sport-related activities and involvement, time management, organization skills, social activities, relationships with university faculty, and self-efficacy toward academic tasks. Future research looking at these specific topics could be useful in gaining an expanded awareness of the non-cognitive factors that play a role in college adjustment and attachment. (e) Survey distribution was limited to one institution and the data collection timeframe was short. It is possible that the recruitment and participation from other institutions could have increased the population size and provided a wider range of perspectives. Keeping the data collection window open longer than four months may also assist that process. Data collection and continuous distribution of the survey over a yearlong period of time or multiple times—once in the fall and once in the spring semesters—should be considered. Those options would open the opportunity for more participation, more data, and more options for data analysis. Future researchers should consider a longitudinal study to track changes in adjustment and attachment over time. (f) Furthermore, it is likely student-athletes who participated in this study did so because of the possibility that they were highly interested in the topic or may have had a personal bias toward the researcher, which may have been reasons they volunteered participation. The possibility exists that these particular students who completed the survey were
highly adjusted, highly motivated, and already high academic performers who may not represent the overall population of student-athletes of color at this PWI. It is possible the less adjusted, less academically motivated, poor academic performers lacked interest in the study, ignored the survey, and did not offer their participation. More participation from those student-athletes of color may have influenced the results of the study in a more negative, but more generalizable way. It was also much more difficult for me to increase participation and encourage survey completion from these student-athletes. Another reason I can think of is that they are often solicited from other researchers who are interested in collecting information on their college and athletic experiences. I speculate the over surveying of these student-athletes could caused test fatigue that led them to ignore recruitment efforts. (g) Lastly, it is my belief that participation in the study may have been low because compensation was not offered for completing the study. Student-athletes are regulated by the NCAA and could be subject to certain citations, bans, probations, or other forms of punishment if out of compliance with the rules. For those potential reasons is why I did not offer compensation of any kind to participate. I am under the belief that future research with this population should include compensation of some kind to increase engagement and involvement. A possible option for compensation could be the ability to earn time toward study hall hours many athletes’ are obligated to complete a set amount of hours each week, they can earn from participation.

**Delimitations**

Some delimitations made by the researcher follow: (a) The 4 amotivation items of the AMS-C28 scale were not included in the data analysis process. This decision was made because the purpose of the study was to investigate if any relationship existed between college adjustment, self-efficacy, and academic buoyancy, which are all progressive attitudes toward
motivation. Therefore they were removed. (b) Participant socioeconomic status and hometown classification (i.e. urban, suburban, and rural) were not part of the analysis as well. It is possible these factors could have led to deeper understanding for the variance and correlations in the study, but the decision was made to not include those factors. This researcher chose to maintain the investigative focus on participants’ race and athletic identity at a PWI and its relation to college adjustment, attachment, and academic motivation. Lastly, (c) the decision to conduct the study at this particular university was made based on an existing relationship established by the researcher with the athletic department and the student-athletes. Conducting the study at this university gave the researcher convenient access to student-athletes of color for recruitment and survey distribution. However, this decision limited the exposure and participation of different NCAA divisional ranges (i.e. Divisions I, II, III, etc.), and school classifications (i.e. public, private, community), location (i.e. urban, suburban, rural), school size (i.e. small, medium, large) to the sole participation from this Division I athletic program at a large, public, PWI located in a rural area.

**Implications**

High-profile Division I college athletic programs disproportionately have students of color who participate on high-revenue generating teams (Hawkins, 2013; Zimbalist, 2001). Men and women’s basketball and football programs have gained greater popularity since the federal ruling of *Brown v. Board of Education* (1954), which allowed the integration of schools. College coaches employed at predominantly White institutions have taken the liberty to aggressively recruit students of color to their campuses, using sports as the foundation of the conversation. Coaches offer prospective athletes, their parents, and their high school support team (i.e. school
counselors, teachers) the promise of an opportunity for the student to earn a degree, compete at a national level, and position themselves to play professionally (Hawkins, 2013; Zimbalist, 2001).

Regrettably, many coaches ignore the fact that they are luring prospective athletes from a culture and community that represents the students’ racial and ethnic identity to coax the athletes to join a campus community that is vastly different. The environment is usually predominantly white, lacks diversity, is not culturally responsive, and is likely located in a rural or isolated part of the state. It is a known practice that many student-athletes of color are recruited from urban communities and schools that usually lack the resources necessary to prepare them for the academic rigor these PWIs maintain (Ancis, Sedlacek, & Mohr, 2000; Cabrera et al., 1999; D'Augelli & Hershberger, 1993; Sedlacek, 1999). Though overall graduation rates for student-athletes of color and student-athletes have risen, retention and graduation rates remain low, and dropout rates remain high among student-athletes of color when compared to their White counterparts.

The results of this research study have implications for university administrators and student affairs, athletic administrators and coaches, parents, social clubs and organizations, and mental health and psychological services at the higher education level. The findings of this study offer possible directions for school administrators and school mental health professionals at the secondary level to implement for high school athletes of color who aspire to compete at predominantly White institutions.

**Parental Role and Involvement**

Results of this study can assist parents of student-athletes in the athletic recruitment and college application process. Researchers Crisp, Taggart, and Nora (2015) studied factors that influenced academic success outcomes in Latino/a students and found students with a stronger
sense of ethnic identity were better able to form a relationship with their PWI and had stronger commitment to persist. Additional research findings supported that parental involvement in combination with a student’s deep ethnic identity may help moderate some negative feelings connected to college adjustment and attachment (Crisp, Taggart, & Nora, 2015).

Parents can play a role in the development of their child’s self-efficacy by helping reframe failures as challenges and not threats when it relates to academics (Chemers, Hu, & Garcia, 2001; Torres & Solberg, 2001). In addition, Crisp et al. (2015) connect parent education level and family socioeconomic status to Latino/a students’ academic performance and desire to persist in college. Students of color raised in homes with a stable family income were found to have higher grades and more positive outlooks toward their academics. The role parents have in the lives of their student-athlete children is a significant one. Crisp et al. (2015) findings connect the academic adjustment and success of student-athletes of color to their parents when parents have achieved higher education levels, strengthen the ethnic identity of their child, strive for financial stability, and have developed a strong sense of efficacy toward personal challenges.

**Athletic Administrators and College Coaches**

Data analyses show self-efficacy, college adjustment, and academic buoyancy positively correlate with academic motivation. The findings of this study showed student-athletes of color at this particular PWI demonstrate both intrinsic and extrinsic motivation toward their academics. This could mean more adjustment and attachment occurred due to their athletic involvement and coupled with the opportunity to learn and gain further knowledge from this institution. Athletic administrators and coaches must recognize the importance of the first year of college to student-athletes of color, for it poses the highest risk for students to drop out or academically underperform (D’Lima, Winsler, & Kitsantas, 2014). Researchers agree that
freshman year tends to be the most difficult year for transitioning students to adjust to college. Athletic officials should take proactive steps to provide additional support for students of color in order for them to be successful during this distinct time and beyond (D’Lima et al., 2014).

In order to increase retention and persistence among first-year student-athletes of color, it is recommended that athletic officials and coaches use the findings of this study to implement early interventions that are comprehensive in design. They include the creation and implementation of support groups for students of color, additional academic assistance, and the encouragement of more involvement in campus and community activities outside of athletics. It would even benefit coaches and athletic directors to develop programs that support and develop the ethnic and cultural identities of these students as well. Athletic officials should continually seek out what inspires and motivates their student-athletes of color outside of his or her sport. It would serve them well to assist these students in the development of their self-efficacy for it could be a resource for them as they face challenges in the athletic arena, in the classroom, and in their personal lives.

**University Administrators, Professors, Social Clubs, and Student Affairs**

Increased self-efficacy relates to academic performance, achievement, improved time management, and persistence (Crisp et al., 2015; D’Lima et al., 2014). University administrators, professors, social clubs and organizations, along with student affairs would benefit from the findings of this study as it could inform how they design and implement programs and curriculums that meet the needs of this population. D’Lima et al. offer an empirical connection between Latino/a students’ decisions to remain enrolled in school based on different forms of motivation and support they receive from faculty and university officials. Social clubs and organizations along with the department of student affairs are tasked with the duty of creating an
inclusive and supportive environment for all students. The utilization of these findings can help these organizations offer programs and assistance to student-athletes of color that support their cultural and ethnic needs, and that help the campus feel more welcoming and feel more of a fit (D’Lima et al., 2014; Museus and Yi, 2015).

D’Lima et al. (2014) identifies other contributing factors to college adjustment and attachment for students of color to be meaningful ties to professors, a social network of friends, positive mentor relationships, and strong financial assistance from the university. Torres and Solberg (2001) wrote about how important student participation in social activities on campus and being more involved with clubs and organizations in combination with engaging discussions with faculty can benefit students of color at PWIs. These actions increase self-efficacy, improve self-confidence, and enhance institutional attachment. In contrast, unwelcoming campuses with the perception of a negative racial climate and derogatory remarks made from peers or professors can adversely impact retention and persistence of the students of color who attend PWIs (Crisp et al., 2015). A study by Chemers et al., (2001) found self-efficacy positively correlates with academic performance and educational achievement. It is recommended that university officials, professors, social clubs and organizations, along with student affairs make a concerted effort to develop programs and relationships that focus on the minority student experience on a PWI campus. The effects of racism, micro-aggression (Crisp et al., 2015), and lack of cultural inclusion may go unaddressed by university officials and does not improve the transition on to a PWI campus and could impede adjustment to college in students of color, leading to lower academic success.

Mental Health Professionals and Psychological Services
Numerous studies over the years have found the impact of stress on college students negatively affects mental health (Torres and Solberg, 2001). Torres and Solberg recognize the high levels of stress college students face often influences their decision to persist due to the emotional and psychological pressures. However, researchers Chemers et al., (2001) and Martin and Marsh (2009a, 2009b) believe optimism and academic buoyancy are positive characteristics students can possess and apply when faced with personal-emotional stress and academic setbacks. General optimism has shown to have positive effects on students’ perceptions of their academic performance and psychological well-being during demanding situations (Chemers et al., 2001). Mental health and psychological services may benefit from these findings, which reinforce the need to increase student self-efficacy, academic buoyancy, and college adjustment to help students succeed in the classroom. These mental health professionals can assist student-athletes of color by helping them reframe their thoughts to have more positive expectations from their academic experiences and take on a more optimistic view of the college experience. Chemers et al. see optimism as a crucial factor in students maintaining positive expectations in their first year in college.

**Precollege Preparation and College Academic Advisers**

The way in which student-athletes of color attach and adjust to their high school can serve as a good predictor of their academic performance. A study by Crisp et al. (2015) looking at academic success among Latino/a students found a positive connection between high school academic performance and persistence. The researchers found high school performance among this population to be a strong predictor for college grades. That means precollege experiences at the secondary level in the areas of adjustment and attachment may also influence adjustment, attachment, self-efficacy, academic buoyancy, and academic motivation at the college level.
How students approach their high school experience can serve as a preview to their first year in college.

Moreover, Crisp et al (2015) identify academic self-confidence as a major factor in student academic performance, goal orientation, and skill mastery. Secondary school administrators, educators, and mental health professionals (i.e. school counselors, school psychologists, social workers, and school nurses) have an opportunity at the precollege level to develop these skills in student-athletes of color prior to college enrollment. These educators possess the knowledge, skills, and training to develop academic self-confidence in high school students preparing them for the academic rigor and other demands expected at the college level (Bong, & Skaalvik, 2003; Marsh, 1993; Marsh, Byrne, & Shavelson, 1988).

Furthermore, college academic advisers have a unique role in the lives of student-athletes. In addition to their normal duties of academic advisement and schedule adjustments, college academic adviser can bolster academic self-confidence and self-efficacy while providing guidance on the college adjustment and attachment process through mentorship and emotional support. The student-athlete of color benefits by gaining a strong sense of academic self-efficacy and adjustment, which researchers have found positively links to academic performance, goal orientation, improved effort regulation, time-study management, and greater perception of academic skills (D’Lima, Winsler, & Kitsantas, 2014). College academic advisers are in a position to establish special relationships with student-athletes of color where they can encourage students to take a more positive view of the world, thereby leading to better academic outcomes and higher academic motivation.
Recommendaions for Further Study

Based on the findings from this study the following recommendations can be made for future research. This study was limited to only one college located in a rural area. Future studies would benefit from the expansion of this study to various institutions of different sizes (small, medium, large), different demographic makeup (more or less diverse), different institutional classifications (public, private, community college), and different NCAA divisions (Divisions I, II, III). In doing so, the opportunity for a variation of responses arises along with the possibility of a comparison study.

Although this study looked at student-athletes of color and excluded White student-athletes, future investigation between the perceptions of White student-athletes in comparison to those of color at a PWI would perhaps broaden the topic of discussion (i.e.by exploring how different races perceive their college experiences). Preliminary t-test analysis found a difference in means between genders in these student-athletes of color as it pertains to college adjustment, self-efficacy, academic buoyancy, and motivation. The data analyzed from this population found females self-reported their perception to be higher in areas of adjustment to college, self-efficacy, and academic motivation overall (both intrinsic and extrinsic) compared to their male counterparts who marginally bested the females in the area of academic buoyancy. Further investigation in this direction would perhaps yield more substantial information.

A study done by D’Lima, Winsler, and Kitsantas (2014) reports how crucial the first year of college is for students. The researchers believe how well students do in their first year, meaning in their adjustment, attachment, and academic performance, has served as a predictor for their academic future. This study saw higher participation from freshman student-athletes of color than juniors, seniors, and graduate students. Further research could be done with a deeper
focus on students from each academic year. Future researchers would be better served if data was collected in two phases, and at two separate times to see the differences in response in comparison. In addition, the suggestion of longitudinal studies that follow one or more academic classes over the span of a traditional academic career (4-5 years) could perhaps gain deeper insight on how students adjust and attach to their PWI institutions over time, and could obtain empirical data on its influence on their academic motivation.

This study set out to investigate if any correlations existed between college adjustment, self-efficacy, academic buoyancy, and academic motivation. Perhaps future research could examine if these independent variables predicted academic motivation in student-athletes of color at PWIs. A study collecting data on these variables with the use of regression analysis would offer an opportunity to identify which variables predict academic motivation and to what extent. Hierarchical regression was not used in this study although further investigation with this method may find overlap between the independent variables and their level of influence on academic motivation.

Future research should look at gender differences in perceptions of adjustment, attachment, and motivation (D’Lima et al., 2014). This study suggests differences in gender, race, childhood experiences, precollege experiences, and economic class may influence how student-athletes of color adjust and attach to college and, therefore, should be explored further. With the continued growth in popularity of college sports and many top-performing schools identified as PWIs, these institutions will have to consider how to further develop programs to socially, emotionally, and academically support student-athletes of color who help their programs win games. A closer look at how student-athletes of color compared to White student-
athletes adjust and attach to their PWI campuses and how it influences their academic motivation and achievement should be given.

Lastly, preliminary t-test analysis of means between academic year found freshmen self-reported their perception of adjustment, self-efficacy, academic buoyancy, and motivation to be high. However, sophomore participants reported their perceptions in those same areas as lower than the freshmen. Junior participants saw an uptick in their perceptions compared to sophomores in the same areas. It appears freshman year may have students holding optimistic hopes for their college career that met with a negative change of heart sophomore year, possibly stemming from the reality of the academic rigor and expectations, with a recovery of sorts in the junior year and beyond. Further study in this trend is recommended to investigate if college adjustment moves along a normal developmental curve between freshman year and graduation.

**Conclusion**

Previous research has shown cognitive factors (*intellectual factors*) to be reliable predictors of academic success for college students based on their high school performance (Hall, Smith, & Chia, 2008). However, some researchers argue the sole use of cognitive factors as a predictor for academic success for students of color does not apply. Scholars have found evidence that non-cognitive factors (*attitudinal, mood, and social factors*) serve as better predictors of academic success for students of color particularly in the areas of adjustment, attachment, persistence, self-efficacy, sense of belonging, and academic motivation (Cabrera, Castañeda, Nora, & Hengstler, 1992; Hyatt, 2003; Ting, 2009;).

Yet, despite this racial and cultural contrast student-athletes of color join when they attend a PWI, their level of adjustment and attachment to the college plays a significant role in their academic, social, and emotional satisfaction and success. Some student-athletes choose to
enroll at PWIs for athletic reasons. Some athletes enroll for the academic opportunities. Others, who may be exceptional students and athletes, chose to attend for the equal opportunity of high-level athletics and quality academics.

The purpose of this study set out to find if relationships existed between college adjustment, self-efficacy, academic buoyancy and academic motivation among student-athletes of color. It aimed to find out how these student-athletes perceive their sense of belonging and attachment to their PWI and what type of motivation drives them toward academic success. For the 28 participants in this study, it was found that many perceived the non-cognitive factors of adjustment, attachment, efficacy, and academic buoyancy to favorably contribute to their intrinsic and extrinsic motivations (Tracey & Sedlacek, 1982). These results support Deci and Ryan’s Self-Determination Theory (SDT; 1985) on motivation, as it requires an individual to exert energy, direction, persistence, and intention as a behavior in approaching a task. Researchers Deci and Ryan argue that people can be motivated for the value of the activity and what it means to them, or due to coercion (2000).

As hypothesized by this researcher, student-athletes of color involved in sports (Astin, 1984) at a PWI perceived their college adjustment and attachment to be high due to their likely assessment that the institution has athletic and academic value, which makes the risk and the cost of attending worth taking (Eccles et al., 1983; Wigfield, 1994; Wigfield & Eccles, 2000; Wigfield, Tonks, & Klauda, 2009). Student-athletes of color are a small population on PWI campuses in comparison to their White teammates. This study supports the belief that highly efficacious and academically buoyant student-athletes of color tend to adjust better on PWI campuses. Yet, when it comes to academic motivation, student-athletes of color with better
college adjustment and attachment have greater intrinsic and extrinsic motivation toward their academics.

These factors are related and have a positive impact on retention, persistence, and goal commitment among student-athletes of color, as they remain intrinsically and extrinsically motivated for sport and school. The student-athletes of color in this study represent a small sample of the population of student-athletes overall in all Division I college athletics. Still, the participants of this study can serve as a representation for coaches and university officials at PWIs to take note of how they can better support this population in their adjustment and attachment process in an effort to elevate achievement. When athletes expect value from their sport and school it gives rise to better adjustment, increased attachment, and more motivational energies put toward academics endeavors.
Reference


Geiser, S., & Santelices, M. V. (2007). Validity of high-school grades in predicting student success beyond the freshman year: High-school record vs. standardized tests as indicators of four-year college outcomes. *Center for studies in higher education.*


NCAA.org (2016, April 24) is a website operated under the National Collegiate Athletic Association that provides statistical information on college athletic programs and the institutions that participates. Retrieved from http://www.ncaa.org/about/resources/research/graduation-success-rate.


DOI: 10.5330/PSC.n.2013-16.158

doi:10.1037/0003-066X.55.1.68


doi:10.1177/0095798409353894

DOI:10.1016/j.lindif.2008.05.004


http://doi.org/10.2147/PRBM.S33188


EXEMPTION DETERMINATION

Date: November 7, 2016
From: Courtney Whetzel, IRB Analyst
To: Clewiston Challenger

<table>
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<th>Type of Submission:</th>
<th>Initial Study</th>
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<tr>
<td>Title of Study:</td>
<td>Student-Athletes Perception of College Adjustment and Attachment at Predominantly White Institutions and Its Relationship to Academic Motivation</td>
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<tr>
<td>Principal Investigator:</td>
<td>Clewiston Challenger</td>
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| Documents Approved: | • AcMot_GSE_AcBou_Instruments (1), Category: Data Collection Instrument  
• Demographic Information Questionnaire (1.01), Category: Data Collection Instrument  
• HRP 591 (0.01), Category: IRB Protocol  
• SACQ instrument (1), Category: Data Collection Instrument |

The Office for Research Protections determined that the proposed activity, as described in the above-referenced submission, does not require formal IRB review because the research met the criteria for exempt research according to the policies of this institution and the provisions of applicable federal regulations.

Continuing Progress Reports are not required for exempt research. Record of this research determined to be exempt will be maintained for five years from the date of this notification. If your research will continue beyond five years, please contact the Office for Research Protections closer to the determination end date.

Changes to exempt research only need to be submitted to the Office for Research Protections in limited circumstances described in the below-referenced Investigator Manual. If changes are being considered and there are questions about whether IRB review is needed, please contact the Office for Research Protections.

Penn State researchers are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within CATS IRB (http://irb.psu.edu).

This correspondence should be maintained with your records.
Appendix B

Student-Athlete Recruitment Letter with Video Link and Survey Link Embedded (REDACTED)

Dear Student-Athlete,

As a student-athlete, have you ever asked yourself: Did I make the right choice? Is [REDACTED] the right place for me? Further, do you feel it has been easy for you to make friends here, or to find the food you like, fashion you enjoy, hair and hygiene products you need to gain a sense of community you may desire? Is [REDACTED] meeting your needs (i.e. academically, socially, personally, and emotionally)? Do you have a sense of belonging here? Who wants to know? I do.

My name is Clewi Challenger and I am a 4th year PhD student in the Counselor Education and Supervision (CNED) program at Penn State, University Park. Since 2014 I have worked with student-athletes [REDACTED] I am a former school counselor (Hartford, CT and New York City schools for 8+ years), and Division I student-athlete (UCONN) in the sport of football. For my research topic, I wanted to combine my interests in sports and counseling to better understand how student-athletes perceive their adjustment and attachment to the college.

As a student-athlete I would often wonder how motivation toward my academics was being influenced by my social, emotional, and psychological adjustment to college. Being an athlete made me feel loyal, committed, and attached to my school, which entail made me want to do well academically, but I know my story may not be the same for every student. Some may feel the opposite about their college experience and may not feel included or attached to their schools at all.

I am asking for your voluntarily participation in this confidential study that looks how your perceive your adjustment and attachment to college. Results from this study could lead to the creation and implementation of programs and initiatives that help students like yourself better transition and adjust to college for increased academic success. These results could also help to bring in programs that promote diversity, inclusion, and ethno-cultural celebration for student-athletes to increase the overall graduation rate.

Please click on the link below and you will take you directly to my study. Your participation is very important to me. A better understanding of how you feel about your experience here could lead to changes at the school in how you can be better supported (i.e. academically, socially, culturally). So please take the time to complete the survey.

Click link below for the YouTube video:

https://youtu.be/gCUC! b8_sIH8

Click link below to go directly to the survey:

https://pennstate.qualtrics.com/SE/?SID=SV_9G3HG6H08d8FpD7

Best,
Clewiston D. Challenger, MA, NCC
Graduate Assistant Supervisor for Guided Study Groups at Penn State Learning
PhD Candidate in Counselor Education & Supervision
Department of Educational Psychology, Counseling, & Special Education
Penn State University
Mobile: 860-778-3060
Email: cdc216@psu.edu
Appendix C

Permission Request For License to Adapt/Reprint Material (SACQ)

<table>
<thead>
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<th>Contact Information</th>
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<tr>
<td><strong>First:</strong> CLEWISTON</td>
</tr>
<tr>
<td><strong>Middle:</strong> DWANE</td>
</tr>
<tr>
<td><strong>Last:</strong> CHALLENGER</td>
</tr>
</tbody>
</table>

- **Customer Number (if known):**
- **Position/Title:** GRADUATE STUDENT (PHD)
- **Company/Institution:** THE PENNSYLVANIA STATE UNIVERSITY
- **Street Address:** CEDAR BUILDING
- **City:** STATE COLLEGE
- **State/Province:** PA
- **Postal Code:** 16801
- **Country:** UNITED STATES
- **Email Address:** CDC216@PSU.EDU
- **Telephone:** 860.778.3080
- **Fax:**
- **Contact information of Principal Investigator:** CLEWIC@GMAIL.COM
- **Full name and title of the person to whom the resulting agreement should be offered for signature:** JOLYNN CARNEY, PHD; EMAIL-- JVC15@PSU.EDU (ADVISOR/SUPERVISOR)

**Assessment Information**

- Name of WPS Assessment you wish to use, adapt, or modify: STUDENT ADJUSTMENT TO COLLEGE QUESTIONNAIRE (SACQ)
- **Edition:**
- **Author (if known):** BAKER & SIYIK

625 Alaska Avenue, Torrance, CA 90503  t 800.648.8857 or 424.201.8800  f 424.201.6950  www.wpspublish.com
What is the time frame the test will be online?
Beginning: OCTOBER 2016  End: JUNE 2017

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RESULTS OF THE STUDY WILL BE SUBMITTED TO PI AND USED TO COMPLETE A DISSERTATION.

Permission to Create/Use an Existing Translation
Please be sure to contact Rights & Permissions to determine whether an existing research translation is available.

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If the translation you need is not currently available, and you wish to translate the assessment, into which language do you wish to translate the measure?
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Purpose of translation?
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Name and qualifications of the individual(s) who will be conducting the translation:
NOT APPLICABLE

Additional Comments

To Submit Form
Please complete the form, save the form on your computer, and manually email it to rights@wpspublish.com.
Appendix D

WPS Rights and Permissions Approval Letter

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# Rights & Permissions

Certificate of Limited-use License

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<td>October 14, 2016</td>
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**Principal Investigator’s name and title:**

Jolynn Carney, PhD

**Name of the Assessment:**

Student Adaptation to College Questionnaire (SACQ)

**Permitted number of uses:**

100 uses

**Description of the study:**

"Student-athletes of color perception of college adjustment and institutional attachment at predominately white institutions and the relationship to academic motivation."

Reference terms dated 22Sep’16.

**Method of administration:**

Administration and scoring via a secure, password-protected online environment.

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Sandra Ceja

[Digital signature]

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Appendix E

Example Survey Administered on Qualtrics.com, Not Including SACQ Items

Perception of College Adjustment and Institutional Attachment and its Relation to Academic Motivation

Q1 Hello Student,
You are being invited to volunteer your participation in a research study that examines your perception of college adjustment and attachment and how it relates to your motivation towards your academics. This survey takes about 20 minutes to complete and asks questions about your college experience. Participation in this study is voluntary and confidential. You may withdraw your participation at any time or choose not to answer certain questions. At the end of the survey you will be re-directed to brief survey for completion. If you are receiving extra credit in your course for participation, please fill out the requested information completely. Please understand the contact information collected in this survey is separate and is only needed to verify participation and to give credit. The information submitted on the "extra credit" survey will NOT connect you to your responses on the college adjustment and institutional attachment survey. So, I assure you that no identifiable information will be collected about you and stored; your responses will remain confidential and anonymous. This study has been approved by the Penn State IRB (Study # STUDY00004427). If you have questions or concerns about this study you should contact Clewiston Challenger at 860-778-3060 or by email at cdc216@psu.edu. If you have questions regarding your rights as a research subject or concerns regarding your privacy, you may contact the Office for Research Protections at 814-865-1775. Thank you for participating.

Q2 If you agree to participate in this study, click "I agree". If you do not agree to participate in this study, click "I disagree".
○ I agree
○ I disagree

Q3 1.1. How old are you?
○ I am not over 17 years old
○ My age is ______________

Q4 Answer the following questions according to how you feel the statement corresponds to you.

Q5 Why do you go to college? (AMS-C28; Academic Motivation Scale College Version Items)

<table>
<thead>
<tr>
<th></th>
<th>Does not correspond at all 1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>Corresponds moderately 4 (4)</th>
<th>5 (5)</th>
<th>6 (6)</th>
<th>Corresponds exactly 7 (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1. Because with only a high-school degree I would not find a high-paying job later on.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>2.2. Because I</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
experience pleasure and satisfaction while learning new things.

2.3. Because I think that a college education will help me better prepare for the career I have chosen.

2.4. For the intense feelings I experience when I am communicating my own ideas to others.

2.5. Honestly I don't know; I really feel that I am wasting my time in school.

2.6. For the pleasure I experience while surpassing myself in my studies.

2.7. To prove to myself that I am capable of completing my college degree.

2.8. In order to obtain a more prestigious job later on.

2.9. For the pleasure I experience when I discover new things never seen before.

2.10. Because eventually it will...
enable me to enter the job market in a field that I like.

2.11. For the pleasure that I experience when I read interesting authors.

2.12. I once had good reasons for going to college; however, now I wonder whether I should continue.

2.13. For the pleasure that I experience while I am surpassing myself in one of my personal accomplishments.

2.14. Because of the fact that when I succeed in college I feel important.

2.15. Because I want to have "the good life" later on.

2.16. For the pleasure that I experience in broadening my knowledge about subjects which appeal to me.

2.17. Because this will help me to make a better choice regarding my career orientation.
2.18. For the pleasure that I experience when I feel completely absorbed by what certain authors have written.

2.19. I can't see why I go to college and frankly, I couldn't care less.

2.20. For the satisfaction I feel when I am in the process of accomplishing difficult academic activities.

2.21. To show myself that I am an intelligent person.

2.22. In order to have a better salary later on.

2.23. Because my studies allow me to continue to learn about many things that interest me.

2.24. Because I believe that a few additional years of education will improve my competence as a worker.

2.25. For the "high" feeling that I experience while reading about various interesting subjects.
Q6 Choose the answer that best describes your resourcefulness when faced with academic hardships. What is your agreement with the following questions?

<table>
<thead>
<tr>
<th>(ABS; Academic Buoyancy Scale Items)</th>
<th>Strongly disagree (1)</th>
<th>Disagree (2)</th>
<th>Somewhat disagree (3)</th>
<th>Neither agree nor disagree (4)</th>
<th>Somewhat agree (5)</th>
<th>Agree (6)</th>
<th>Strongly agree (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1. I'm good at dealing with setbacks at school.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>3.2. I don't let study stress get on top of me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>3.3. I think I'm good at dealing with schoolwork</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
3.4. I don’t let a bad mark affect my confidence

| Q7 Answer the following questions according to your attitude towards completing tasks and achieving goals. (GSE; General Self-Efficacy Scale Items) |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
|                                | 1 (Not true at all) | 2 (Hardly true) | 3 (Moderately true) | 4 (Exactly true) |
| 4.1. I can always manage to solve difficult problems if I try hard enough. | ☐ | ☐ | ☐ | ☐ |
| 4.2. If someone opposes me, I can find the means and ways to get what I want. | ☐ | ☐ | ☐ | ☐ |
| 4.3. It is easy for me to stick to my aims and accomplish my goals. | ☐ | ☐ | ☐ | ☐ |
| 4.4. I am confident that I could deal efficiently with unexpected events. | ☐ | ☐ | ☐ | ☐ |
| 4.5. Thanks to my resourcefulness, I know how to handle unforeseen situations. | ☐ | ☐ | ☐ | ☐ |
| 4.6. I can solve most problems if I invest the necessary effort. | ☐ | ☐ | ☐ | ☐ |
| 4.7. When I am confronted with a problem, I can usually find several solutions. | ☐ | ☐ | ☐ | ☐ |
| 4.8. I can remain calm when facing difficulties because I | ☐ | ☐ | ☐ | ☐ |
can rely on my coping abilities.

4.9. If I am in trouble, I can usually think of a solution.
4.10. I can usually handle what comes my way.

Note: The 67 items of the SACQ instrument are not included in this example survey. Researchers are not permitted to publish the items of the SACQ per request of the Western Psychological Services who hold the license to the instrument.

Q13 1.2. What is your gender?
- Male
- Female
- Other, please specify (optional) _______________

Q14 1.3. Please indicate your class standing:
- Freshman
- Sophomore
- Junior
- Senior
- Graduate Student

Q15 1.4. Which of the following describes you?
- White/Caucasian
- Hispanic/Latino
- Black/African American
- American Indian/Alaskan Native
- Asian
- Native Hawaiian or Other Pacific Islander
- Indian/South Asian
- Other/Please specify: _______________

Q16 My parent(s) or guardian(s) highest education level.
- Both parents/guardian(s) are college graduates
- One parent/guardian is college graduate
- One or more parent/guardian is a high school graduate
- One or more parent/guardian highest education level is middle school
- Both parents/guardian(s) did NOT graduate from high school

Q17 My family’s annual income is. (choose one according to your best guess)
- Greater than $100,000/year
- Between $50k-$90k/year
- Between $20k-$49k/year
- Less than $20k/year
I honestly do not know

Q18 1.5. Are you a United States citizen?
 đấu Yes
• No

Q19 1.6. Are you an international student?
• No
• Yes, which country? ______________

Q20 1.7. Please select your current (or anticipated) GPA range:
• 1.5-1.9
• 2.0-2.4
• 2.5-2.9
• 3.0-3.5
• 3.6-4.0

Q21 1.9. Please list your SAT or ACT score.
• SAT _____________
• ACT _____________

Q22 1.10. Please indicate your current or intended major(s). If undecided, indicate 'undecided'.

Q23 1.11. Do you speak languages other than English?
• Yes
• No

Q24 1.12. Please list all the languages you speak, starting with your first language.

Q25 1.13. How would you characterize your degree of ability with the English language?
• Beginning
• Intermediate/ Conversational
• Advanced
• Fluent
• English is my primary language

Q26 1.14. Which of the following do you identify as?
• Heterosexual/Straight
• Gay
• Lesbian
• Bisexual/Pansexual
• Queer
• Other/Specify ______________

Q27 1.15. What is your religious/faith affiliation?
• Christianity
• Judaism
• Buddhist
• Muslim
• Hinduism
Q28 1.16. Do you play an NCAA varsity sport (not intramural, club, rec, or fraternity) or are you a part of the cheer or dance team here at the University?
- Yes (if yes, indicate which sport you participate in) ___________
- No

Q29 1.17. Which of the following are you involved with? (choose all that apply)
- Social club, group, or organization
- Fraternity or Sorority
- Religious / faith / spiritual group
- I volunteer at times
- I attend events held at the university (i.e. concerts, sporting events, theater, dorm life)
- I participate in the social scene on and off campus (i.e. partying, bar scene, dancing, lounge, restaurants and cafes)
- I participate in charity work and organizations with the campus OR independently
- I have a gym membership
- I play intramural sports
- I play club sports

Q30 1.18. What is your living arrangement?
- On campus in a Residence Hall/Dorm
- On campus in an apartment
- Off campus (i.e. apartment, house)
- Off campus, I commute from my parents home

Q31 1.19. Do you have a job on/off campus?
- Yes, ON campus
- Yes, OFF campus
- None
- Both, ON and OFF campus jobs

Q32 1.20. Are you a...? (optional; choose one, OR, all that apply)
- US military veteran
- Non-traditional/Continuing Education student (i.e. you are older than 25, or, change in career after several years, or, currently work full-time, married, with a family, or, senior citizen)
- Transfer student (i.e. from a branch campus or another institution) (specify which campus) ___________
- Graduate student who completed my undergraduate degree at different college or university

Q33 1.21. I am a person diagnosed with having a... (optional; choose one, OR, all that apply)
- Learning disability (i.e. ADHD, dyslexia, memory loss)
- Physical disability (i.e. visual impairment, hearing impairment, handicapped)
- Psychological disability (i.e. mental illness, depression)
- Emotional disability (i.e. inability to learn not due to intellectual, sensory, or health reasons)

Q34 1.22. Which of the following describe your plans after graduating from college? (choose one)
☐ Obtain a job/ start my career
☐ Marriage and Family
☐ Travel
☐ Military
☐ Graduate School
☐ Law School
☐ Medical / Veterinary School
☐ Internship (7)
☐ Peace Corp or Volunteer work
☐ Professional Athlete
☐ I have a strong doubt that I will graduate from college
☐ Other/ Specify: ______________

Q35 I grew up in a...
☐ Rural community
☐ Suburban community
☐ Urban community
☐ Other (please specify) ______________
EDUCATION

Ph.D., Counselor Education and Supervision, Pennsylvania State University (CACREP Accredited), (August 2017)
M.A., Educational Psychology, School Counseling focus, University of Connecticut (2008; CACREP Accredited)
B.A., Psychology (major), Criminal Justice (minor), University of Connecticut (2003)

CERTIFICATIONS

Nationally Certified Counselor (NCC) by the National Board of Certified Counselors (NBCC) status through April 30, 2021, NCC #238626

Certified School Counselor, (New York) Provisional Status through August 31, 2016 (extension pending)
Certificate Number: 2325970

DISSERTATION TITLE

Perception of College Adjustment and Institutional Attachment Among Student-Athletes of Color At A Predominately White Institution and its Relation to Academic Motivation

Research interests: College adjustment, sense of belonging, retention, persistence, urban education, urban school counseling, adolescent boys of color, racial identity development, multicultural counseling, academic motivation, school engagement, boys and school involvement, college student-athletes of color and their transition from high school into college, college transition, counseling student-athletes of color at Predominantly White Institutions of Higher Education (PWIHE)

WORK EXPERIENCE

The Opportunity Charter School, Harlem, NY August 2012-June 2013
Middle School Counselor, 6-9th grade

- Created schedules for current and incoming students; tracked students’ academic progress for success
- Collaborated with administration, teachers and parents for student academic planning
- Conducted informational presentations for parents on academic requirements
- Provided academic counseling and coordinated the college and vocational school tours for students
- Tracked credits for high school students
  Coordinate the NYC high school application process for 8th/9th graders