

Running head: ATHLETE BURNOUT IN BLACK STUDENT-ATHLETES

Psychosocial Antecedents of Athlete Burnout in Black Student-Athletes

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Abstract

The aims of this study is to investigate psychosocial factors that may contribute to athlete burnout and are salient to the Black student-athlete population. A survey battery was compiled to measure sport-related stress and race-related stress, social support, and athlete burnout as well as racial and athletic identity and administered to 28 Division I and sport club Black athletes. Results revealed a positive correlation between sport-related stress and athlete burnout and the combination of all three psychosocial factors explained 42% of the variance in athlete burnout. Along with this, athlete burnout was negatively associated with athletic identity. There were no other significant relationships of athlete burnout with other study variables. These findings emphasize psychological stress as a strong predictor of athlete burnout and underscore the impact of psychosocial factors on negative sport outcomes. Though this population was low in race-related stress, it is still important to examine how racism intersects with Black student-athletes' experiences and how to minimize the psychological and academic disparities associated with it.

Chapter One

Student-athletes must deal with a variety of stressors that can be attributed to the combination of both sport and academic demands. Stressors can include pressure to win, excessive anxiety, frustration, or conflict with coaches, which can negatively affect mental health (Humphrey, Yow, & Bowden, 2000; Wilson & Pritchard, 2005). Kimball & Feysinger (2003) found that, among many stressors related to being a student-athlete, being a person of color to be a unique source of stress. Specifically, Black and bi-racial participants reported additional sources of stress accumulating from the familial pressures of being a first-generation college student. Qualitative literature on black student-athletes (BSAs) indicates both positive and negative perceptions of the role that race plays in their academic and sport experiences (Bimper, 2015; Carter-Francique, Hart, & Steward, 2013; Martin, Harrison, Stone, & Lawrence, 2010). Motifs of such literature include forms of institutional racism, as well as embedded stereotypes against athletes and black students, which BSAs identify as extant but difficult to express as an actual threat (Bimper, Harrison, & Clark, 2012). Yet, the National Collegiate Athletic Association (NCAA) and athletic departments tend to not holistically address sociocultural issues facing BSAs nor do their organizational trends and policies acknowledge the salience of BSAs' experiences (Bimper & Harrison, 2015). As a result, race-related stress may persist throughout their college careers, which in turn, could exacerbate the effects of sport-related stress of psychological outcomes like athlete burnout.

Sport-related stress is emphasized in Smith's (1986) Psychosocial Stress Model of Athlete Burnout, which focuses on burnout as a stress-based process manifests from the inability to cope with stressors resulting from environmental demands. Already, researchers

generally agree that athlete burnout is a maladaptive cognitive-affective syndrome characterized by dimensions of emotional and physical exhaustion, reduced accomplishment, and sport devaluation (Raedeke, 1997). Furthermore, psychological antecedents of burnout include negative associations with motivation and coping with anxiety or stress, as well as potential evidence for a positive association with athletic identity (Goodger, Gorely, Lavalley, & Harwood, 2007). The Psychosocial Stress Model posits that athlete burnout emerges from heightened sport stress and inadequate coping resources leading to burnout-related symptoms, such as decreased performance and withdrawal from activity. Additionally, burnout is negatively related to levels of social support and also negatively associated with various types of stressors like social pressures, intensive training, and other relevant demands for athletes (Goodger et al., 2007; Smith, 1986).

Another potential psychosocial factor relevant to athlete burnout that may moderate its relationship with stress is athletic identity. According to Coakley's (1992) unidimensional identity development and external control model, burnout is not entirely dependent on psychological stress, but rather on the structural minimization of identity exploration within the sport environment. Thus, the organization of sport may constrict athlete identity to a unidimensional self-concept and decreases perceptions of control over life and creates perceptions of lack of control. Black and Smith (2007) found some support for Coakley's model such that identity exclusivity and perceived control were positively associated with higher levels of two dimensions of burnout: loss of accomplishment and sport devaluation. Contrary to this, athlete burnout has also exhibited a negative relationship with athletic identity, which may reflect the complex nature of personal identities (Martin & Horn, 2013; Raedeke, 1997).

Moreover, Coakley (1992) stressed the necessity for athletes to develop and maintain a multifaceted identity to satisfy personal control needs. Also, the function of a multifaceted identity (e.g. racial and athletic identity) in BSAs has also been an area of interest in regards to psychological factors such as campus and emotional adjustment, academic success, and gender (Bimper et al., 2012; Melendez 2008, 2010). Nevertheless, identity still yields mixed results in context of athlete burnout, and therefore, will be an exploratory variable in the current study (Black & Smith, 2007; Raedeke, 1997).

Likewise, the function of multidimensional nature of BSAs' identity may be facilitated by race-related stress while subsequently contributing to overall stress. BSAs' racial identities are positively and negatively shaped by their experiences and social interactions at their respective institutions. Moreover, they often must negotiate their Blackness with their athletic identity when dealing with stereotype threat (Bimper et al., 2012). Racial identity has found to be positively related to imposter feelings in African American college students and a positive predictor of race-related stress (Arbona & Johnson, 2006; McClain, Beasley, Jones, Awosogha, Jackson, & Coakley, 2015). In regards to Coakley's (1992) model, BSAs may have difficulty maintaining their racial identity because of race-related stress embedded in sport social contexts, which may restrict control over exploration of racial and other types of identity. Similar to the relationship between athlete burnout and identity, levels of racial identity have varied in significance amongst literature while relative to levels of athletic identity, aspects of academic success (e.g. GPA, retention), and in comparison with White student-athletes (Harrison, Sailes, Rotich, & Bimper, 2011; Johnson et al., 2006; Melendez, 2010 Nevertheless,

the nature of the relationship between two identities may have substantial implications in regards to stress management and psychological health outcomes in elite black athletes.

Next, social support is investigated as study variable because it may be a psychological buffer for both sport and race-related stress and dimensions of athlete burnout. Social support can be a useful coping mechanism for overall stress management (Cohan & Wills, 1985; Holt & Hoar, 2006), meaning it may be a psychosocial, protective factor which limits an athlete's susceptibility to athlete burnout. This has been supported by research conducted by DeFreese and Smith (2014), which found social support to be negatively associated with global burnout. Moreover, social support can be impacted by social experience within athletic environments, which is evident in how social support can vary for BSAs' experience (Holt & Hoar, 2006). Therefore, it is important to examine how high levels of social support can act as buffer for race-related stress, as well as the implications of low levels of social support for BSAs' reception to dimensions of athlete burnout. Moreover, on-campus sources of social support, such as faculty, have been found to be the most important for the academic success of Black and Latino college students (Baker, 2013). Thus, a goal of the current research is to examine the relationship between social support and other psychosocial factors of the BSA experience. This information will have important implications towards intervention methods targeting the promotion of health and well-being outcomes for this population.

Athlete burnout was chosen as the athlete psychological health outcome of interest because it is associated with chronic psychological stress (Raedeke, 1997; Smith 1986) and related to dimensions of athletic identity (Black & Smith, 2007; Coakley, 1992). To my knowledge, there is no extant research that has examined athlete burnout as it pertains to

racial stressors. The current study outlines three sources of race-related stress for BSAs: stereotypes against student-athletes and/or black students, conflict between racial and athletic identity, called multidimensional identity conflict (MDIC), and the minimization of racism by sport institutions, which will be characterized by Bonilla-Silva's (2014) term called colorblindness. The existence of these psychosocial pressures for BSAs, along with lack of social support, and high athletic identity may contribute to the outcomes of burnout. Likewise, outcomes of burnout, such as leaving sport, can be more detrimental for BSAs due to the educational opportunity made available to them due to their athletic ability. According to the NCAA, 1 in 4 BSA is a first-generation college student; for some, a college education can equate to a better future and breaking the cycle of poverty (Simiyu, 2014). Thus, the race-related stress-burnout relationship is important to understand because it has implications for BSA retention and facilitating a friendly, positive and athlete-centered sport environment for coping with racism and stress.

In addressing these important psychological health variables relative to the BSA experience, the current study hypothesizes that 1) race-related stress and sport-related stress will be each be positively associated with athlete burnout and 2) social support will be negatively associated with dimensions of athlete burnout and also positively related both race-related stress and sport-related stress. The exploratory nature of this study will also 3) examine both of the aforementioned hypotheses while taking racial and athletic identity in account. It is the aims of these hypotheses to inform literature on athlete burnout on initial rationalization of how racism may negatively impact the sport environment.

Chapter 2

Introduction

Across populations, athlete burnout prevalence is relatively low, ranging from 1-9%, and still, the reliability of previous literature is restricted by measurement differences and scarcity of research (Gustafsson, Kenttä, Hassmén, & Lundqvist, 2007). Nevertheless, research on athlete burnout points to its growth in prevalence in elite athlete populations (Dubuc-Charbonneau, Durand-Bush, & Forneris, 2014; Gustafsson et al., 2007). The following literature review will outline consequential experiences elicited by racism that may exacerbate stress in conjunction with dimensions of athlete burnout. At times, universities and athletic departments may overlook the psychological demands and associated consequences of being Black in collegiate sport (Bimper & Harrison, 2015; Brown, Jackson, Brown, Sellers, Keiper, & Manuel, 2003; Singer, 2009). Such trends could be chronic in nature due to the inability for BSAs to effectively cope with racially-driven experiences throughout their college career. Moreover, chronic stress and lack of coping resources has found to be related to higher levels of burnout in athlete populations (Cresswell, 2009; Raedeke & Smith, 2004; Smith, 1986). Thus, the method in which race operates in negative, sport psychological outcomes may be illustrated through instances of racism in the sport and campus environment.

In light of the hegemonic trend sometimes seen in collegiate sport, aims of this study are to examine how possible methods of stress cultivated from latent racism in the experiences of BSAs. The salience of these experiences will be examined as it pertains to negative psychological outcomes, such as athlete burnout. In particular, the consequences of racial discrimination and athlete burnout seem to intersect at and, therefore may be best illustrated

by relative psychosocial stress. In addition, social support is another foci of the study because of its essentialness to coping and also, the intricate nature of social support seen in the BSA experience on college campuses (Comeaux & Harrison, 2007; Sadberry & Mobley, 2013). Another perspective relevant to measuring the psychosocial scope of BSAs is identity. Again, the extent to which identity is investigated is only exploratory given the inconsistent literature on both the relationship between athletic identity and athlete burnout and also, the general function of athletic and racial identity for BSAs. In order to contextualize study variables, I will use Delgado's (1995) Critical Race Theory (CRT) to direct the goals and implications of the study towards debunking racial inequalities.

In carefully and strategically choosing the psychological variables, researchers used sociological frameworks as lens to contextualize race in athlete burnout literature. Aforementioned, it is suggested that stress racial discrimination and/or inequities may contribute to antecedents of burnout. Since the racial has not been previously germane within athlete burnout research, the use of Critical Race Theory (CRT) is employed as theoretical lens. CRT will provide insight to how racial inequities have been maintained across social sectors, including collegiate sport.

Theoretical Framework

Many studies on BSAs utilize CRT in order to connect educational institutions and sport to the Black experience (Bimper, 2015; Carter et al., 2013; Clark, Harrison, & Bimper, 2015; Singer, 2005, 2009,). Under this framework researchers question the role of race, racism, and racial power plays in the dichotomy of experiences between White and Black student-athletes. On a societal scope, CRT considers racial disadvantages, the creation of white privilege, and

then, challenges misconceptions about racism and its circulation (Delgado, Richard & Stefancic, 2012). The three major tenants of CRT are as follows:

- 1) Race and racism has been and continues to be deeply embedded in society such that it has become normalized on a legal, cultural, and psychological basis.
- 2) Therefore, it is necessary to challenge any dominant view that holds racism as nonexistent (also known as colorblindness) or neutral in order to mitigate racial inequities.
- 3) Lastly, there is an essentialness of experiential knowledge or the voice of people of color to inform scholarship on present discrimination and inequities.

Although the current study is quantitative in nature, the intent of eclecticism for the survey is to empower BSAs by giving them an opportunity to reflect on their social climate. This insight could elaborate on how racism serves as a threat to the psychological outcomes of BSAs and, thus, potentially heightening BSAs receptiveness to maladaptive behavior such as athlete burnout.

Psychosocial Stress

The relationship between psychosocial stress and athlete burnout can be contextualize best by Smith's (1986) Psychosocial Stress model, such that psychosocial stress from the social and sport environment can be difficult to cope with; thereby, enhancing dimensions of athlete burnout. The first of the four-part model includes the trade-off between demands (e.g. racial stressors) and resources (e.g. designated safe space for athletes) of a situation, which are influenced by a variety of personality and motivational factors (e.g. race, racial or athletic identity). In the second component, the cognitive appraisal of the situation can sometimes be

depicted as an imbalance between these two factors leading to perceived stress. In order to account for the salience of race in sources of stress, race-related stress is examined as a negative contributor to general stress. It is theorized that race-related stress may function in a similar manner as sport-related stress in its prediction of burnout, such that BSAs' negative appraisal of racism may increase stress. Race-related stress is first defined by the accumulation of acute and chronic encounters with racism and discrimination (Utsey & Ponterotto, 1996). Harrell (2000) supplemented this definition by furthering the scope of race-related stress as exceeding existent resources or threatening well-being (as cited by Utsey, Belvet, Hubbard, Fischer, Opare-Henaku, & Gladney, 2013). Likewise to the nature of stress Smith's (1986) model, race-related stress is characterized as chronic and prolonged, both of which are premised on Lazarus and Folkman's (1984) stress and coping model (Utsey et al., 2013).

Race-related stress has also been conceptualized through Lazarus and Folkman's (1984) model by adapting the perception of racism and discrimination to the cognitive appraisal of stress (Utsey et al., 2013). For instance, the third component of Smith's (1986) model and Utsey and colleagues' (2013) race-related stress model involves a psychophysiological response or arousal to the perceived threat from the negative cognitive appraisal of a demand. Such responses in athlete burnout include tension, anger, anxiety, and depression (Smith, 1986), which also can be seen in physiological responses to race-related stress (Utsey et al., 2013). Furthermore, the model asserts these responses are resultants of chronic stress and can also compound the appraisal of the situational overload. The last component focuses on behavioral response formed following coping efforts (or the lack thereof), like decreased performance, interpersonal difficulties, burnout symptoms and at times, withdrawal from activity. If this

model were to take race into consideration, there would be an emphasis on interpersonal difficulties that may manifest in various social sectors that overlap with sport.

Previous literature on stress and athlete burnout has found support for Smith's (1986) Psychosocial Stress model in that perceived psychological stress was negatively associated with higher levels of athlete burnout (DeFreese & Smith, 2014; Lu, Lee, Chang, Chou, Hsu, Lin & Gill, 2016; Moen, Federici, & Abrahamsen, 2015; Raedeke & Smith, 2004). It is also possible that properties of stress-induced burnout are activated by stress arising from racial discrimination in a similar propensity to sport-related stress. Thus, the potential interaction of sport and race-related stress may suggest to higher levels of general stress; thereby, leading to potential increases in dimensions of athlete burnout. Literature on athlete burnout, to the best of my knowledge, has yet to examine negative racial outcomes (e.g. racial stereotypes, discrimination, etc.). DeFreese & Smith (2014) found that negative social interactions were positively associated with athlete burnout, though in a largely White sample. That limitation aside, racism can be experienced through negative social interactions, which could allude to the nature of such outcomes for burnout in BSAs.

For example, negative social interactions may be racially driven and may impede on psychological outcomes for minority populations. Meaning, the methods in which racism influences social constructs for BSAs may be seen in negative interactions between them and on-campus groups (e.g. peers, faculty, coaches, etc.). Researchers also examine social support as a psychosocial role in the development of athlete burnout since it has been found to have a negative relationship with burnout (DeFreese & Smith, 2014). Consequences of athlete burnout have not been extensively studied; however, the most prominent behavioral outcome is

withdrawal from sport (Gould & Whitley, 2008; Raedeke, 1997; Smith, 1986). Thus, in order to understand constructs of BSAs and psychosocial stress, there are three major themes that may explain the unique sources of psychosocial stress that contribute to dimensions of athlete burnout: stereotypes of Black students and student-athletes, colorblindness in collegiate sport, and multi-dimensional identity conflict (MDIC),

Racial Stressors in Black Student-Athletes

Unfortunately, literature on student-athletes suggests they frequently encounter stereotypes regarding their intelligence, academic motivation and integrity, and overall social position on campus (Comeaux, 2012; Parsons, 2013; Simons, Bosworth, Fujita, & Jensen, 2007). Such stereotype combinations can refer to the *dumb-jock stereotype*. Simons, Bosworth, Fujita, & Jensen (2007) found that a substantial amount of student-athletes reported incidents of negative treatment from faculty and exhibited unproductive coping methods to deal with the stigma of being a student-athlete. Moreover, qualitative data on student-athletes' perceptions of faculty has shown athletes report mostly positive interactions, but still inciting a lingering negative impact of athlete stigma in 10% or less of interviewed samples. Examples of this stigma include faculty singling them out for being privileged over the student body and insinuating motives of athletes are purely athletic and not balanced with academics (Parsons, 2013). Comeaux (2012) refers to these tendencies as athlete microaggressions, in which student-athletes must combat the inequality and discrimination arising from harbored stereotypes of faculty and peers. Instances of stereotypes against student-athletes may heighten their sport-related stress, which contributes to general stress and possible antecedents of athlete burnout.

It is also important to note that faculty perceptions of student-athletes can be mediated by gender, high or low revenue sport, and race (Comeaux, 2011; Simons et al., 2007). Although outside the scope of the current research, it is important to note that faculty tended to view female student-athletes in a more favorable way than males (Comeaux, 2011). Furthermore, faculty seemed to be more resentful of student-athletes from high-revenue sports such as basketball or football. Interestingly, Black athletes are overrepresented in high-revenue sports, making up over half of student-athlete play football or basketball in contrast to the 13% of the US population that are black (Lapchick, 2016). Even though negative interactions with faculty only accounted for less 10% of all interactions, the existence of such experiences can be shared between student-athletes and possibly convey a negative campus environment (Comeaux, 2012). Comeaux and Harrison (2007) found that White student-athletes tend to benefit more from faculty interactions than BSAs and these interactions were associated with better academic outcomes. Also, researchers found that BSAs entered college with lower high school GPAs than their White counterparts, which translated into powerful predictors of college GPA across both races. These findings allude to a perpetuating issue in colligate sport in which BSAs have significantly lower graduation rates than their White counterparts (Lapchick, 2016). Since academic status may jeopardize sport participation, further research is needed about whether this heightens psychosocial stress in student-athletes.

When controlling for academic and athletic variables, Johnson, Wessel, and Pierce (2013) found that race was a significant contributor to retention, such that African American student-athletes were 2.96 times less likely to be retained for their second year of college than White student athletes. This finding is reflective of the dichotomy between White and Black

student-athletes that may be culpable of psychosocial stress for BSAs. Ironically, consequences of the *dumb-jock stereotype* can be conglomerated with stereotypes of Black people (e.g. laziness, underachieving, inherently poor), meaning BSAs must deal with the double threat nature of stereotyping (Hawkins, 2010; Sailes, 2010). In addition, it is known that stereotypes and stereotype threat can impede on academic performance and thus, can be psychologically and cognitively debilitating (Dee, 2013; Massey & Owens, 2014; Steele & Aronson, 1995). Racial disparities (e.g. discrimination, lack of educational and leadership opportunities, etc.), facing BSAs have shown to have possible negative impacts on their academic success (Simiyu, 2012). Likewise, race has also played a role in faculty perceptions of students-athletes and extends the psychosocial demands of BSAs (Comeaux, 2010; Simons et al., 2007), which has the potential to exacerbate stress and athlete burnout perceptions in this population.

Even if in the minority, faculty can often underestimate and dismiss BSAs on the basis of racial stereotypes, which may exacerbate pressure for BSAs to succeed academically. Instances of racial differences in faculty perceptions of student-athletes portrays expectations that disregard inequities faced by people of color or racially-coded language that implies BSAs' accomplishments were not entirely earned (Comeaux, 2010). Simiyu (2012) asserts that these findings predispose BSAs to potential academic failure by reinforcing the stereotype already embedded in many campus environments. Persisting stereotypes against BSAs have been held by their White peers in a similar, and perhaps to a stronger degree, to faculty (Sailes, 2010).

However, not all literature on stereotypes in BSAs point to negative outcomes for the Black student population. Martin, Harrison, Stone, and Lawrence (2010) found BSAs are mindful of negative stereotypes against them and how these barriers play a role in navigating campus.

Nevertheless, researchers' findings indicate a motif in which BSAs convey a degree of passion in regards to their work ethic. In this, Black students and BSAs have also demonstrated resilience in coping with stereotypes and strive to debunk these stereotypes (Fries-Britt & Griffin, 2007; Martin et al., 2010). Thus, it is also important to acknowledge the positive outcomes or "good" stress of stereotypes that may motivate BSAs to perform better. The nature of stereotypes against BSAs seems to be chronic since they prevail across social sectors (e.g. faculty, peers,) and is compounded by both BSAs' athlete status and Blackness. Meaning, stereotypes have a similar function with the psychosocial stress in Smith's (1986) explanation stress-related burnout. Therefore, it is believed the impact of race-related stress should be taken into consideration when examining BSAs and negative psychological outcomes like athlete burnout.

Importance of Athlete Burnout

Athlete burnout has the potential to threaten the well-being of athletes but, has unique implications for BSAs that may threaten life outcomes such as education attainment. It is possible that BSAs encounter dimensions of athlete burnout through their experiences with racism and discrimination. For example, high levels of race-related stress may belittle the racial barriers BSAs may have overcome and may impede on their sense of accomplishment. Race-related stress may play a role in creating dissonance between prioritizing sport, leading to sport devaluation, since it allows racism to persist in their experiences . Lastly, the persistence of race-related stress may become a chronic part of navigating through college for BSAs and, thus, may exhaust their tolerance for psychosocial stress. Again, many BSAs are in a unique situation where their athletic ability creates academic opportunities, enabling them to overcome sociodemographic disparities facing the Black community. Therefore, withdrawal from sport

and other negative outcomes of athlete burnout may threaten their position for better economic, social, and life outcomes.

Psychosocial stress in BSAs may play a significant role in enhancing perceptions of athlete burnout and this may deter this population from reaching their full sport and academic potential. Another perspective in which athlete burnout impacts outcomes salient to BSAs is through academic success. Though athlete burnout does not indicate possible levels of academic or student burnout, it is possible that higher levels of athlete burnout may have bi-directional implications for BSAs academic motivation. Already, we know that BSAs are lacking when it comes to graduation rates and retention (Johnson et al., 2013; Lapchick, 2016), which is why GPA is a demographic variable of the current study. Thus, athlete burnout may decrease overall motivation (sport and academic) of BSAs while stress and academic struggles may contribute to psychosocial stress and likelihood of player ineligibility, which may exacerbate dimensions of burnout. Overall, the examination of athlete burnout may demonstrate how race-related stress and racial differences in academic outcomes may occur in BSAs and vice versa.

Social Support

The incorporation of social support into the current study was dependent on its previous identified associations with athlete burnout and stress. According to the buffering effect theory, social support can mitigate the effect of negative stress by acting as a coping method. Thus, it has been found to be a powerful mechanism in combating the impact of general psychological stress on a myriad of health and well-being outcomes (Cohen & Wills, 1985). Moderators of social support include macro examples of study variables such as social

environment factors, culture, social context, which highlight psychosocial intersects of stress previously mentioned (Holt & Hoar, 2006). Specifically, the racial constructs in collegiate sport and higher education, that tend to create barriers for students and student-athletes of color, may affect the availability and function of social support from on-campus supporters like coaches, faculty, etc. and will be further discussed in this section. Moreover, the buffer effect has been found to have main effects with perceived social support as compared to received social support (Cohen & Wills, 1985). Thus, social support can be a point of intervention and possibly mitigate the stress-burnout relationship for elite athletes.

Overall, social support has been found to be negatively associated with athlete burnout across varied athlete populations (Cresswell, 2009; DeFreese & Smith, 2014; Lu et al., 2014; Raedeke & Smith, 2004). Specifically, a longitudinal study on rugby players found that athletes who did not display signs of athlete burnout reported perceptions of social support from a positive environment (Cresswell & Eklund, 2007). Similarly, DeFreese & Smith (2013, 2014) found similar relationships with the quality of the environment and social support such that negative social interactions were negatively correlated with social environment. This study looked at social support specifically and found it to have a positive temporal association with well-being. Along with this, researchers found that global athlete burnout had moderate negative correlations with social support and positive correlations with negative social interactions. The Psychosocial Stress Model would attribute to these trends to the utilization of social support as a coping mechanism, which serves to combat or buffer against stress (Smith, 1985).

Across literature on athlete burnout, the theme of coping with adversity outlines the important role perceived stress, anxiety, and coping contribute to dimensions of athlete burnout. Support hypotheses found coping to have a stress-mediating relationship with athlete burnout, and overall, the impact of coping resources on stress has an indirect relationship with burnout (Goodger et al., 2007). Hence, social support may explain psychosocial correlates of athlete burnout and also provide a point for intervention. Already, we know BSAs may encounter negativity from faculty, whom can be sources of on-campus social support. Can racial discrimination faced by BSAs negatively impact social support availability in a manner that amplifies race-related stress? Do BSAs have an outlet or safe space where they can express their experiences with racism without fear of endangering their social and athletic position? Previous literature on BSAs suggests that they can be stereotyped by providers of social support like faculty (Comeaux, 2012) and should have services that address experiences with racism (Singer 2005, 2009).

A handful of researchers have investigated the impact of social support on the BSA experience and also, how that relates to their academic success. The interest in academic success is due to the impact of social support on matriculation and retention of BSAs (Carter-Francique et al., 2013). According to the NCAA (2016), the Division I Graduation Success Rates (GSR) of White student-athletes is 89%, while BSAs graduate at a lower GSR of 70%. Although such statistics can be explained by multiple challenges, some which have already been discussed as well as other psychosocial barriers such as campus isolation, pressure from competition and athletic schedule, and academic unpreparedness (Simiyu, 2014). Furthermore, previous research suggests psychosocial problems due to racism and/or discrimination can still

persist even with moderate levels of social support (Melendez, 2008; Sadberry & Mobley, 2013). I assert that when examining stress and athlete burnout in BSAs, it is also necessary to consider how social support may also be less accessible due to racial barriers, and thus, decrease sources of coping with race-related stress.

BSAs have cited on-campus support, such as faculty and academic advisors, as a significant supporter and contributor of their academic success. For example, in one study, the majority of student-athletes (80%) reported positive experiences with faculty, while only a few participants shared negative experiences characterized by a bias due to their athletic responsibilities that forced them to miss class, exams, etc. (Carter-Francique, Hart, & Cheeks, 2015). As previously discussed, BSAs can be exposed to negative stereotypes held by faculty, which can have negative implications of athlete perceptions of social support availability. When looking across the campus environment, Melendez (2008) found BSAs often reported feeling judged, misunderstood, or rejected by their environment (e.g. their classmates, teammates, and coaches). Interestingly, BSAs in this study seemed to resent their coaches' efforts to racially integrate the team, saying their coaches were forcing it and it should be left to the players. Although this is an intriguing finding, more research is needed on how BSAs would exercise their control over racial matters in collegiate sport. In addition to this, Melendez (2008) inferred that both BSA participants and their coaches were not at a consensus of what good race relations actually entail. Yet, coaches did not take advantage of diversity workshops offered by the university, which may have given them better insight about their players of color, which calls into question the goals of athletic departments in regards to equalizing racial disparities.

After examining directives and policies of Division I athletic departments, Bimper & Harrison (2015) concluded that many were overwhelmingly avoidant of persisting racial inequities within collegiate sport. Regardless of extant literature on ambiguous implications of social support on BSAs, athletic departments tend to not address how race can play a role in negative outcomes for student-athletes including athlete burnout. Therefore, BSAs may not be able to find solutions or resources for dealing with negative interactions with faculty or finding other methods to manage race-related stress, which will be discussed later in the chapter (Bimper & Harrison, 2015).

Intersections of race perceptions and social support may provide a point of intervention; however, these are often missed opportunities due the minimization of race in sport contexts. A notion that characterizes this trend, seen in many other social sectors, is known as colorblindness. A substantial study examined Black male student-athletes' perceptions of race as defined by Bonilla-Silva's (2014) colorblind racism (Bimper, 2015). Colorblind racism outlines how latent racism can be belittled and masked, which allows racial inequities to adapt and persist across societal levels through these frames:

- 1) Abstract liberalism is a concept that many White people use to legitimize racial matters such that notions like "political" or "economic" liberalism in which equal opportunity regards each individual as a person with choices (e.g. the choice to be passive about racial inequities);
- 2) Naturalization affirms that current racial matters are simply natural occurrences and is often used by a White majority as an explanation for instances of inequality;

- 3) Cultural racism relies on cultural arguments based on negative stereotypes and generalizations to explain the disparities in societal standings of minorities;
- 4) And the minimization of racism believes discrimination is no longer a prominent factor affecting the life choices of minorities.

These frames were often reflected concurrently in the experiences of Black male student-athletes and effected their perceptions of racism. For instance, participants' counter-narratives to abstract liberalism suggested the absence of allied figures like students and faculty of color gave more opportunity to racial inequities. Moreover, experiences with micro-aggressions from academic counselors whom projected low academic expectations and stereotyping. The cultural racism embedded in collegiate sport has been found to be an inherent disabler of BSAs academic opportunity, furthering the progress of racial inequities. An intriguing narrative arising from a study done by Bimper (2015) emphasized the need for programs that provide support targeted for BSAs and athletes of color in order to combat the minimization of race in their experiences. In essence, the colorblind tactics within collegiate sport allows racial inequities to perpetuate the experiences of BSAs, which are being explored in the current study through the interseccionss of race-related stress, sport-related stress, and social support.

Again, it has been called into question whether or not athletic programs and the NCAA truly seek to equalize racial discourses in sport contexts. The interests of athletic programs to create equal opportunities for athletes seems contrary to existing discrimination in BSAs experiences (Bimper & Harrison, 2015). The conclusion of much of the literature on BSAs is to create a safe space dedicated to the furthering of academic and social prospering of BSAs coupled with more representation of people of color in faculty, coaches, and athletic

administration (Cooper 2012; Sadberry & Mobley, 2013; Singer, 2005, 2009). However, this rarely, if at all, implemented by athletic administrations, highlighting the systematic nature of colorblindness in collegiate sport (Bimper & Harrison, 2015). Due to this, I assert that the social support needs of BSAs may not be sufficiently met and therefore, needs to be examined when looking at race-related stress. It is hypothesized that levels of social support will indicate a relationship between stress and negative social outcomes, which may have implications for the enhancement of social support (e.g. the creation of centers or resources for BSAs).

Racial and Athletic Identity

Athletic identity can be an important psychosocial dimension of student-athletes' psychological outcomes and may relate to precursors of athlete burnout. One theory explaining athlete burnout is Coakley's (1992) unidimensional identity and external control model, which attributes athlete burnout to the social organization of sport instead of personal failure. Specifically, when athletes perceive a lack of control over their life and career decisions and are unable to explore other identities outside of sport, they may be more likely to experience burnout. Thus, it is important for athletes to be given freedom of choice over sport activity by coaches, parents, and overall sport structures so that a multi-dimensional identity can be easily formed. However, the function of athletic identity has been inconsistent when looking at athlete burnout. Therefore, athletic identity will be an exploratory variable in the current study in order to better discern the psychosocial influencers of athlete burnout. Coakley's model has been partially supported, but again, the need for more research on athletic identity constricts the legitimacy of the model.

Black and Smith (2007) point out that Coakley does not differentiate between strength as opposed to the exclusivity of athletic identity, which may explain why they only found partial support for the model. Researchers only found significant correlations between athletic identity exclusivity and two dimensions of athlete burnout (reduced accomplishment and devaluation). Moreover, results did suggest support for the control component such that perceived day-to-day control was a significant predictor of exhaustion and devaluation. An interesting finding of the study is the inverse relationship between exclusive identities and dimensions of burnout. Black and Smith (2007) attributed this finding to the possibility that athletic identity may depend on the progression of athlete burnout. This is on the theoretical basis that, as athlete burnout or withdrawal becomes more pronounced, so is the psychosocial withdrawal from activity, meaning lower levels of athletic identity (Raedeke, 1997). Still, this possibility does not completely explain the inconsistent findings of athletic identity and burnout.

While athletic identity has been found to have a positive association with athlete burnout, a systematic review of studies have also found a negative relationship between the two variables (Goodger et al., 2007). High levels of athletic identity were found to be positive contributors to dimensions of athlete burnout, which were thought to be related to early development stages of athlete burnout when athletes engage in risky behavior (e.g. overtraining, playing through injury, etc.) (Martin & Horn, 2013). Thus, the burnout-identity relationship seems to be dependent on the stage in which the athlete is experiencing athlete burnout (Raedeke, 1997). However, the *Athlete Burnout Questionnaire* (a well-validated measure of this construct) does not decipher which stage or length of progression of the syndrome and therefore, athletic identity will be difficult to interpret based on

aforementioned, temporal relationship. However, examining athletic identity in Black athlete populations may give more insight to racial implications in sport. For instance, Harrison and colleagues (2011) found differences in athletic identity between Black and White student-athletes that were related to the differences in the BSA experience.

Similar to its relationship with athlete burnout, levels of athletic identity have varied when comparing White and Black student-athletes. Previous findings suggest that White student-athletes tended to have more salient athletic identities as compared to black athletes (Cooper & Dougherty, 2015; Melendez, 2010). However, Harrison et al. (2011) found that football BSAs had higher levels of athletic identity compared to White student-athletes. Particularly, BSAs had significantly higher scores on item 7 (other people see me mainly as an athlete), suggesting the impact of aforementioned stereotypes. Researchers found that higher scores on items 5(I spend more time thinking about sport than anything else) and 9(sport is the only important thing in my life) of the *Athletic Identity Measurement Scale (AIMS)* indicated the potential of deterring academic success by narrowing the focus of BSAs to sport goals. Furthermore, athletic identity has also found to be negatively correlated with GPA in male BSAs (Bimper, 2014). Thus, more research is necessary to understand the possible debilitating effects of high levels of athletic identity on BSAs. Another perspective to race and athletic identity is racial identity, which may moderate relationships with athletic identity and other psychological outcomes.

Racial identity is also assessed as exploratory variable in efforts to investigate psychosocial contributions of race in sport. Intriguingly, BSAs with high levels of athletic identity centrality also tended to perceive discrimination as no longer a problem in the United States or

were more held more distorted or distant regard for race (Bimper, 2014; Brown, Jackson, Brown, Sellers, Keiper, & Manuel, 2003). Yet, other studies have outlined that racial and athletic identity sometimes play at out odds against each other, which research has defined as multi-dimensional identity conflict (MDIC). Bimper et al. (2013) found BSAs were aware of the importance of their athlete status, yet still cognizant of peers solely perceiving them as an athlete. Participants also reported issues arising from a “complex identity” in which BSAs must explore their racial and athletic identities while navigating a sometimes-unfriendly environment. In defining themselves, BSAs (and student-athletes) must maintain optimal levels of athletic identity, which has implications for what it means to be Black (Bimper et al., 2013). The notion of MDIC asserts that BSAs may have to negotiate racial and athletic identity when dealing with racism and discrimination in sport, which may exacerbate perceptions of psychosocial stress.

Within the BSA experience, there have been discrepancies in psychosocial experiences between athletes at predominately White institutions (PWIs) and historically Black colleges/universities (HBCUs) that may give more depth to the function of race in sport. Most of the literature centered on BSAs at PWIs, which are institutions where White people make up more than half of the campus population, because their minority status contributes to their experiences. For instance, Black athletes at PWIs are often isolated due to racial lines and circulating stereotypes (Clark , Harrison, & Bimper., 2015; Comeaux & Harrison, 2007; Melendez, 2008, 2010; Simiyu, 2012). A major issue within higher education and collegiate sport that could positively change circumstances for BSAs is the small representation of people of color in coaching, faculty, and other leadership positions. Most, if not all, previous literature

on BSAs have concluded that an increase in minority leadership will benefit black students and athletes by facilitating mentor relationships and addressing racial issues (Bimper & Harrison, 2015; Simiyu, 2012; Singer, 2005, 2009). On the other hand, HBCUs are institutions dedicated to serve and educate Black students and thus, have larger populations of people of color in leadership positions.

Contrasting the two institution types, Steinfeldt, Reed, & Steinfeldt (2010) did not find differences in black football players' social adjustment, but athletes at PWIs did report significantly higher levels of athletic identity. Also, athletes at HBCUs were more supportive of the perception that being Black is unique. Interestingly, across the entire sample, the willingness to recognize that society does not value Black people actually seemed to contribute to higher levels of college adjustment. Black athletes at HBCUs may perceive racial and athletic identity in different constructs due to their majority status, meaning identity operates in a differing way than it would at a PWI. Another study examining institutional differences characterized athletes at PWIs with a unique profile characterized by high minority stress (Sadberry & Mobley, 2013). Likewise, athletes at PWIs reported significantly less positive relationships and lower levels of engagement and satisfaction as compared to athletes at HBCUs (Cooper & Dougherty, 2015). Though institution-type is not investigated in the current study, it is important to both recognize the benefits of attending a HBCU and the psychosocial risks associated with the racial climate of PWIs.

Conclusion

Given the innovative nature of the investigation of race in athlete burnout literature, the objectives of the current study are to generate much needed discussion about racism and its

potential impact on maladaptive psychological outcomes for BSAs (like athlete burnout). We know that black athletes must navigate a sport context that is influenced by racial discourse amongst general society. Thus, it is important to understand how negative sport psychological outcomes are associated with athlete perceptions of race and the racial climate in a sport environment. Black student-athletes may have unique, but sometimes negative, sport and/or broader college experiences due to the dyad of racial and athlete stigma. However, how this experience functions in regards to psychosocial stress and other athlete burnout indicators is not well known. Thus, this study is the first to our knowledge to quantitatively examine these two types of stress (i.e., sport- and race-related) relative to burnout perceptions of BSAs. The nature of race and sport-related stress may identify athletes with higher potential for negative psychological outcomes dealing with stress like athlete burnout, which may have negative implications outside of sport as well.

Since psychosocial stress and athlete burnout in BSAs have not been examined together previously, it is hopeful that results from the current research will provide preliminary direction to the nature of this relationship. Nevertheless, this knowledge gap is problematic for BSAs especially because of the life-enhancing potential that collegiate sport extends to student-athletes whom were granted better educational opportunities from their athletic ability, hard work, and intellectual ability which could be negatively impacted by the experience of burnout. Again, for some members of the BSA population, a college education may mean a better life (e.g. financial, career opportunities, marital, etc.) outcomes than previous generations (Simiyu, 2012). Thus, outcomes of athlete burnout like withdrawal from sport may decrease opportunities across both within and outside of sport for BSAs. Moreover, athlete burnout may

be associated with lower qualities of both psychosocial health and well-being for BSAs during their collegiate careers, an important outcome in its own right. Hopefully, examining social support within this study will shed light on potential opportunities for prevention for BSAs with high levels of sport and/or race-related stress.

Researchers anticipate that social support will be related to psychosocial stress and athlete burnout. Social support is an important mechanism for understanding BSAs experience in order to target beneficial resources and intervention for the population (Carter-Francique et al., 2015). Although outside the scope of the current study, further research on the role on-campus individuals specifically play in social support levels in BSAs. Along with social support, identity is explored to provide more direction on the relationship between athlete burnout and identity. It is uncertain how racial and athletic identity will interact with each other and then, how that relationship impact stress and burnout. However, the function of identity across athlete burnout and race may demonstrate the underlying antecedents to higher levels of stress and possibly athlete burnout.

Overall, Black athletes make up a substantial part of sport populations, especially for high-revenue sports (Lapchick, 2016), meaning the comprehension of positive and negative sport outcomes unique to their population are imperative to facilitating better sport and, sometimes, life outcomes. This study seeks to further the understanding of contributors to burnout, an important psychological outcome for BSAs. Often, the impacts of racism, discrimination, and racial inequities are overlooked when examining psychological health outcomes in sport. Although this population may be empowered by racial barriers they have overcome to be student-athletes, researchers still should seek to expose racism and optimize

the academic, performance, and life potential of BSAs. Moreover, an overall goal of the study is to inform the literature on such predictors, which may eventually lead to the development of interventions that facilitate the health and well-being of this population through deterrence.

Chapter 3

Participants

Data was collected from 28 African American or Black student-athletes from 6 predominantly White institutions ($n = 27$) and 1 Historically Black College/Universities ($n = 1$). Participants were included from both club and varsity levels and were between the ages of 18-23 ($M = 19.6$, $SD = 1.6$). There were 18 Division I and 1 Division II athlete, along with 9 sport club athletes. Most athletes identified track & field as their sport ($n = 7$), followed by football ($n = 5$), basketball ($n = 4$), and then soccer ($n = 3$). Also, this sample included 9 first-year students, 5 sophomores, 7 juniors, 6 seniors, and 1 fifth-year or graduate student.

Measures

A survey battery was compiled into Qualtrics survey technology and disbursed to participants through e-mail or shared link. Each survey assessed major study variables including demographics, sport-related stress, race-related stress, social support, athletic and ethnic identity, and athlete burnout. To conclude the survey, participants were asked two questions about their thoughts on the current Black Lives Matter movement as an exploratory effort. The order in which each participant completed each survey was randomized.

Demographics

Participants were asked to report their age, ethnicity (African American, Caribbean, African, etc.), sport and sport level (varsity or club), first-generation student status, GPA, gender, university type (HBCU or PWI) and class year.

Sport Stress

The *Perceived Stress Scale* - 4-item version was used to measure sport-related stress levels of BSAs aside from potential levels of race-related stress (Cohen, Kamarck, Mermelstein, 1983). In order to examine sport-related stress, each of the items were adapted to the sport context. Example items include “how often have you felt nervous and ‘stressed’ in your sport environment” on a Likert scale from 1 (*never*) and 5 (*very often*). The Perceived Stress Scale has been shown to exhibit good internal validity when examining athlete burnout in collegiate athlete populations and had moderate positive associations with subscales of the ABQ (Raedeke & Smith; 2004; DeFreese & Smith, 2014).

Race-Related Stress

The *Prolonged Activation and Anticipatory Race-Related Stress Scale* (PARS) uses a 17-item self-report measure of responses to prolonged and anticipatory racism. The subscales based on the four-step model of Lazarus and Folkman’s (1986) Cognitive Appraisal model, which include *Perservative Cognition*, *Anticipatory Race-Related Stress*, *Anticipatory Bodily Alarm Response*, and *Secondary Appraisal* (Utsey, Belvet, Hubbard, Fischer, Opare-Henaku, & Gladney, 2013). Only three of the four subscales were included in the survey, Secondary Appraisal was not included. Participants were asked about their stress responses to network events or personal encounters of racism on a 7-point Likert scale with 1 equaling strongly disagree and 7 indicating strongly agree. Network events are experiences with racism that are made aware to an individual through a friend or colleague. Directions on how to complete this measure were somewhat altered when discussing examples of racism, to better fit within the context of sport.

All four subscales of PARS was found to have positive, moderate correlations with measures on the *Experiences of Discrimination Scale* (EOD; Krieger, Smith, Naishadham, Hartman, & Barbeau, 2005) demonstrating good convergent validity. Also, the Anticipatory Race-Related Stress Scale of PARS was both positively and moderately positively correlated with ethnic identity search and affiliation, belonging, and commitment scales of the *Multidimensional Ethnic Identity Measure-Revised* (MEIM; Phinney, 1992). Higher scores mean participant has higher expectations of experiences with race-related stress in the future (Utsey et al., 2013).

Social Support

The short version of the *Social Support Questionnaire* (Sarason, Sarason, Sherain & Pierce, 1987; SSQ6) was used to measure satisfaction with social support. Participants were asked six questions regarding social support satisfaction with items such as “when you feel under stress” on a 5-point Likert scale with 1 = *not very satisfied* and 5 = *very satisfied*. Then, participants were asked to list the initials and relationships of persons whom provided the social support. Items were scored by adding the total number of each item and then averaging those scores together. Items of this measurement were found to be associated with dimensions of burnout and other types of social support like perceived and received social support, which is important because the measure only asses received social support (DeFreese & Smith, 2013; Raedeke & Smith, 2004).

Athletic Identity

The *Athletic Identity Measurement Scale* (AIMS: Brewer, Vanraalte, & Lindder, 1993) was used to measure levels of intensity of athletic identity. Participants responded to 10-items

based on a Likert type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Examples of items are “I consider myself an athlete” or “Sport is the most important part of my life”. AIMS has maintained good internal consistency over several studies with $\alpha = 0.80$ to 0.93 and associations between subscales was found to be associated with dimensions of burnout when examining Coakley’s (1992) model (Black & Smith, 2007; Brewer et al., 1993). Also, AIMS has found to have consistent validity and reliability across varying populations (Cresswell & Eklund, 2006). The sums of the three subscales: social identity, exclusivity, and negative affect are averaged together to indicate an overall score, such that a higher score means higher levels of athletic identity.

Racial Identity

Racial or ethnic identity of participants was measured using the *Multigroup Ethnic Identity Measure-Revised* (MEIM-R; Phinney & Ong, 2007) to examine the saliency from athletic identity and other key study variables. This measure is a revision of Phinney’s (1992) MEIM and consists of 6-items, made up two subscales: exploration and commitment (Phinney & Ong, 2007). Participants rated their attitude or sense of belonging within his racial group from 1 (*strongly disagree*) to 4 (*strongly agree*). Scores of internal consistency reliability were moderate, with Cronbach’s alpha equaling 0.81 (Phinney & Ong, 2007). To find the score of this measure, we averaged the scores of all 6 items. The MEIM-R has been found to be reliable across varying participant factors and research settings and has shown higher internal consistency validity than the original MEIM (Herrington, Smith, & Griner, 2016).

Athlete Burnout

The most readily used measurement for burnout in sport is the *Athlete Burnout Questionnaire* (ABQ; Raedeke & Smith, 2001). This is a 15-item measure that is sub-scaled into the definitional dimensions of burnout: emotional or physical exhaustion, sport devaluation and loss of accomplishment. Participants self-reported possible perceptions of burnout on a 5-point scale with 1 meaning almost never and 5 meaning almost always. Internal consistency in previous research with the ABQ has been found to be acceptable with Cronbach's alpha equaling 0.89 (Raedeke & Smith, 2001). Each subscale has 5 items and is based on Raedeke's (1997) definition of burnout: loss of accomplishment, sport devaluation, physical/mental exhaustion. Previous research has found support for convergent validity (Cresswell & Eklund 2007) and factorial validity (Raedeke & Smith, 2001) for ABQ scores.

Exploratory questions

To conclude the survey, participants were given a brief description of the Black Lives Matter movement. Then, they were asked how supportive they were of the movement and if they anticipated their coaches, athletic department, fans, or significant others to be supportive of their decisions to support the movement on a scale from 1 (*not supportive at all*) to 7 (*very supportive*). These questions will not be randomized with other measures and will always be the last questions of the survey.

Procedure

The current study was approved by the university institutional review board before contacting athletic administrations and receiving permission from coaches. Following agreements, participants received a secure link to a Qualtrics survey through e-mail or other forms of mobile exchange. The research team received access to participants through the aid of

athletic administrators who shared a listserv with the emails of eligible participants. The only eligibility requirements of the current study were to self-identify as Black/African American, be 18 years of age or older, and be currently participating in a club or varsity sport at a southeastern college or university.

Before the start of the survey, participants were given information about the voluntary nature of their participation and a standard consent form. Participants were told the survey required about 20 minutes to complete. In order to give participants additional privacy and confidentiality, the survey could be completed in any setting of the participants' choice where they had e-mail access, such as a resident hall. Three days after the first contact, a second wave of reminder e-mails was sent to solicit remaining eligible athletes to complete the study. Then, a second and final reminder was sent to participants seven days after first contact. No more contacts were made after this final reminder.

After providing consent, participants were given general instruction to complete the survey, which concluded with debriefing on the circumstances of the study. Before exiting the survey, participants were given an opportunity to enter into a lottery in a separate survey as an incentive for their participation. Specifically, participants were given a link to lottery where they inputted their email for a chance to win an \$XX Visa Gift Card. To maintain confidentiality, only the lead investigator had access to the incentive survey and once winner(s) were chosen, the survey was deleted. Study procedures resulted in a XX% response rate to the survey.

Data Analysis

First, the data were screened and checked in accordance with best practices for management of multivariate data (Tabachnick & Fidell, 2007). Preliminary data screening was

performed to assess for instances of missing values, outliers, and violations of the assumption of multivariate analysis. Descriptive statistics were calculated for each study variable and bivariate correlations were computed using SPSS to understand the magnitude and direction of the relationship between each study variable. In order to better understand the relationships among all study variables of interest, the current study examined associations between race-related stress and burnout, race-related stress and both measures of identity, and burnout and both measures of identity. Linear regression analyses were used to examine the impact of social support on athlete burnout with both measures of psychosocial stress. In addition, a hierarchical linear regression was utilized to examine the exploratory hypothesis on the current study.

Chapter 4

Introduction

When looking at social impactors of psychological health, there may be particular stressors related to racism that contribute to negative outcomes in the Black population in collegiate sport settings. Literature on Black student-athletes (BSAs) generally points to the multi-dimensional methods in which racism impacts their social experiences relating to the perceptions of the campus environment, on-campus groups, and other social factors (Bimper, 2015; Carter-Francique, Hard, & Steward, 2013; Martin, Harrison, Stone, & Lawrence, 2010; Singer 2005, 2009). Therefore, there may be salient contributors to negative psychological outcomes for Black student-athlete related to racism and discrimination. An interesting sport outcome, which has been found to be related to negative psychosocial experiences, is athlete burnout (DeFreese & Smith, 2014). Student-athlete may be especially prone to negative sport outcomes, like athlete burnout, because of lowered levels of autonomy over their environments, reliance on sport to support their academic endeavors, and the demands of maintaining their student and sport goals (Hwang & Choi, 2016). Thus, it is worth exploring how racial matters may perpetuate in student-athlete's vulnerability to negative outcomes and how that further relates to other social variables of the collegiate sport setting. Athlete burnout will be the center of investigation in terms of how psychosocial variables, such as psychological stress, may exacerbate it and, specifically, how these variables may be driven by racism.

Threats to the social environments for BSAs may have negative effects on their psychological health, which paired with stress from the sport environment, could be overwhelming for an athlete. Aforementioned, chronic stress is a marked to be a major positive

predictor of athlete burnout Cresswell, 2009; Raedeke, 1997; Raedeke & Smith, 2004; Smith, 1986), but is not part of the generally agreed upon definition of athlete burnout outlined by Raedeke (1997). According to Raedeke (1997), athlete burnout is a cognitive-affect syndrome defined by three dimensions: loss of accomplishment, sport devaluation, and physical/mental exhaustion. The significance of athlete burnout is even more pivotal for this population due to substantial percentages of first-generation college students as well as graduation rate disparities. Some BSAs rely on sport to aid in the creation of life opportunities (e.g. job prospects, marital and familial relationships etc.) and withdrawal from sport may be detrimental to such outcomes. Instances of racism on colleges campuses intersect with the psychological well-being of Black students and this has found to be reflected in their perceptions of social support, campus climate and belongingness (Steinfeldt, Reed, & Steinfeldt, 2010), and other social factors (Stahura, Brown, & Choi, 2016).

A theory that examines and conceptualizes psychosocial stress as contributor to athlete burnout is Smith's (1986) Psychosocial Stress model. According to this four-component model, curated by Lazarus & Folkman's (1984) stress model of cognitive appraisal and coping, there is a negative trade-off between demands from sport stressors and resources available to address sport-related stress. This leads to the athlete cognitively appraising the imbalance of resources as creating psychological stress along with stress-induced physiological responses. The ultimate outcome of the model attributes withdrawal from sport to psychological resulting from and athlete perceiving more resources (Smith, 1986). Again, the theoretical implications of the Psychosocial Stress Model are to highlight the lack of resources for stress as mechanism for facilitating dimensions of athlete burnout. Moreover, the utilization of this theory gives ground

for how psychosocial stress salient to being Black can add to dimensions of athlete burnout. Already, previous literature supports the negative associations between stress and athlete burnout as well as other social contributors of positive coping resources, such as social support (DeFreese & Smith, 2014; Lu, Lee, Chang, Chou, Hsu, Lin & Gill, 2016; Moen et al., 2015; Raedeke & Smith, 2004).

The insertion of variables dealing with racism is also in accordance with the sociological framework of the Critical Race Theory (CRT), a theory crafted by lawyers for legal activism seeking to expose the negative of racism on people of color. This theory asserts 1) race and racism are deeply embedded in societal, legal, and psychological norms, which 2) is neutered by the minimization of racism and its existence and 3) must be informed and challenged with the use of experimental knowledge (Delgado & Stefancic, 2012). CRT has been adapted to numerous studies looking at the academic and sport experiences of Black student-athletes in order to inform academia of the impact of issues festering from institutional and systemic racism (Bimper, Harrison, & Clark, 2012; Bimper, 2015; Francique-Carter et al., 2013; Clark, et al., 2015; Singer, 2005, 2009). In this study, CRT informs the intersections of negative sport outcomes, which in this particular study is athlete burnout, and race-related stress, as well as how social factors can relate to sport-related stress and other correlates of athlete burnout.

Psychosocial stressors in Black student-athletes

Across demographic lines, student-athletes must combat psychological stress from their busy schedules, balancing sport and academic performance, amongst other inflicting risks to their mental health (Humphrey, Yow, & Bowden, 2000; Wilson & Pritchard, 2005). Again, the marked relationship between athlete burnout and stress could be due the inability for athletes

to cope with stressors from their sport environment, which ultimately leads to them withdrawing from the sport. DeFreese & Smith (2014) found a positive relationship between athlete burnout and psychological stress perceptions and a negative relationship between athlete burnout and social support satisfaction in a student-athlete sample. Furthermore, previous research examining psychosocial stressors concluded Black student-athletes in a multi-racial population had additional pressures embedded in social inequities related to being first-generation college student (Kimball & Freysinger, 2003). Little is known on how the dichotomy of experiences related to being a Black student and student-athlete can be stressful and contribute to the stress-athlete burnout relationship. To my knowledge, this is one of the first studies to investigate the parallels between racism-induced stress in a sport setting. Thus, it is important to conceptualize, within the scope of CRT, how racism can serve as stressor for BSAs and exacerbate their sport-related stress. Literature on BSAs have outlined negative social interactions manifesting from stereotypes about their Blackness and student-athlete stigma, which is being conceptualized by race-related stress (Comeaux, 2012; Griffin, 2017; Simyu, 2012).

BSAs have often perceived others, such as their peers, professors, and academic advisors to negatively stereotype them, which can be stressful in an environment where student-athletes may lack social autonomy (Melendez, 2008). This population has reported differential treatment from faculty on the basis of both harbored Black stereotypes along with athlete-stigma (Comeaux, 2012; Griffin, 2017; Simons et al., 2007). Moreover, qualitative data demonstrates BSAs engage in stereotype threat behavior, such that they act in an anticipatory way towards does not conform to the stereotype sometimes held by on-campus groups, in

order to cope with negative perceptions (Griffin, 2017). The academic implications for faculty-treatment, along with other social variables related to their academic settings, may contribute to poor campus adjustment. For instance, BSAs were found to be 2.96 times less like to be retained for the second year of college in comparison to White student-athletes (Johnson et al., 2013). Thus, embedded stereotypes in their campus experiences may psychologically exacerbate their academic disparities and reinforce the persisting stereotype in a cyclical nature (Sailes, 2010; Simiyu, 2012). Aforementioned, this evidence represents unaddressed psychological stress from BSAs' environments, which could increase exposure to race-related stress, and then possibly, dimensions of athlete burnout.

Social support represents a variable that is potentially protective against athlete stressors (both sport- and race-based) as well as athlete burnout-related perceptions. Previous research on athlete burnout has supported a negative relationship between its dimensions and social support (Cresswell, 2009; DeFreese & Smith, 2014; Lu et al., 2014; Raedeke & Smith, 2004). Furthermore, social support has also demonstrated positive effects on facilitating mental health in well-being in the face of psychological stress (Cohen & Wills, 1985). Social support will be examined in addition to stress and athlete burnout, but also to give depth to the psychosocial experiences of BSA participants. Unfortunately, BSAs have reported varied levels of social support from on-campus groups, often varied due to racism and discrimination. More specifically, these on-campus supporter need to take a multicultural perspective to counseling practices, which may exuberate academic motivation (Carter-Francique, Hart & Cheeks, 2015). Though teammates and coaches provide sources of support, BSAs still report feelings of judgment and misunderstanding from these two groups, as well as perceived isolation from

peers and other groups on campus (Melendez, 2008). It is necessary for BSAs to be able to express the concerns salient to their experiences yet, having those needs addressed is often neglected because of the tendencies for athletic department and the NCAA to ignore the impacts of racism or be colorblind to such issues (Bimper & Harrison, 2015; Singer, 2009).

A third aspect of this investigation includes additional variables related to the psychosocial experiences of being a BSA: racial and athletic identity. A literature review on athlete burnout research found mixed results for the relationship between burnout and athletic identity (Goodger et al., 2007). Although, some literature points to a negative relationship with athletic identity due to the progression of athlete burnout leading the athlete to grow away from their athletic identity. (Martin & Horn, 2013; Raedeke, 1997). Furthermore, higher levels of athletic identity was related to higher levels of perceived stereotype threat in a general student-athlete population (Feltz, Schneider, Hwang & Skogsberg, 2013). In BSAs, previous research points to a complicated relationship in managing their racial and athletic identity (Bimper, 2014). Athletic identity also tends to be higher for BSAs as compared to White student-athletes and negatively related to GPA (Bimper, 2014; Melendez, 2010). These two types of identity may serve to give additional details to the psychosocial stress-athlete burnout relationship.

Overall, there are three areas within literature on BSAs that could relate to the psychosocial stress-burnout relationship: stress from racism, levels of social support, and possibly, athletic and racial identity. Since the sport contexts of BSAs have demonstrate perceived climate-differences based on racism, it is possible that these experiences heighten psychological stress. Outcomes associated with athlete burnout could unhinge the life goals of

BSAs if they are not able to maintain their student status and drop out. However, this possibility could be combated through social support, though, on-campus groups sometimes do not provide efficient support because of embedded discrimination. Again, racial and athletic identity may give more explanation to the stress-athlete burnout relationship but the direction of this relationship is unpredictable. In order to address how sport outcomes may behave in regards to the racial experiences of BSAs, I hypothesize that 1) race-related stress and sport-related stress will be each be positively associated with athlete burnout and 2) social support will be negatively associated with dimensions of athlete burnout and also negatively related both race-related stress and sport-related stress. As an exploratory effort we will also 3) examine both of the aforementioned hypotheses while taking racial and athletic identity in account. It is the aims of these hypotheses to inform literature on athlete burnout on initial rationalization of how racism may negatively impact the sport environment.

Methods

Participants

Data was collected from 28 African American or Black student-athletes from 6 predominantly White institutions ($n = 27$) and 1 Historically Black College/Universities ($n = 1$). Participants were included from both club and varsity levels and were between the ages of 18-23 ($M = 19.6$, $SD = 1.6$). There were 18 Division I and 1 Division II athlete, along with 9 sport club athletes. Most athletes identified track & field as their sport ($n = 7$), followed by football ($n = 5$), basketball ($n = 4$), and then soccer ($n = 3$). Also, this sample included 9 first-year students, 5 sophomores, 7 juniors, 6 seniors, and 1 fifth-year or graduate student.

Measures

A survey battery was compiled into Qualtrics survey technology and disbursed to participants through e-mail or shared link. Each survey assessed major study variables including demographics, sport-related stress, race-related stress, social support, athletic and ethnic identity, and athlete burnout. To conclude the survey, participants were asked two questions about their thoughts on the current Black Lives Matter movement as an exploratory effort. The order in which each participant completed each survey was randomized.

Sport Stress

The Perceived Stress Scale - 4-item version was used to measure sport-related stress levels of BSAs aside from potential levels of race-related stress (Cohen, Kamarck, Mermelstein, 1983). In order to examine sport-related stress, each of the items were adapted to the sport context. Example items include “how often have you felt nervous and ‘stressed’ in your sport environment” on a Likert scale from 1 (never) and 5 (very often). The Perceived Stress Scale has been shown to exhibit good internal validity when examining athlete burnout in collegiate athlete populations and has exhibited moderate positive associations with subscales of the ABQ (Raedeke & Smith; 2001; DeFreese & Smith, 2014). This variable exhibited had low internal consistency reliability scores in the present study (Cronbach’s $\alpha = .42$).

Race-Related Stress

The *Prolonged Activation and Anticipatory Race-Related Stress Scale* (PARS) uses a 17-item self-report measure of responses to prolonged and anticipatory racism. The subscales based on the four-step model of Lazarus and Folkman’s (1986) Cognitive Appraisal model, which include *Perservative Cognition*, *Anticipatory Race-Related Stress*, *Anticipatory Bodily Alarm Response*, and *Secondary Appraisal* (Utsey, Belvet, Hubbard, Fischer, Opare-Henaku, &

Gladney, 2012). Only three of the four subscales were included in the survey, Secondary Appraisal was not included. Participants were asked about their stress responses to network events or personal encounters of racism on a 7-point Likert scale with 1 equaling strongly disagree and 7 indicating strongly agree. Network events are experiences with racism that are made aware to an individual through a friend or colleague. Directions on how to complete this measure were somewhat altered when discussing examples of racism, to better fit within the context of sport. In the current study, the internal consistency reliability of scores was $\alpha = .74$.

Social Support

The short version of the *Social Support Questionnaire* (Sarason, Sarason, Sherain & Pierce, 1987; SSQ6) was used to measure satisfaction with social support. Participants were asked six questions regarding social support satisfaction with items such as “when you feel under stress” on a 5-point Likert scale with 1 = *not very satisfied* and 5 = *very satisfied*. Then, participants were asked to list the initials and relationships of persons whom provided the social support. Items were scored by adding the total number of each item and then averaging those scores together. Items of this measurement were found to be associated with dimensions of burnout and other types of social support like perceived and received social support, which is important because the measure only assesses received social support (DeFreese & Smith, 2013; Raedeke & Smith, 2004). Internal consistency reliability scores were sufficient with $\alpha = .89$.

Athletic Identity

The *Athletic Identity Measurement Scale* (AIMS: Brewer et al., 1993) was used to measure levels of intensity of athletic identity. Participants responded to 10-items based on a

Likert type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Examples of items are “I consider myself an athlete” or “Sport is the most important part of my life”. AIMS has maintained good internal consistency over several studies with $\alpha = 0.80$ to 0.93 and associations between subscales was found to be associated with dimensions of burnout when examining Coakley’s (1992) model (Black & Smith, 2007; Brewer et al., 1993). Also, AIMS has found to have consistent validity and reliability across varying populations (Cresswell & Eklund, 2007). The sums of the three subscales: social identity, exclusivity, and negative affect are averaged together to indicate an overall score, such that a higher score means higher levels of athletic identity. In this study, the internal consistency reliability with $\alpha = .88$.

Racial Identity

Racial or ethnic identity of participants was measured using the *Multigroup Ethnic Identity Measure-Revised* (MEIM-R; Phinney & Ong, 2007) to examine the saliency from athletic identity and other key study variables. This measure is a revision of Phinney’s (1992) MEIM and consists of 6-items, made up two subscales: exploration and commitment (Phinney & Ong, 2007). Participants rated their attitude or sense of belonging within his racial group from 1 (*strongly disagree*) to 4 (*strongly agree*). Scores of internal consistency reliability were moderate, with Cronbach’s alpha equaling 0.81 (Phinney & Ong, 2007). To find the score of this measure, we averaged the scores of all 6 items. The MEIM-R has been found to be reliable across varying participant factors and research settings and has shown higher internal consistency validity than the original MEIM (Herrington, 2014). This variable also demonstrated strong internal consistency reliability with $\alpha = .74$.

Athlete Burnout

The most readily used measurement for burnout in sport is the *Athlete Burnout Questionnaire* (ABQ; Raedeke & Smith, 2001). This is a 15-item measure that is sub-scaled into the definitional dimensions of burnout: emotional or physical exhaustion, sport devaluation and loss of accomplishment. Participants self-reported possible perceptions of burnout on a 5-point scale with 1 meaning almost never and 5 meaning almost always. Internal consistency in previous research with the ABQ has been found to be acceptable with Cronbach's alpha equaling 0.89 (Raedeke & Smith, 2001). Each subscale has 5 items and is based on Raedeke's (1997) definition of burnout: loss of accomplishment, sport devaluation, physical/mental exhaustion. Previous research has found support for convergent validity (Cresswell & Eklund 2006) and factorial validity (Raedeke & Smith, 2001) for ABQ scores. The Cronbach's $\alpha = .95$ within this study, showing good internal consistency reliability.

Exploratory questions

To conclude the survey, participants were given a brief description of the Black Lives Matter movement. Then, they were asked how supportive they were of the movement and if they anticipated their coaches, athletic department, fans, or significant others to be supportive of their decisions to support the movement on a scale from 1 (*not supportive at all*) to 7 (*very supportive*). These questions will not be randomized with other measures and will always be the last questions of the survey. Participants were also given the option to input qualitative thoughts about the movement if they had free thoughts they thought were important to the study.

Procedure

The current study was approved by the university institutional review board before contacting athletic administrations and receiving permission from coaches. Following agreements, participants received a secure link to a Qualtrics survey through e-mail or other forms of mobile exchange. The research team received access to participants through the aid of athletic administrators who shared a listserv with the emails of eligible participants. The only eligibility requirements of the current study were to self-identify as Black/African American, be 18 years of age or older, and be currently participating in a club or varsity sport at a southeastern college or university.

Before the start of the survey, participants were given information about the voluntary nature of their participation and a standard consent form. Participants were told the survey required about 20 minutes to complete. In order to give participants additional privacy and confidentiality, the survey could be completed in any setting of the participants' choice where they had e-mail access, such as a resident hall. Three days after the first contact, a second wave of reminder e-mails was sent to solicit remaining eligible athletes to complete the study. Then, a second and final reminder was sent to participants seven days after first contact. No more contacts were made after this final reminder.

After providing consent, participants were given general instruction to complete the survey, which concluded with debriefing on the circumstances of the study. Before exiting the survey, participants were given an opportunity to enter into a lottery in a separate survey as an incentive for their participation. Specifically, participants were given a link to lottery where they inputted their email for a chance to win an \$50 Visa Gift Card. To maintain confidentiality, only

the lead investigator had access to the incentive survey and once winner(s) were chosen, the survey was deleted.

Data Analysis

First, the data were screened and checked in accordance with best practices for management of multivariate data (Tabachnick & Fidell, 2007). Preliminary data screening was performed to assess for instances of missing values, outliers, and violations of the assumption of multivariate analysis. Descriptive statistics were calculated for each study variable and bivariate correlations were computed using SPSS to understand the magnitude and direction of the relationship between each study variable. In order to better understand the relationships among all study variables of interest, the current study examined associations between race-related stress and burnout, race-related stress and both measures of identity, and burnout and both measures of identity. Linear regression analyses were used to examine the impact of social support on athlete burnout with both measures of psychosocial stress. In addition, a hierarchical linear regression was utilized to examine the exploratory hypothesis on the current study.

Results

Preliminary data screening

There was a proportion of missing data from completed surveys which did not exceed 7% for any one study variable. Before calculating a hierarchical linear regression, the statistical assumptions were checked for each study variable, in accordance with best practices outlined by Tabachnick & Fidell (2007). No outlying casing were identified. All variables met assumptions for multivariate analyses.

Demographic variables and descriptive statistics

See Table 2 for relevant demographic statistics. There was an even representation of both genders as well as a normal distribution of class years. Most of participants either played Division I ($n=18$) level or played a sport club ($n=9$) through campus recreation; there was only one participant from the Division II level. About 20% ($n= 5$) of participants identified themselves as first-generation college students.

Bivariate correlations and other descriptive statistics appear in Table 1. Participants demonstrated low-to-moderate levels of athlete burnout and psychosocial stress. In regards to bivariate correlations, there was a significant positive correlation between athlete burnout and sport-related stress. Though not significant, there was a positive correlation between sport-related and race-related stress. Overall, participants demonstrated low levels of race-related stress and was found not to be an independent predictor of athlete burnout. Interestingly, race-related stress exhibited a low-to-moderate positive relationship with racial identity, but it was not found to be statistically significant. It is also important to note that athletic identity had a significant negative correlation ($r = -.40$) with the burnout dimension of sport devaluation. Social support did not have any significant relationships with athlete burnout and other study variables except for sport-related stress. Contrary to previous research, social support had a moderately positive relationship with sport-related stress ($r = .47$).

Regression analyses

A simple linear regression was calculated to predict athlete burnout based on sport-related stress, race-related stress, and social support to examine the first and second hypotheses. A significant regression equation was found ($F(3, 23) = 5.72, p < .005$), with an R^2

of .43. Sport-related stress was the only individual significant predictor athlete burnout in this regression.

Another linear regression was conducted to examine the third, exploratory hypothesis. In the first step of this hierarchal linear regression, athletic identity and racial identity were not significantly associated with athlete burnout. Both types of identity only accounted for 13% of the variance in athlete burnout. The second step of these analyses did yield a significant association between athlete burnout and sport related stress ($F(5, 20) = 2.80, p < .001$). In addition, there was a significant 30% increase in the variance explaining athlete burnout as seen in Table 4. This results indicates, when taking athletic and racial identity into account, sport-related and race-related stress and social support accounts for over 50% of the variance in athlete burnout. It is also important to note that sport-related stress was the only variable with a significant relationship with athlete burnout amongst the other study variables entered in Stage 2. Analyses did not support any associations of athlete burnout with any other study variables besides sport-related stress.

Group difference analyses

Also important to mention, sport devaluation, out of the other 2 dimensions of athlete burnout, behaved differently with variables used to examine the saliency of the BSA experience. Both sport devaluation ($t(25) = -2.34, p < .05$) and global athlete burnout ($t(25) = 7.63, p < .05$) were significantly higher for upperclassman than lowerclassman. Sport devaluation was the only dimension to have a positive relationship with year in college. Aforementioned, devaluation was also negatively related to athletic identity, which may be

attributed to the socialization of sport in the Black community. This will be better addressed in the discussion.

Discussion

Antecedents of athlete burnout that may be exacerbated by variables salient to the psychosocial experiences of Black student-athletes. The sample population was comprised of 28 Black student-athletes or sport club members with low-to-moderate scores on maladaptive markers of psychological health athlete burnout and psychosocial stress. Results support the strong relationship between athlete burnout and sport-based psychological stress which is consistent with previous literature (DeFreese & Smith, 2014; Lu, Lee, Chang, Chou, Hsu, Lin & Gill, 2016; Moen, Federici, & Abrahamsen, 2015; Raedeke & Smith, 2004). However, race-related stress did not exhibit any significant associations with any dimensions of athlete burnout. Thus, my results highlight the reliability of the psychological stress-athlete burnout relationship in a BSA sample. Even in a small population, some results still give insight to the particular dimensions of burnout that may be germane to the experiences of BSAs. However, social support and race-related variables did not have any significant relationships possibly differences in conceptualizing factors that add to sport-related stress. Implications of this study were essential to its role as a pilot study to give researchers more insight on how to efficiently examine athlete burnout in a Black athlete population.

Study results show it may be important to distinguish race-related stress from general stress when examining psychological experiences of Black college students (Wei, Tsun-Yao, and Yu-Hsin Liao, 2011). Results point to a potential, but small, relationship between sport-related stress and race-related stress, which may have become more evident with a larger sample. In

terms of athlete burnout, the supportive findings of this study at least establishes that the stress levels of this population behave in a predictable manner with burnout dimensions. Future research could focus on other stress-related outcomes for student-athletes, some of which will be unique to BSAs, and how they related to athlete burnout. For instance, previous studies have utilized variables that captured the more distal impact of racism such as perceptions of being stereotyped, perceived campus climate, and adjustment (Melendez, 2008, 2010). These psychosocial factors may be easier for participants to recognize the way race and racism influences their experiences. Also, findings that point to a relationship between psychosocial stress and athlete burnout were limited to the sport-setting and not social issues like racism. Another possibility that may have also impacted results and relationships dealing with race-related stress, has to do with the conceptualization of sport and social stress as it pertains to sport-related outcomes.

The sport devaluation dimension of athlete burnout had two significant relationships with demographic and exploratory variables, pointing too potential pathways that athlete burnout is influenced by psychosocial variables. This trend could be sociologically attributed to the entrapment theory of athlete burnout and the importance of sport in the black community. The importance of sport may be unique amongst BSAs due to the its social implications in the Black community such that the socialization of sport may create psychological vulnerability for this population. To reiterate, sport devaluation is characterized by a resentment or loss in importance to an athlete. Beamon (2010) found both environmental agents (schools, community, and the media) as well as peers and family pushed them towards athletics and fulfill media stereotypes in a small sample of Black male student-athletes. This may relate to

burnout on the basis of Coakley's (1992) entrapment model such that Black student-athletes become reliant and possibly overinvested in to sport. Moreover, it is possible that the socialization of sport as a means of coming up and out low socioeconomic and poorer socioemotional situations. Athlete burnout may be further connected to the Black student-athlete experience as it pertains to athletic identity. Future research efforts in BSA populations should continue to probe this idea.

Findings also have revealed athletic identity as a negative correlate of the sport devaluation dimension of athlete burnout, which may highlight the psychosocial implications of sport socialization in BSAs. Qualitative data has indicated effects of the entrapment theory in that participants expressed discouragement of the overemphasis of sport in the Black community. The focus on going to "the pros" over and at the expense of academics was a theme of the participant concerns about the sport socialization of the next generations (Beamon, 2010). Athletic identity has thematically been varied in nature when looking at racial differences (Harrison, Sailes, Rotich, & Bimper, 2011; Melendaz, 2010 and also must be balanced with other identities (Bimper, Harrison, & Clark, 2012). Overall, it is possible that BSAs may feel pressured to only exceed in their sport and also have their athletic identity nurtured over and at the cost of their student identity.

Perhaps with a larger sample, there would be more significance relationship between specific aspects of athletic identity including AIMS item 7 ("Other people see me mainly as an athlete") and other study variables, such as sport devaluation. Previous research points to this item to be significantly higher in BSAs compared to White student-athletes (Harrison et al., 2011), which I theoretically believe can be at least partially contributed to the socialization of

sport. Meaning, BSAs may place over-importance on their athletic status, facilitated by the socialization that others who mostly view them as an athlete, which could lead to them become over-reliant on sport. While findings did not support this previous literature, it is still possible that athletic identity, though ambiguous, gives depth to psychosocial issues like race-related stress. An intriguing study on athletic identity in student-athletes who were comfortable with the extent that the athletic department addressed discrimination, were comfortable with teammate diversity, and higher faculty interaction also tended to have lower levels of athletic identity (Rankin, Merson, Garvey, Sorgen, Menon, Louya & Oseguera, 2011).

Though most studies examining the social experiences of BSAs find that they acknowledge the way racism perpetuates their experiences, yet none, to my knowledge, measured this based on race-related stress. For instance, Melendez (2008) modeled that Black football players perceived isolation from their environment due to perceived racial differences in people in their campus environment. These social factors are instances of race-related stressors, though participants used words to describe their affect like misjudged, mistrust of others, double-standards, etc. which could be generalized to stress. Melendez (2008) underlined the negative implications for psychological health of this population. It is possible that participants did not frame these perceptions as stress and, therefore, did not attribute race-related stress dimensions of sport-stress and athlete burnout. Again, the measurement for race-related stress (PARS) asked participants to recall previous encounters with racism. This recall may be subjective on the basis of familiarity of the definitions of discrimination, stereotyping, and prejudice and history of racism, amongst many other factors. BSAs has found to have significantly different perceptions of discrimination on the basis of athletic identity and

gender, but still reported lower levels of agreement that discrimination was no longer a problem in the US than White student-athletes (Brown, Jackson, Brown, Sellers, Keiper & Manuel, 2003). Thus, the population could have also been too small and varied in contributors such as identity and gender, to show significant relationships.

Limitations

The most pronounced limitation of the current is the size of the sample population, then the novelty in examining this specific population in athlete burnout also was an area of difficulty for the researcher. Aforementioned, the sample size decreased the possibility for significant relationships, which might exist, to be examined between study variables. Student-athletes are already asked to complete numerous surveys from the NCAA or athletic department, thus the response rate from outside universities and UNC student-athletes and sport club members was low. If more time was allotted for recruitment, this limitation may not have been as substantial. Along with access barriers, Black student-athletes are still in the minority relative to other student-athletes and then within the student population at predominately-white institutions (PWIs). Therefore, even after granted permission from athletic administration, it is difficult to locate and reach this population—especially since they typically do not have target organizations like Black, non-athlete students have (e.g. Black students club, multi-cultural organizations).

Secondly, use of race-related stress and social support may have not been the most efficient perspective for investigating salient variables of athlete burnout in BSAs. Again, this is one of the first studies to investigate unique variables of being a BSA in terms of athlete burnout. Thus, there were numerous methods, psychological and sociological frameworks that

could have been utilized to look at these relationships. The purposes of examining athlete burnout in BSAs was not to declare race as a risk factor, but rather, emphasize the negative factors related to racism in sporting environments. Aforementioned, it is possible that race-related stress was not the most efficient method to examine negative psychosocial factors elicited by racism. In addition, the measurement of social support may have not captured perceptions of on-campus support. On a positive note, the findings and shortcomings of the study provide guidance for curating a more effective method for examining the negative impacts of racism in terms of sport outcomes.

Again sport-related stress was still a significant predictor of athlete burnout even in a small sample size meaning, it could be a point of intervention for both student-athletes and BSAs. Academic variables have been found to be the strongest predictor of stress levels for student-athletes, but other variables like scheduling, coach relationships, and fatigue were also sources of stress (Cosh & Tully, 2015; Hwang & Choi, 2016). Furthermore, qualitative research from student-athletes has outlined specific coping mechanism for dealing with stress like familial support and reevaluating academic decisions (Cosh & Tully, 2015). Overall, it is important for student-athletes to have unlimited access to mental health services in the same fashion as athletic training services. For instance, recent literature has outlined an integrated model to connect student-athletes to mental health services through required screening questions during physical examinations (Sudano, Collins, & Miles, 2017). Specific to BSAs psychological stress could be minimized through unity in Black safe spaces that are judgement-free zones so they may speak their truths about their experiences (Cooper 2012; Sadberry &

Mobley, 2013; Singer, 2005, 2009). BSAs, along with other minorities in higher education, are resilient and will continue to both thrive and seek to eliminate inequities facing them.

Conclusion

It is satisfying that this sample of BSAs did not report moderate or high levels of race-related stress and that these levels of stress did not exacerbate other negative psychological variables. Findings did point to the chronic nature of athlete burnout such that upperclassman exhibited higher levels of burnout and thus, may need more resources directed towards combating stress than their underclassman counterparts. Negative social factor facing the BSA population, such as race-related stress, may be better recognized if BSAs were given a designated space or target-resources for expressing their opinions and having psychological needs addressed (Carter-Francique et al., 2013; Cooper, 2012, 2015; SADBERRY & Mobley, 2013). Furthermore, BSAs can be further academically and motivationally supported by faculty (Bimper & Harrison, 2015; Comeaux, 2010; Singer 2005, 2009) and by increasing the representation of people of color in leadership positions in their setting. Future research may examine more specific racial stressors of the BSA experience such as isolation and/or stereotype threat that may connect better to the sport contributors of athlete burnout. Understanding the racial impacts on the psychological health of BSAs will continue to be a complex investigation. Nevertheless, the pursuit is necessary to aid in mitigating academic and social disparities seen in this population as well as to deter negative outcomes of athlete psychological health (e.g., burnout) as a means to promote overall health and well-being in this population.

Tables

Table 1Descriptive statistics for study variables ($N=28$)

Variable	1	2	3	4	5	6	7	8	9
1.Sport-related Stress	<i>.42</i>								
2.Race-related Stress	.12	<i>.74</i>							
3.Social Support	<i>.47*</i>	.25	<i>.89</i>						
4. Athlete Burnout	<i>.65**</i>	.04	.12	<i>.95</i>					
5. Sport Devaluation	<i>.57**</i>	.13	.26	<i>.94**</i>	<i>.90</i>	.			
6. Loss of Accomplishment	<i>.62**</i>	-.13	<i>.40*</i>	<i>.85**</i>	<i>.70**</i>	<i>.90</i>			
7. Physical/mental Exhaustion	<i>.57**</i>	.09	.09	<i>.89**</i>	<i>.57**</i>	<i>.63**</i>	<i>.91</i>		
8. Racial Identity	-.01	.34	-.38	.01	-.11	-.18	-.09	<i>.74</i>	
9. Athlete Identity	.16	.07	.27	-.30	-.40*	-.17	-.10	.01	<i>.88</i>
<i>M</i>	1.94	3.63	1.42	2.40	2.30	2.31	2.64	4.08	4.57
<i>SD</i>	.62	.89	.85	.95	1.12	.99	1.13	.62	1.29

Notes. * $p < .05$, ** $p < .01$; Cronbach's alpha values appear on the matrix diagonal in italics; Correlations appear below diagonal.

Table 2

Demographic variables

Variable	N(%)	Range	Mean (SD)
Gender			
Male	15(54)		
Female	13(46)		
Year			
First-Year	9(32)		
Sophomore	5(18)		
Junior	7(25)		
Senior	6(21)		
Fifth-Year/Graduate Student	1 (4)		
Age		18-23	19.96(1.6)
Sport Level			
Club	9(23)		
Division I	18(64)		
Division II	1 (4)		
Sport Played			
Basketball	4 (14)		
Cross Country	1(4)		
Football	5(18)		
Soccer	3(11)		
Track & Field	7(25)		
Volleyball	1(4)		
Golf	1(4)		
Other	5(18)		
First-Year Generation Status	5(18)		
GPA			3.04 (.45)

Table 3

Linear regression analyses assessing psychosocial stress and social stress associations with athlete burnout ($N = 28$)

Model	BO	
	ΔR^2	B
Support Variable		
	.43*	
Sport-related stress		.67*
Race-related stress		-.003
Social Support		-.05

Notes. * $p < .05$

Table 4

Model	BO	
	ΔR^2	B
Support Variable		
Step 1 – $F(2,23)$.13	
Athletic identity		-.33
Racial identity		-.14
Step 2 – $F(5,20)$.52	
Sport-related stress		..80*
Race-related stress		.002
Social Support		-.20

Notes. * $p < .05$

References

- Arbona, C., & Johnson, S. C. (2006). The relation of ethnic identity, racial identity, and race-related stress among african american college students. *Journal of College Student Development, 47*(5), 495-507. doi:10.1353/csd.2006.0057
- Baker, C. N. (2013). Social support and success in higher education: The influence of on-campus support on african american and latino college students. *The Urban Review, 45*(5), 632-650. doi:10.1007/s11256-013-0234-9
- Beamon, K. K. (2010). Are sports overemphasized in the socialization process of African American males? A qualitative analysis of former collegiate athletes' perception of sport socialization. *Journal of Black Studies, 41*(2), 281-300.
- Bimper Jr, A. Y. (2014). Game changers: The role athletic identity and racial identity play on academic performance. *Journal of College Student Development, 55*(8), 795-807.
- Bimper, A. Y. (2015). Lifting the veil: Exploring colorblind racism in black student athlete experiences. *Journal of Sport and Social Issues, 39*(3), 225; 225-243; 243.
- Bimper, A. Y., & Harrison, L. (2015). Are we committed to issues of race? institutional integrity across intercollegiate athletics. *International Review for the Sociology of Sport*, doi:10.1177/1012690215616270
- Bimper, A. Y., Harrison, L., & Clark, L. (2013). *Diamonds in the rough: Examining a case of successful black male student athletes in college sport* doi:10.1177/0095798412454676
- Black, J. M., & Smith, A. L. (2007). An examination of coakley's perspective on identity, control, and burnout among adolescent athletes. *International Journal of Sport Psychology, 38*(4), 417-436.

- Bonilla-Silva, E. (2014). *Racism without racists : Color-blind racism and the persistence of racial inequality in america*. Lanham: Rowman & Littlefield Publishers, Inc. Retrieved from <http://search.lib.unc.edu?R=UNCb7593826>
- Brewer, B., Vanraalte, J., & Linder, D. (1993). Athletic identity - hercules muscles or achilles heel. *International Journal of Sport Psychology*, 24(2), 237-254.
- Brown, T. N., Jackson, J. S., Brown, K. T., Sellers, R. M., Keiper, S., & Manuel, W. J. (2003). "There's no race on the playing field": Perceptions of racial discrimination among white and black athletes. *Journal of Sport & Social Issues*, 27(2), 162-183. doi:10.1177/0193732502250715
- Carter-Francique, A. R., Hart, A., & Cheeks, G. (2015). Examining the value of social capital and social support for black student-athletes' academic success. *Journal of African American Studies*, 19(2), 157-177. doi:10.1007/s12111-015-9295-z
- Carter-Francique, A., Hart, A., & Steward, A. (2013). Black college athletes' perceptions of academic success and the role of social support. *Journal of Intercollegiate Sport*, 6(2), 231-246. Retrieved from <http://unc.summon.serialssolutions.com/2.0.0/link/>
- Clark, L., Harrison Jr, L., & Bimper, A. (2015). Generations: Academic and Athletic Integration of a Southern PWI Basketball Program. *Research quarterly for exercise and sport*, 86(3), 281-291.
- Coakley, J. (1992). Burnout among adolescent athletes: A personal failure or social problem?. *Sociology of sport journal*, 9(3), 271-285.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological bulletin*, 98(2), 310.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396.

- Comeaux, E. (2010). Racial differences in faculty perceptions of collegiate student-athletes' academic and post-undergraduate achievement. *Sociology of Sport Journal*, 27(4), 390.
- Comeaux, E. (2011). Examination of faculty attitudes toward division i college student-athletes. *College Student Affairs Journal*, 30(1), 75.
- Comeaux, E. (2012). Unmasking athlete microaggressions: Division I student-athletes' engagement with members of the campus community. *Journal of Intercollegiate Sport*, 5(2), 189-198.
doi:<http://dx.doi.org/10.1123/jis.5.2.189>
- Comeaux, E., & Harrison, C. K. (2007). Faculty and male student athletes: Racial differences in the environmental predictors of academic achievement. *Race Ethnicity and Education*, 10(2), 199-214. doi:10.1080/13613320701330726
- Cooper, J & Dougherty, S. (2015). Does race still matter?: A post bowl championship series (BCS) era examination of student athletes' experiences at a division I historically black College/University (HBCU) and predominantly white institution (PWI). *Journal of Issues in Intercollegiate Athletics*, 8, 74; 74.
- Cooper, J. (2012). Personal troubles and public issues: A sociological imagination of black athletes' experiences at predominantly white institutions in the united states. *Sociology Mind*, 2(3), 261-271. doi:10.4236/sm.2012.23035\
- Cosh, S., & Tully, P. J. (2015). Stressors, coping, and support mechanisms for student athletes combining elite sport and tertiary education: implications for practice. *The Sport Psychologist*, 29(2), 120-133.
- Cresswell, S. L. (2009). Possible early signs of athlete burnout: A prospective study. *Journal of Science and Medicine in Sport*, 12(3), 393-398. doi:<http://dx.doi.org/10.1016/j.jsams.2008.01.009>

- Cresswell, S. L., & Eklund, R. C. (2006). The convergent and discriminant validity of burnout measures in sport: A multi-trait/multi-method analysis. *Journal of Sports Sciences*, 24(2), 209-220.
doi:10.1080/02640410500131431
- Cresswell, S. L., & Eklund, R. C. (2007). Athlete burnout: A longitudinal qualitative study. *Sport Psychologist*, 21(1), 1-20.
- Dee, T. S. (2013). Stereotype threat and the student-athlete. *Economic Inquiry*, 52(1), 173; 173-182; 182.
- DeFreese, J. D., & Smith, A. L. (2013). Teammate social support, burnout, and self-determined motivation in collegiate athletes. *Psychology of Sport and Exercise*, 14(2), 258-265.
doi:10.1016/j.psychsport.2012.10.009
- DeFreese, J. D., & Smith, A. L. (2014). Athlete social support, negative social interactions, and psychological health across a competitive sport season. *Journal of Sport & Exercise Psychology*, 36(6), 619-630. Retrieved from https://auth.lib.unc.edu/ezproxy_auth.php?url=http://search.ebscohost.com/login.aspx?direct=true&db=s3h&AN=100607160&site=ehost-live&scope=site
- Delgado, Richard, and Jean Stefancic. *Critical race theory: An introduction*. NYU Press, 2012.
- Dubuc-Charbonneau, N., Durand-Bush, N., & Forneris, T. (2014). Exploring levels of student-athlete burnout at two canadian universities. *The Canadian Journal of Higher Education*, 44(2), 135.
- Feltz, D. L., Schneider, R., Hwang, S., & Skogsberg, N. J. (2013). Predictors of collegiate student-athletes' susceptibility to stereotype threat. *Journal of College Student Development*, 54(2), 184-201.
- Fries-Britt, S. & Griffin, K. (2007). The black box: How high-achieving blacks resist stereotypes about black americans. *Journal of College Student Development*, 48(5), 509; 509-524; 524.

- Goodger, K., Gorely, T., Lavallee, D., & Harwood, C. (2007). Burnout in sport: A systematic review. *The Sport Psychologist, 21*(2), 1.
- Gould, D., & Whitley, M. A. (2009). Sources and consequences of athletic burnout among college athletes. *Journal of Intercollegiate Sports, 2*(1), 16-30.
- Griffin, W. (2017). Who is Whistling Vivaldi? How Black football players engage with stereotype threats in college. *International Journal of Qualitative Studies in Education, 30*(4), 354-369.
- Gustafsson, H., Kenttä, G., Hassmén, P., & Lundqvist, C. (2007). Prevalence of burnout in competitive adolescent athletes. *The Sport Psychologist, 21*(1), 2.
- Harrison, L., Sailes, G., Rotich, W. K., & Bimper, A. Y. (2011). Living the dream or awakening from the nightmare: Race and athletic identity. *Race Ethnicity and Education, 14*(1), 91-103.
doi:10.1080/13613324.2011.531982
- Hawkins, B. (2010). *The new plantation : Black athletes, college sports, and predominantly White NCAA institutions* (1st ed.). New York: Palgrave Macmillan.
- Herrington, H. M., Smith, T. B., Feinauer, E., & Griner, D. (2016). Reliability generalization of the Multigroup Ethnic Identity Measure-Revised (MEIM-R). *Journal of counseling psychology, 63*(5), 586.
- Holt, N., & Hoar, S. (2006). The multidimensional construct of social support. *LiterLiterature reviews in sport psychology* (199-225). New York: Nova Science Publishers.
- Humphrey, J. H., Yow, D. A., & Bowden, W. W. (2000). Stress in college athletics: Causes, consequences, coping. New York: Haworth Half-Court Press.
- Hwang, S., & Choi, Y. (2016). Data Mining in the Exploration of Stressors Among NCAA Student Athletes. *Psychological Reports, 119*(3), 787-803.

- Johnson, J. E., Wessel, R. D., & Pierce, D. A. (2013). Exploring the influence of select demographic, academic, and athletic variables on the retention of student-athletes. *Journal of College Student Retention, 15*(2), 135-155. doi:10.2190/CS.15.2.a
- Kimball, A., & Freysinger, V. J. (2003, 04). Leisure, Stress, and Coping: The Sport Participation of Collegiate Student-Athletes. *Leisure Sciences, 25*(2-3), 115-141. doi:10.1080/01490400306569
- Krieger, N., Smith, K., Naishadham, D., Hartman, C., & Barbeau, E. M. (2005). Experiences of discrimination: validity and reliability of a self-report measure for population health research on racism and health. *Social science & medicine, 61*(7), 1576-1596.
- Lapchick, R. (2016). *The 2015 racial and gender report card: College sport*. (No. 10). University of Central Florida: The Institute for Diversity and Ethics in Sport.
- Lazarus, R. S., & Folkman, S. (1984). Coping and adaptation. *The handbook of behavioral medicine, 282-325*.
- Lu, F. J., Lee, W. P., Chang, Y. K., Chou, C. C., Hsu, Y. W., Lin, J. H., & Gill, D. L. (2016). Interaction of athletes' resilience and coaches' social support on the stress-burnout relationship: A conjunctive moderation perspective. *Psychology of Sport and Exercise, 22*, 202-209.
- Martin, B. E., Harrison, C. K., Stone, J., & Lawrence, S. M. (2010). Athletic voices and academic victories: African american male student-athlete experiences in the pac-ten. *Journal of Sport & Social Issues, 34*(2), 131-153. doi:10.1177/0193723510366541
- Martin, E., & Horn, T. (2013). The role of athletic identity and passion in predicting burnout in adolescent female athletes. *Sport Psychologist, 27*(4), 338-348.
- Massey, D. S., & Owens, J. (2014). Mediators of stereotype threat among black college students. *Ethnic and Racial Studies, 37*(3), 557-575. doi:10.1080/01419870.2013.786110

- McClain, S., Beasley, S. T., Jones, B., Awosogba, O., Jackson, S., & Cokley, K. (2016). An examination of the impact of racial and ethnic identity, impostor feelings, and minority status stress on the mental health of black college students. *Journal of Multicultural Counseling and Development, 44*(2), 101-117. doi:10.1002/jmcd.12040
- Melendez, M. C. (2008). Black football players on a predominantly white college campus: Psychosocial and emotional realities of the black college athlete experience. *Journal of Black Psychology, 34*(4), 423-451. doi:10.1177/0095798408319874
- Melendez, M. C. (2010). Psychosocial influences on college adjustment in division I student-athletes: The role of athletic identity. *Journal of College Student Retention: Research, Theory & Practice, 11*(3), 345.
- Moen, F., Federici, R. A., & Abrahamsen, F. (2015). Examining possible relationships between self-determination and burnout among junior athletes in sport. *International Journal of Coaching Science, 9*(2), 43-58.
- Murty, K., & Roebuck, J. (2015). Deviant exploitation of black male student athletes on white campuses. *Deviant Behavior, 36*(6), 429-440. doi:10.1080/01639625.2014.935691
- NCAA. (2016, November). *Division I Graduation Rate Trends (Rep.)*. Retrieved http://www.ncaa.org/sites/default/files/2016RES_GSRandFedTrends-Final_sc_20161114.pdf**
- Parsons. (2013). Student athlete perceptions of academic success and athlete stereotypes on campus. *Journal of Sport Behavior, 36*(4), 400; 400.
- Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of adolescent research, 7*(2), 156-176.

- Phinney, J. S., Ong, A. D., & American Psychological Association, W., DC. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*(3), 271-281. doi:10.1037/0022-0167.54.3.271
- Raedeke, T. (1997). Preliminary development of an athlete burnout measure: Factorial validity. *Journal of Sport & Exercise Psychology, 19*, S97-S97.
- Raedeke, T. & Smith, A. (2001). Development and preliminary validation of an athlete burnout measure. *Journal of Sport & Exercise Psychology, 23*(4), 281; 281.
- Raedeke, T. & Smith, A. (2004). Coping resources and athlete burnout: An examination of stress mediated and moderation hypotheses. *Journal of Sport & Exercise Psychology, 26*(4), 525; 525.
- Rankin, S., Merson, D., Sorgen, C., McHale, I., Loya, K., & Oseguera, L. (2011). Student-athlete climate study (SACS) final report. *Center for Study of Higher Education*.
- Sadberry, S., & Mobley, M. (2013). Sociocultural and mental health adjustment of black student-athletes: Within-group differences and institutional setting. *Journal of Clinical Sport Psychology, 7*(1), 1-21.
- Sailes, G. A. (Ed.). (2010). *Modern sport and the African American experience*. Cognella.
- Sarason I., Sarason B., Shearin E., Pierce G. (1987) A brief measure of social support: Practical and theoretical implications. *Journal of Social and Personal Relationships, 4*, 497–510.
- Simiyu, W. W. (2012). Challenges of being a black student athlete on U.S. college campuses. *Journal of Issues in Intercollegiate Athletics, (2012)*, 40-63.
- Simons, H. D., Bosworth, C., Fujita, S., & Jensen, M. (2007). The athlete stigma in higher education. *College Student Journal, 41*(2), 251.

- Singer, J. N. (2005). Understanding racism through the eyes of african american male student-athletes. *Race Ethnicity and Education*, 8(4), 365-386. doi:10.1080/13613320500323963
- Singer, J. N. (2009). African american football athletes' perspectives on institutional integrity in college sport. *Research Quarterly for Exercise and Sport*, 80(1), 102-16.
- Smith, M. P., & Clark, Langston D, Harrison, Louis. (2014). The historical hypocrisy of the black student-athlete. *Race, Gender, & Class*, 21(1/2), 220-235.
- Smith, R. (1986) "Toward A Cognitive Affective Model Of Athletic Burnout." *Journal of Sport Psychology*: 36-50.
- Stahura, K. A., Brown, C., & Choi, D. (2016). Race issues within intercollegiate athletics: African-american versus white athlete's perceptions of athletics and academic and community social climate. *Journal of Contemporary Athletics ISSN*, 1554, 9933.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of personality and social psychology*, 69(5), 797.
- Steinfeldt, J. A., Reed, C., & Clint Steinfeldt, M. (2010). Racial and athletic identity of african american football players at historically black colleges and universities and predominantly white institutions. *Journal of Black Psychology*, 36(1), 3-24. doi:10.1177/0095798409353894
- Stevens, R. E., Loudon, D. L., Yow, D. A., Bowden, W. W., & Humphrey, J. H. (2013). *Stress in college athletics : Causes, consequences, coping*. Hoboken: Routledge. doi:10.4324/9781315043593
- Sudano, L. E., Collins, G., & Miles, C. M. (2017). Reducing barriers to mental health care for student-athletes: An integrated care model. *Families, Systems, & Health*, 35(1), 77.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Experimental designs using ANOVA*. Thomson/Brooks/Cole.

Utsey, S. O., Belvet, B., Hubbard, R. R., Fischer, N. L., Opare-Henaku, A., & Gladney, L. L. (2013).

Development and validation of the prolonged activation and anticipatory race-related stress scale. *Journal of Black Psychology, 39*(6), 532-559. doi:10.1177/0095798412461808

Wei, M., Ku, T. Y., & Liao, K. Y. H. (2011). Minority stress and college persistence attitudes among

African American, Asian American, and Latino students: perception of university environment as a mediator. *Cultural Diversity and Ethnic Minority Psychology, 17*(2), 195.

Wilson, G., & Pritchard, M. (2005). Comparing sources of stress in college student athletes and non-

athletes. *Athletic Insight, 7*(1) Retrieved from <http://unc.summon.serialssolutions.com>