



**“Race..., Sport Type, and Divisional Classification Matters:”
An Examination of Black Female Athletes’ Experiences at
National Collegiate Athletic Association (NCAA) Institutions**

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The purpose of the current study was to examine the nature and quality of Black female athletes’ college experiences across race, sport, and National Collegiate Athletic Association (NCAA) divisional classifications. Female athletes constitute nearly half of all NCAA participants and yet their experiences are often only highlighted in comparison to male peers (NCAA, 2018) and more specifically the racialized experiences of female athletes are conspicuously under researched. Given that female athletes graduate at higher rates than their male counterparts, make decisions about their academic pursuits differently, and are generally more engaged in university life (Kulics, Kornspan, & Kretovics, 2015), it is critical for leaders to better understand how they experience college. In this study, we analyzed data from an NCAA Growth, Opportunities, Aspirations, and Learning of Students (GOALS) survey to explore the college experiences of Black female athletes compared to their female athlete counterparts. Comeaux and Harrison’s (2011) conceptual model for student-athlete academic success was incorporated to explore the relationships between Black female athletes’ interactions with institutional systems, levels of integration (academic and social), and educational outcomes. Key findings provided insight into the unique experiences of Black female athletes as a result of their race, gender, sport, and divisional classification. Implications from this study highlight the need to engage culturally responsive strategies for academic and social integration of Black female athletes across all divisional classifications.

Keywords: gender, race, intercollegiate athletes, National Collegiate Athletic Association (NCAA), conceptual model of student-athlete academic success

It has been nearly half a century since the passage of the milestone *Title IX of the Education Amendment of 1972*, whereby the federal government declared its intention to enforce gender equity across publicly funded educational institutions. At its core, *Title IX* was implemented to promote “shared democratic ideals about equality, fairness and justice...” (Staurowsky, 2003, p. 70). Even though National Collegiate Athletic Association (NCAA) member institutions have improved after their initial resistance to *Title IX* during the early 1970s (i.e., seeking exemption from the jurisdictional purview of the law), the nature and quality of female athletes’ experiences in general (Staurowsky, 2003; Rankin et al., 2016) and Black female athletes’ experiences more specifically (Bruening, 2005; Carter-Francique, 2013, 2018; Carter-Francique, Lawrence & Eyanson, 2011; Withycombe, 2011) remains a prevailing issue facing the NCAA and its member institutions. For example, alarming numbers of female athletes have been subjected to sexual assault, discrimination, abuse, and various conditions that contribute to maladaptive behaviors and outcomes (e.g., eating disorders, depression, burnout, etc.) (Hoffman, Rankin, & Loya, 2016; Rankin et al., 2011; Rankin et al., 2016). In particular, Black female athletes face compounded challenges as a result of racism and sexism. Research has indicated this sub-group of athletes faces a myriad of discriminatory challenges such as being subjected to the gendered racist belief that they are hypersexual and/or more masculine compared to their same gender different race peers, intellectual inferior, temperamentally unstable, culturally deficient (as compared to Eurocentric standards of acceptability particularly with regards to beauty, femininity, and behavior), unfit to fulfill leadership positions in sport and society in general, and innately gifted in basketball and track and field and less fit to excel athletically beyond these sports (Carter-Francique, 2013, 2018; Carter-Francique et al., 2011; Cooper, Cooper, & Baker, 2016; Ferguson, 2015; Foster, 2003).

Extant literature focused on the intersection of race and gender in intercollegiate athletics has relied on qualitative case study investigations with small sample sizes and no comparison groups (Bernhard, 2014; Bruening, Armstrong, & Pastore, 2005; Carter & Hart, 2010; Carter-Francique, 2013; Carter-Francique et al., 2011; Cooper, Cooper, & Baker, 2016; Cooper & Jackson, 2019; Ferguson, 2015; Withycombe, 2011). Quantitatively, limited studies account for the role of race in female athletes’ experiences, and within these studies researchers clustered multiple racial groups together with the label “of Color” (Hoffman et al., 2016; Rankin et al., 2011; Rankin et al., 2016). While there are some benefits to this approach, such a design conflates racial identity groups in ways that can be problematic and mask unique experiences (Cooper, 2016). Additionally, a majority of the research on Black female athletes has been qualitative (Bernhard, 2014; Bruening et al., 2005; Bruening & Borland, 2007; Carter & Hart, 2010; Carter-Francique, 2013, 2018; Carter-Francique et al., 2011; Cooper et al., 2016; Cooper & Jackson, 2019; Ferguson, 2015; Foster, 2003; Withycombe, 2011) and each of these studies has focused on their experiences at Division I institutions. Notwithstanding, key findings from these studies cited the significant barriers facing these athletes based on the intersection of their race, gender, socio-cultural backgrounds, socioeconomic status, and specific sport participation (e.g., limited access to same race and gender role models, lack of culturally responsive supports, etc.).

Moreover, the historical racial distribution of female athletes has been skewed, as most African American¹ females participate in basketball and track and field (NCAA, 2019a). Current research therefore lacks samples from other sports (Sellers et al., 1997). A major limitation associated with previous research on female athletes is the lack of emphasis on disaggregating data based on both race *and* gender. We argue female athletes' experiences should be explored in greater detail particularly those from groups who have been historically marginalized (e.g., Black, Hispanic/Latina/o, Native Americans, Asian and Asian American, and Multi-Racial). For example, given the history of racism against Blacks and sexism against women in the U.S. more broadly, and intercollegiate athletics more specifically, the experiences of Black female athletes are unique and an area worthy of exploration (Bernhard, 2014; Bruening, 2005; Carter & Hart, 2010; Carter-Francique et al., 2011; Cooper, Cooper, & Baker, 2016; Cooper & Jackson, 2019). In addition, it is also important to note that Divisions I, II, and III have notable differences and thus worthy of examining athletes' experiences across classificational status (NCAA, 2018a). These differences include the presence of athletic scholarships, level of commercialization, average student enrollment, average faculty-to-student ratio, geographical region of athletic conferences and competitions, size of athletic budgets, and balance between academics and athletics across the entire athletic department (Cooper, Dougherty, & Davis, 2017; Umbach et al., 2006; Watt, 2001). Hence, the current study sought to centralize the experiences of Black female athletes at NCAA institutions and identify any potential differences based on race, divisional classification, and sport type.

Literature Review

Female Athletes' Experiences at NCAA Institutions

Previous research on female athletes has contrasted their experiences with male athletes (Hoffman, Rankin, & Loya, 2016; Potuto & O'Hanlon, 2006; Rankin et al., 2011; Rankin et al., 2016), athletes of Color and/or sexual minorities (i.e., lesbian, gay, bisexual, or questioning (LGBQ²)) (Hoffman, Rankin, & Loya, 2016; Rankin et al., 2011; Rankin et al., 2016), non-athletes (Umbach et al., 2006), athletes within a single NCAA divisional classification (Potuto & O'Hanlon, 2006), non-athlete peers between and across NCAA divisional classifications and NAIA (Hoffman, Rankin, & Loya, 2016; Rankin et al., 2011; Rankin et al., 2016; Umbach et al., 2006). Collectively, findings from these studies provided insight into female athletes' cognitive competencies and development (Hoffman, Rankin, & Loya, 2016; Rankin et al. 2011; Rankin et al., 2016), overall experiences (Potuto & O'Hanlon, 2006), perceptions of campus climates (Hoffman, Rankin, & Loya, 2016; Rankin et al., 2011; Rankin et al., 2016), and engagement in effective educational practices in college (Umbach et al., 2006).

The relationship between female athletes' academic success and engagement with, and positive perceptions of, their respective campus climates is a common theme in the literature. For example, Umbach et al. (2006) found female athletes were more likely to interact with faculty, participate in active and collaborative learning activities, report greater gains in

¹ The terms "Black" and "African American" will be used interchangeably based on the cited source. Both terms refer to individuals who are socially labeled and self-identify as either "Black" and/or "African American" as it pertains to their racial classification.

² The term "LGBQ" is used in the Rankin et al. (2011) study.

personal/social development and personal competence, and being satisfied with their overall college experiences compared to their female non-athlete peers. When contrasting divisional classifications, Division III women were more likely to engage in active and collaborative learning activities, report receiving more support, and express greater satisfaction with their overall college experiences compared to their female student non-athlete peers at Division I and II institutions (Umbach et al., 2006). In another study focused on Division I-A (now known as Football Bowl Subdivision [FBS] level) institutions, Potuto and O'Hanlon (2006) found female athletes expressed higher levels of interest and engagement in curricular and co-curricular activities (e.g., participate in service projects, member of a campus organization, etc.) and concomitantly lower levels of interest and engagement with athletics compared to male athletes. Relatedly, research has indicated that perceptions of climate, interactions with faculty, perceptions of respect, and personal comfort with teammate diversity had the largest influence on female athletes' academic success (Hoffman, Rankin, & Loya, 2016; Rankin et al., 2011; Rankin et al., 2016).

Despite these findings, previous research has also indicated perceptions of campus climate among female athletes is contingent upon race, sexual identity, and type of sport involvement. In other words, all female athletes do not experience college in the same manner despite consistent trends indicating that as a group they outperform their male athlete peers academically and typically are more engaged socially (Hoffman, et al., 2016; Rankin et al., 2011; Rankin et al., 2016). In fact, in Rankin et al.'s (2011) study, female athletes and athletes of Color were among the sub-groups who reported experiencing harassment³ more than their athlete counterparts and were more likely to experience these types of treatment from coaches or other athletes in practice and competition settings. Along the same lines, Hoffman et al., (2016) found female athletes of Color were more likely to possess negative perceptions of campus climate and report lower levels of academic success. Collectively, these findings highlight the importance of disaggregating data when examining female athletes' experiences.

Raced and Gendered Experiences of Female Athletes at NCAA Institutions

The contested campus climate conditions facing all Black athletes has significantly impeded their engagement in educationally purposeful activities and adversely impacted the nature and quality of their college experiences (Bernhard, 2014; Comeaux & Harrison, 2007; Carter-Francique, 2013, 2018; Cooper, Cooper, & Baker, 2016; Cooper & Jackson, 2019; Ferguson, 2015; Simons et al., 2007). In study of faculty perceptions of college athletes at a Division I institution, Comeaux and Harrison (2007) found that faculty, a majority of whom were White, held prejudicial perceptions of the academic accomplishments of Black athletes compared to White athletes. In another study, Simons et al. (2007) found that nearly one-third of athletes (33%) felt faculty perceived them negatively and over half (62.1%) cited incidences where faculty explicitly made negative statements about athletes and were unaccommodating of athletic related schedule conflicts (61.5%). Hurtado et al. (1998) cited how perceptions of discrimination, one of the four dimensions of campus racial climate, is correlated with lower academic performance outcomes for students who are racially underrepresented at historically White

³ In Rankin et al.'s (2011) study harassment was measured by reported encounters with a coach showing favoritism to teammates, ignoring or excluding the athlete, or targeting the athlete for derogatory remarks.

institutions (HWIs⁴). Given the fact that faculty-interactions have been identified as one of the strongest predictors of student achievement in college (Pascarella & Terenzini, 2005), these findings are particularly troubling and illustrate how and why the classroom can serve as a challenging environment for athletes, particularly those who are racially underrepresented and marginalized.

Beyond faculty, racist stereotypes have been found among peers at HWIs in both academic and social spaces. For example, Cooper, Cooper, and Baker (2016) found that Black female athletes who excelled academically were still subjected to negative intellectual stereotypes and differential treatment from their classmates based on their race and athletic status. Black female athletes in Bernhard's (2014) study described how they felt isolated and unfulfilled due to the racial composition of the student body, faculty, and staff at a Division I HWI in concert with a lack of culturally relevant supports. Additionally, problematic recruitment and enrollment trends continue to result in a glaring overrepresentation of Blacks on athletic teams and concurrent underrepresentation in the general study body (Harper, 2016; NCAA, 2019a; NCES, 2017). For example, at the University of Texas at Austin, one of the largest public universities in the U.S., Black women accounted for 4.2% of the general student enrollment in 2017-2018 (NCES, 2017) while constituting 84.6% of the women's basketball team (UT Athletics, 2018). Hurtado et al. (1998) explicated how these trends reflect an extensive legacy of exclusion at U.S. postsecondary institutions resulting in limited interracial social interactions, increased the likelihood of prejudice and bias, and feelings of tokenism and related mental health stress from social stigmatization for those who are racially underrepresented and marginalized.

Despite popular assertions that athletic participation shields Black athletes from discrimination, chilly campus climates are ubiquitous at HWIs and particularly for women (Hurtado et al., 1998). The culmination of unfavorable campus climate conditions at HWIs for Black female athletes has resulted in various episodes of depression, isolation, and feelings of being silenced (Bernhard, 2014; Bruening et al., 2005; Carter-Francique, 2013, 2014, 2018; Carter-Francique et al., 2011; Cooper et al., 2016; Cooper & Jackson, 2019; Ferguson, 2015; Foster, 2003; Withycombe, 2011) as well as lower academic performance in some instances (Hoffman, Rankin, & Loya, 2016). These findings echo broader trends identified among college students who are racial underrepresented at HWIs (Hurtado et al., 1998). These disconcerting trends in the literature reflect the challenges facing Black female athletes whose intersecting identities and experiences are often rendered invisible (Bruening, 2005; Carter-Francique, 2013, 2014, 2018; Carter-Francique et al., 2011; Cooper & Jackson, 2019; Ferguson, 2015). Hence, the current study explores Black female athletes' experiences and outcomes in college across race, divisional classification, and sport type.

A Conceptual Model of Student-Athlete Academic Success

In order to better understand the nature, quality, and any potential differences among female athletes' experiences in college, we have employed Comeaux and Harrison's (2011)

⁴ The terms "historically White institution (HWI)" refers to postsecondary institutions that historically excluded the enrollment of non-White students when they were initially established and continue to enroll a majority of White students. The authors posit the term HWI as opposed to predominantly White institution (PWI) is more reflective of the relationship between the origins of these institutions and their current enrollment trends, campus climates, and curricula.

conceptual model for student-athlete academic success⁵. Similar to previous college student development models (Tinto, 1975, 1987), Comeaux and Harrison's (2011) model includes pre-college enrollment factors, college academic and social integration, and a specified outcome (e.g., retention or attrition, academic performance, graduation, etc.). However, the model also incorporates specific features related to the range of distinct challenges athletes encounter⁶ such as sport commitments. Athletes are required to spend on average 20 or more hours per week on athletic related tasks, compete at a high level athletically representing the university, and adhere to NCAA bylaws (Watt, 2001). Academically, athletes need to maintain specific grades to be eligible to participate in their respective sports. They also must balance conflicting academic and athletic schedules, which results influences their major selection and ability to engage in educationally purposefully activities on campus and has been associated with lower levels of career maturity, psychosocial development, and cognitive development (Gayles, 2009).

Athletes also often must prioritize their athletic identities at the expense of their holistic identities, cope with the physical and mental stress associated with competitive athletics and manage a higher status profile (compared to their non-athlete peers) (Cooper, Davis, & Dougherty, 2017; Gayles, 2009; Watt, 2001). Consequently, interactions with staff who emphasize the athletic identities of the students, and the resultant intercollegiate athletic sub-cultures, have been characterized by numerous academic scandals, unethical and illegal behavior (i.e., sexual assault from athletic staff and athletes), pervasive racism and sexism via policies and practices, and overemphasis on winning at all costs (Cooper, Nwadike, & Macaulay, 2017).

Athletic participation can lead to varied levels of involvement in campus cultures based on sport, gender, and divisional classification. For example, Schroeder (2000) qualitatively examined Division III basketball athletes' experiences and found their academic engagement, extracurricular involvement, and faculty relationships positively contributed to their educational outcomes. Gaston Gayles and Hu (2009) found that Division I athletes were more likely to report spending time with teammates and less likely to be involved in student organizations aside from athletics. Notably, female athletes were more likely than their male counterparts to interact with students other than their teammates (Gayles & Hu, 2009). Huml, Hancock, and Bergman (2014) incorporated Astin's (1984) student involvement theory and found Division I participants were less satisfied with the academic and career support they received from their athletic academic centers compared to general campus supports (i.e., faculty advisor).

In an effort to account for factors specific to college athletes, as highlighted, Comeaux and Harrison's (2011) model is comprised of the following sequential phases: a) pre-college characteristics (family background, educational experiences, and individual attributes), b) initial commitments (goal, sport, and institutional), c) institutional systems (academic and social), d) levels of integration (academic and social), e) commitments (goal, sport, and institutional), and f) academic success (see Figure 1 in Comeaux & Harrison, 2011, p. 238). Within the current study, the authors sought to explore female athletes' academic and social experiences (interaction with

⁵ Comeaux and Harrison's (2011) original model focused on NCAA Division I level, but given the transferability of the model's components to Division II and Division III student-athletes (e.g., sport commitments, interactions with athletic staff, and athletic participation) the authors' deem the model appropriate or adaptable for the current study.

⁶ The original conceptual model of student-athlete academic success includes involvement with the Scholar-Baller (SB) paradigm, but the current study did not include this component due to the available data set and lack of SB paradigm verification within each institution in the sample size.

institutional systems and level of integration) in college and identify any potential differences based on their race, sport, and divisional classification while controlling for background characteristics. The authors also sought to examine the nature of the relationship between female athletes' academic and social experiences and their academic performance. The use of this model builds upon previous inter-divisional research (Hoffman, Rankin, & Loya, 2016; Rankin et al., 2011; Rankin et al., 2016; Umbach et al., 2006) and adds a nuanced lens by disaggregating racial groups and contrasting sub-groups by sport type and divisional classification. Despite these differences, the core elements of Comeaux and Harrison's (2011) model of academic and social integration are applicable across divisional classifications since numerous studies have incorporated similar student engagement models in multi-divisional analyses (Hoffman et al., 2016; Rankin et al., 2011; Rankin et al., 2016; Umbach et al., 2006). Hence, the purpose of this study was to examine the nature and quality of NCAA female athletes' college experiences across race, sport, and divisional classifications. Using extracted items from the NCAA 2006 Growth, Opportunities, Aspirations, and Learning of Students in college (GOALS) survey (described in greater detail in the methods section), the current study incorporated Comeaux and Harrison's (2011) model as an analytical framework to better understand exploratory inquiries as opposed to testing the model with pre-conceived hypotheses. The following research questions guided the current study:

- RQ 1: Are there differences between female athletes' social attitudes and behaviors across race, sport, and divisional classification?
- RQ 2: Are there differences between female athletes' academic attitudes and behaviors across race, sport, and divisional classification?
- RQ 3: Are there differences in the social and academic attitudes and behaviors of Black female athletes' across sport and divisional classification?
- RQ 4: Are there differences in the social and academic attitudes and behaviors and academic performance of Black female athletes' across sport and divisional classification?

Methods

Data and Sample

The data for this study were extracted from the 2006 NCAA GOALS survey. The survey is a nationally representative sample of athletes across Divisions I, II, and III, and all NCAA recognized sports. The GOALS study is conducted and released roughly every four years (2006, 2010, and 2015). The 2006 GOALS was the inaugural dataset for this NCAA sanctioned study and concurrently the first time this data was accessible to researchers (NCAA, 2019b). Previous studies on NCAA athletes relied on third-party instruments and analyses such as the seminal American Institutes for Research (AIR) studies in the late 1980s. Given the significance of this inaugural dataset and the NCAA's continued use of this instrument to date, we posit that analyzing differences across and within different sub-groups of female athletes serves as a vital contribution to the literature with regards to the modern day 21st century experiences of NCAA

athletes. In addition, we assert the findings from the current study using the inaugural GOALS dataset can serve as precedent or foundation data to compare with subsequent GOALS datasets including the 2010 data, 2015 data, and future survey responses.

Regarding the current study, the initial analyses included all 19,786 athletes in the sample, 7,911 of whom identify as female. Though most analyses include all female athletes, analyses for Black female athletes is restricted to the 635 participants who identify as both Black and female. Sample weights were used in all analyses other than summary statistics. Data in the sample highlight salient features of the distribution of the female athlete population, which we use to frame our specific approach to analysis. This can be seen in Table 1. For instance, Black females are represented in the greatest proportion in Division I sports, and especially in what we define as the high-profile sports of basketball and track and field. Of the 635 Black females in our sample, 386 (60.8%) of them were in Division I universities and athletic programs, with 298 of those 386 (77.2%) in either basketball or track and field. Along with the preceding theory, we use these facts about the distribution and participation of Black female athletes as the basis for undertaking analysis that contrasts the experiences of Black female athletes across division and type of sport (high/low profile⁷). These descriptive statistics reveal clear differences across divisional classifications including the share of athletes who identify as Black across the athletic divisions as well as several of our core constructs of interest.

Table 1
Summary Statistics

	(1) All Divisions	(2) Division I	(3) Division II	(4) Division III
Black student athletes	0.129	0.159	0.175	0.043
Non-Black student athletes	0.87	0.84	0.824	0.956
Grade Point Average	2.898	2.858	2.863	2.986
Overall College Experience	0.075	0.051	0.066	0.117
College Climate	-0.023	-0.04	-0.016	-0.008
Perception of Major	0.062	0.153	0.026	-0.017
Academic Engagement	-0.007	0.039	-0.055	-0.019
Feelings About Academics	0.093	0.166	0.071	0.023
Expected Academic Experiences	0.014	0.119	-0.006	-0.101
Extracurricular Participation	0.026	0.162	-0.053	-0.067
Attend Social Events	0.143	0.231	0.14	0.035
Race Interactions	0.012	0.017	0.092	-0.076
Academic Perception	0.175	0.334	0.271	-0.121

Notes: The first two rows represent the proportions of student athletes who, respectively, identify as Black, or not. The third row is self-reported grade point average on a four-point scale. The remaining rows represent mean standardized values for full sample of student athletes on measures of interest.

⁷ For the purposes of this study, high profile refers to basketball and track and field and low profile refers to Olympic sports other than basketball and track and field (e.g., softball, tennis, volleyball, swimming, etc.).

Measures

The 2006 GOALS survey included eight sections across 75 items with each section designed to capture a specific aspect of the athlete experience⁸. The focus of the current study examines participants' responses to selected questions in sections pertaining to their academic, social, and athletic experiences. Within these three sections, we pinpointed questions that address the following constructs and enable us to answer the research questions: a) social attitudes, b) social behaviors, c) academic attitudes, and d) academic behaviors. We describe our method for capturing measures of these four constructs below, organized substantively by social and academic dimensions. In most cases, we created the constructs as a composite of multiple sub-questions, and in all cases the constructs mirror those adopted in a previous study by the Authors that focused on the experiences of Black male athletes.

Five constructs, three related to attitudes and two related to behaviors, capture the social dimension of the athlete experience. Each construct is generated by combining athlete responses to questions that were identified for their substantive alignment with the research questions. These constructs were statistically analyzed for internal reliability in Cooper, Dougherty, and Davis (2017) and questions were extracted from the 2006 GOALS survey. For each construct, we calculated an internal reliability metric, alpha, to verify whether the response to the sub-questions within each question appeared to represent a single, unified construct.

Items 5, 6, and 8 from the GOALS College Social Experience section represent social attitudes (all measured on six-point Likert scales), while items 1 and 4 from the same section represent social behaviors (all measured on four-point Likert scales). Question five is an overall measure of college experience (*COLL_EXP*) defined by eight sub-questions that ask respondents to comment on the extent to which their college experience impacted their leadership skills, teamwork, understanding of people from different races or backgrounds, study skills, time management, work ethic, sensitivity to members of the opposite sex, and ability to take responsibility for themselves. In contrast, question six measured school climate (*CLIMATE*) defined by nine sub-questions related to whether their campus is inclusive environments for all students, accepting of different viewpoints and cultures, makes an effort to recruit a diverse student body, creates opportunities to discuss different cultures or viewpoints, lets students feel comfortable expressing their social, political views, or religious views, are respectful of members of the opposite sex, are respectful of individuals from all racial or ethnic groups, and whether instructors fairly discuss opposing viewpoints. Question eight captured, with one question, a measure of how athletic experiences shaped interactions with members of other races in general (*RACE_INT*), with respondents indicating whether their experience had a net positive, negative, or no effect.

We identified the behavior questions analogously with question 1 representing a measure of extracurricular participation (*EXTRA*) defined by nine sub-questions where students indicated whether they participate, have participated or intend to participate in fine arts, religious or spiritual organizations, sororities or fraternities, student government, academic groups, publication or media groups, intramural or club sports, recreation or hobby groups, or culture specific groups. Question four captured the frequency of attending social events (*SOCIAL*) defined by 5 sub-questions addressing concerts, plays, speakers, art exhibits, and sporting events.

⁸ We include the survey text in the appendix to provide access to specific wording of questions analyzed in this study.

Four constructs, two each for attitudes and experiences, captured the athlete's academic perspectives. Questions 7 and 11 from the GOALS College Academic Experience section represented attitudes and measured an athlete's feeling about their choice of major (*MAJOR*) using a single question, and their overall feeling about their academic experience and the efforts they have made in academic endeavors (*AC_FEEL*). Questions 8 and 10 from the same section serve as an appropriate proxy for academic behaviors and represent measures of the types of academic experiences an athlete expects to have in college (*AC_TYPE*) using five sub-questions, as well as the frequency with which an athlete participates in academic activities (*AC_ENGAGE*) using seven sub-questions. Finally, question 1 in section 4 on the Student Athlete Experience section asks surveys how students feel they were perceived as athletes (*AI_PERC*), including a total of eight sub-questions. For all constructs, higher values are associated with more positive feelings or responses; some variables were reverse coded to support this interpretation. All constructs presented above conform to conventionally accepted values of strong reliability, as reported in a previous study by the Authors.

Athlete self-reports on the GOALS survey instrument provided GPA data for this study. Original responses were on a categorical scale representing cumulative GPA ranges, but were recoded as a continuous measure of GPA where the midpoint of the GPA range associated with a particular categorical response was assigned as the numeric GPA. Additional key explanatory variables were indicators for which division an athlete competed in (*DIV2*, *DIV3*, where Division I was the reference category), and whether a student played a sport that is not low-profile (*LP*, equal to 1 if an athlete plays any sport *other* than high-profile sports of basketball or track and field, zero otherwise). Indicators for whether an athlete was a first-generation college student (*FG*, equal to 1 if a student was a first-generation student, zero otherwise) as well as indicators for their year in college are additional covariates that were captured from the survey. All measures of social and academic attitudes and behaviors are standardized to have a mean of zero and a variance of one. Standardizing these measures allows for easier interpretation of the relationships of interest, and abstracts from the otherwise arbitrary Likert scale values that would be otherwise generated.

Analytic Approach

Descriptive statistics, including means and variance for key variables of interest, assist us in addressing all four research questions. To answer research questions one and two, we utilized multiple regression analyses to determine whether there were observable differences between social and academic attitudes and behaviors, respectively by research question, among athletes by division, sport, or racial identification. The model fit to identify these differences was as follows:

$$Y_i = \alpha_0 + \alpha_1 \text{NotBlack}_i + \alpha_2 \text{LowProfile}_i + \alpha_3 \text{Div2}_i + \alpha_4 \text{Div3}_i + \varepsilon_i \quad (1)$$

Where Y_i is a generic outcome, NotBlack_i is an indicator for whether an athlete does not identify as Black, LowProfile_i is an indicator equal to one when an athlete plays a sport other than basketball or track and field (not high-profile), Div2_i and Div3_i are indicators for whether an athlete competes in a division 2 or 3 sport, and ε_i is a heteroskedasticity robust student-level error term. Note that Black athletes in high-profile Division 1 sports are the focal group of

interest and their mean outcome is represented by α_0 . Interaction terms (not shown for model simplicity) assisted us in identifying differences by race, division, and sport type.

We generated estimates to answer research question three by focusing only on Black female student athletes and exploring differences in experiences separately by athletic Division and sport type. We also examined the pairwise linear correlation of academic and experience variable to understand the relationship between these constructs for female student athletes. Similarly, for research question four we analyzed only Black female student athletes using multiple regression, but now using GPA as the focal outcome regressed on attitude and behavior scaled scores, as well as indicators for athletic division, sport, year in college, and whether a student was a first-generation college student. The model specified to answer research question three was:

$$GPA_i = \pi_0 + \beta ATTBEH_i + \pi_1 Div2_i + \pi_2 Div3_i + \pi_3 LowProfile_i + \pi_4 Year_i + \pi_5 FirstGen + \varepsilon_i \quad (2)$$

Where the key parameters of interest constitute the vector β of parameters associated with the eight measures of attitudes and behaviors that we included in our answers to the first two research questions. These parameter estimates represent, respectively, the average difference in GPA associated with a one standard-deviation difference in the specific measure of attitude or behavior of interest, on average, when holding all else constant. This model was specified for all Black female athletes across divisions, as well as separately by division, and by whether an athlete was on a full athletic scholarship. As in the earlier analysis, we also included measures of NCAA athletic division, indicators of whether the athlete participated in a high-profile or low-profile sport, their year in college, and whether the athlete was a first-generation college student. In all regression analyses, sample weights were applied according to guidelines provided by the ICPSR and the GOALS survey team. In our results, we do not discuss the point estimates associated with the control variables, but include them only to distinguish whether our key relationships of interest differ in the presence or absence of these control variables.

Limitations and Delimitations

The use of the 2006 NCAA GOALS survey serves as one limitation in the current study. Although, this instrument is comprehensive, it does not include an exhaustive overview of the college athlete experience. The study was limited in the focus on female athletes across only three dimensions: a) NCAA divisional classifications, b) sport type, and c) race. The lack of in-depth institutional analyses and qualitative inquiry may limit the nature and accuracy of inferences asserted from the findings. For example, data was not disaggregated by conference affiliation, public or private status, institutional size, or racial and cultural classification (e.g., historically Black colleges/universities [HBCUs], HWIs, Hispanic serving institutions [HSIs], and Native American Tribal colleges/universities [NATCUs]). The specific focus on Black female athletes represents a delimitation of the current study. The lack of engagement in longitudinal and ecological systems analyses of female athletes also limited the depth of understandings and inferences across extended time and space. Notwithstanding, the ability to use a large nationally representative sample allowed us to examine relationships of interest while providing a potential foundation for future qualitative, quantitative, and mixed methods studies.

Results

In answer to our first research question, we present in Table 2 our estimates of differences in the average responses of female athletes on measures of social attitudes and behaviors by race and NCAA division using the specification in equation (1). These estimates highlight the potential differences across intersecting aspects of identity focusing on the features of race, NCAA division, and by whether a sport is high-profile. In general, it is salient to report that Black female student athletes in high-profile Division I sports have below average experiences with college climate compared to all female student athletes in the sample (column two, row one), above average race-related interactions on campus (column three, row one), and below average perceptions of their athletic experiences (column four, row one). Since all constructs are standardized to have a mean of zero and variance of one, we can interpret the value of -0.08 for overall college experience for Black female athletes in Division I high-profile sports to mean that these athletes report an overall college experience that is just below (though not statistically significant) the overall mean for all athletes in the sample. In row five of column 1, we interpret the statistically significant value of 0.305 to mean that Black female athletes in Division III high-profile sports report overall college experiences that are 0.3 standard deviations higher than their similar peers in Division I schools in similar sports. In column three, row one, we interpret the statistically significant estimate of 0.17 to represent that Black female athletes in Division I high-profile sports report having race-related interactions that are 0.17 standard deviations above the average for all female athletes in the sample. Only non-Black Division III athletes in low-profile sports reported a higher average level of race relations.

Table 3 presents results analogous to those in Table 2, but focuses instead on academic attitudes and behaviors to answer our second research question. Salient findings include clear differences in the perception of major, which is much lower for Black female athletes in high-profile Division III sports (-0.489 in column one), but much higher among those in lower-profile sports in the same Division (0.550). Also notable is that Black female athletes in lower-profile Division I sports report better expectations for academic experiences relative to their same division, high-profile sport peers. Finally, while Division I athletes in high-profile sports generally report similar academic attitudes and behaviors to the overall sample (no statistically significant differences in columns one through three of row one), these student athletes do report below average levels of academic engagement.

To answer our third research question, we present in Table 4 average responses on measures of social attitudes and behaviors for all Black female athletes disaggregated by division and sport type. Notable differences include lower levels of academic preparation and perception of major at the Division III level compared to Division I. Differences across sport type indicated lower levels of college climate perceptions, academic preparation, expected academic experiences, and academic engagement among high-profile female athletes in high-profile sports. We supplement the descriptive statistics by Division in Table 4 with Pearson's correlations between all social and academic attitude and behavior data for Black female student athletes in Table 5. The rows show the full name of the variable and the numbered columns represent the variable from the corresponding row (e.g. row one column one is the correlation of GPA with itself, and column one, row two is the correlation between GPA and Expected Academic Experiences). We found a moderate negative relationship between reported feelings about academics and an athlete's GPA. A similar, though weaker, negative relationship also exists between academic perception and GPA. Conversely, feelings about academics, extracurricular

participation, and attending social events are both moderately and positively associated with academic engagement and overall college experiences.

Table 2
*Differences in Social Attitudes and Behaviors for Female Student Athletes
by Race and NCAA Athletic Division, and Sport Type*

	(1) Overall Coll. Experiences	(2) College Climate	(3) Race Interactions	(4) Athletic Perception
Black, Div. I, High Profile	-0.080 (0.054)	-0.292*** (0.057)	0.170*** (0.054)	-0.236*** (0.055)
Black, Div. I, Low Profile	0.010 (0.112)	0.080 (0.117)	0.029 (0.111)	0.047 (0.114)
Black, Div. II, High Profile	-0.013 (0.105)	0.082 (0.108)	0.031 (0.103)	-0.014 (0.107)
Black, Div. II, Low Profile	0.012 (0.207)	-0.039 (0.214)	-0.107 (0.206)	-0.041 (0.210)
Black, Div. III, High Profile	0.305** (0.144)	0.132 (0.150)	-0.010 (0.144)	-0.243 (0.149)
Black, Div. III, Low Profile	-0.205 (0.250)	-0.216 (0.261)	-0.417* (0.248)	-0.268 (0.255)
Non-Black, Div. I, High Profile	-0.164** (0.065)	0.354*** (0.067)	0.107* (0.065)	0.001 (0.066)
Non-Black, Div. I, Low Profile	0.110 (0.119)	-0.134 (0.125)	-0.278** (0.119)	0.279** (0.121)
Non-Black, Div. II, High Profile	0.168 (0.119)	-0.110 (0.123)	-0.082 (0.117)	-0.003 (0.121)
Non-Black, Div. II, Low Profile	-0.096 (0.217)	0.107 (0.225)	0.117 (0.216)	-0.201 (0.221)
Non-Black, Div. III, High Profile	-0.141 (0.153)	-0.142 (0.159)	-0.320** (0.153)	-0.212 (0.158)
Non-Black, Div. III, Low Profile	0.069 (0.256)	0.322 (0.268)	0.464* (0.255)	-0.022 (0.262)
N	7746	7718	7918	7712

Notes: Heteroskedasticity robust standard errors are in parentheses (* $p < .10$ ** $p < .05$ *** $p < .01$). The coefficients shown are generated by linear regression and illustrate differences in the dependent variable by race, NCAA Athletic Division, and whether a sport is high profile or not.

Finally, in response to research question 4, we present Table 6 which includes the estimated relationship between measures of Black female athlete reports of social and academic attitudes and behaviors and their reported GPA when controlling for NCAA athletic division as well as their year in school and first-generation college status. Successive sets of predictors are added across models to test whether the relationship between the social and academic experience variables and GPA change as covariates are added. We note that the small samples for Division II and Division III analyses make it less likely that associations that were statistically significant

on aggregate will be evident in these smaller samples. Sample size notwithstanding, the seven sets of estimates show similar relationships between the GPA of Black female athletes and their reported academic and social attitudes and behaviors in college. This similarity manifested in the fact that the point estimates reported in Table 5 associated with the constructs in each row are similar in magnitude and significance across the columns. There are also a few differences worth noting. Being a first-generation college student in Division I athletics and having a full scholarship (two groups that likely overlap) is negatively associated with GPA (-0.126) suggesting there are additional unique academic challenges for first-generation Black female Division I athletes. In addition, the negative relationship between athlete feelings about academics and GPA that we observe overall (-0.236) may be strongest among Division I athletes given that the estimates by division are largest for Division I athletes (-0.288)

Table 3

Differences in Academic Attitudes and Behaviors for Female Student Athletes by Race, NCAA Athletic Division, and Sport Type

	(1) Perception of Major	(2) Feelings About Acad.	(3) Expected Acad. Experiences	(4) Academic Engagement
Black, Div. I, High Profile	0.074 (0.058)	0.074 (0.055)	-0.038 (0.052)	-0.130** (0.053)
Black, Div. I, Low Profile	-0.022 (0.120)	-0.063 (0.112)	0.204* (0.107)	0.132 (0.108)
Black, Div. II, High Profile	-0.031 (0.110)	-0.165 (0.104)	-0.143 (0.099)	-0.123 (0.101)
Black, Div. II, Low Profile	-0.149 (0.221)	0.113 (0.207)	-0.210 (0.197)	-0.306 (0.201)
Black, Div. III, High Profile	-0.489*** (0.154)	0.108 (0.145)	-0.107 (0.138)	0.003 (0.141)
Black, Div. III, Low Profile	0.550** (0.265)	-0.154 (0.251)	-0.238 (0.237)	-0.096 (0.244)
Non-Black, Div. I, High Profile	-0.116* (0.070)	-0.266*** (0.065)	0.024 (0.062)	0.064 (0.063)
Non-Black, Div. I, Low Profile	-0.010 (0.128)	0.223* (0.119)	-0.027 (0.114)	0.043 (0.115)
Non-Black, Div. II, High Profile	-0.027 (0.126)	0.140 (0.119)	0.252** (0.113)	0.183 (0.115)
Non-Black, Div. II, Low Profile	0.210 (0.232)	-0.196 (0.218)	0.005 (0.207)	0.125 (0.211)
Non-Black, Div. III, High Profile	0.425*** (0.163)	-0.130 (0.154)	-0.026 (0.146)	0.151 (0.150)
Non-Black, Div. III, Low Profile	-0.599** (0.272)	-0.042 (0.258)	-0.071 (0.244)	-0.239 (0.250)
N	7131	7784	7766	7790

Notes: Heteroskedasticity robust standard errors are in parentheses (* p<.10 ** p<.05 *** p<.01). The coefficients shown are generated by linear regression and illustrate differences in the dependent variable by race, NCAA Athletic Division, and whether a sport is high profile or not.

Table 4
Differences in Social Attitudes and Behaviors for Black Female Student Athletes by NCAA Athletic Division, and Sport Type

	(1) College Experiences	(2) Coll. Climate	(3) Exp. w/ Other Races	(4) Acad. Prep.	(5) Percept. of Major	(6) Feeling Abt. Acad.	(7) Expected Acad. Experiences	(8) Acad. Engagement
Division I	-0.103** (0.052)	-0.250*** (0.057)	0.199*** (0.050)	-0.254*** (0.053)	0.090 (0.056)	0.046 (0.053)	-0.023 (0.053)	-0.129** (0.054)
Division II	-0.000 (0.098)	0.031 (0.106)	0.033 (0.095)	-0.018 (0.099)	-0.097 (0.105)	-0.163 (0.100)	-0.179* (0.099)	-0.209** (0.101)
Division III	0.236* (0.129)	0.018 (0.140)	-0.125 (0.125)	-0.345*** (0.131)	-0.373*** (0.138)	0.045 (0.132)	-0.140 (0.131)	-0.032 (0.134)
N	542	542	542	542	542	542	542	542
High-Profile	-0.080* (0.048)	-0.247*** (0.052)	0.224*** (0.046)	-0.300*** (0.049)	0.027 (0.052)	0.007 (0.049)	-0.124** (0.049)	-0.210*** (0.050)
Low-Profile	0.024 (0.095)	0.025 (0.102)	-0.122 (0.091)	-0.007 (0.096)	-0.025 (0.102)	0.013 (0.097)	0.154 (0.096)	0.093 (0.098)
N	542	542	542	542	542	542	542	542

Notes: Heteroskedasticity robust standard errors are in parentheses (* p<.10 ** p<.05 *** p<.01). The coefficients shown are generated by linear regression and illustrate differences in the dependent variable separately by race, NCAA Athletic Division, and whether a sport is high profile or not.

Table 5
Correlations Among Experience Variables for Black Female Student Athletes

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
GPA	1									
Expected Academic Experiences	-0.0376	1								
Academic Engagement	-0.0425	0.3259	1							
Feelings About Academics	-0.4238	0.2212	0.2276	1						
Extracurricular Participation	-0.1035	0.3852	0.3509	0.1788	1					
Attend Social Events	-0.0115	0.2443	0.2352	0.1725	0.4278	1				
Overall College Experiences	-0.1789	0.1713	0.2684	0.5105	0.1549	0.1965	1			
College Climate	-0.0437	-0.1804	-0.1171	-0.2762	-0.0969	-0.1015	-0.31	1		
Race Interactions	0.1024	-0.0441	-0.0201	-0.1105	0.0342	0.0236	-0.1854	0.2015	1	
Academic Perception	-0.1799	0.1301	0.0783	0.2656	0.1196	0.131	0.1248	-0.0663	0.0935	1

Notes: Unconditional Pearson's correlation coefficients reported for all dependent and independent variables of interest.

Table 6
Association Between GPA, Attitudes, and Behaviors for Black Female Student Athletes

	(1) No Controls	(2) Controls	(3) Div. I	(4) Div. II	(5) Div. III	(6) Full Scholarship	(7) Not Full Scholarship
Overall College	-0.003 (0.028)	-0.002 (0.029)	0.040 (0.036)	-0.014 (0.061)	-0.143 (0.088)	0.060 (0.045)	-0.037 (0.038)
College Climate	-0.075*** (0.024)	- (0.024)	-0.052* (0.030)	-0.104* (0.053)	-0.125 (0.083)	-0.074* (0.039)	-0.082*** (0.031)
Race Interactions	0.061** (0.026)	0.053** (0.026)	0.062* (0.032)	0.035 (0.061)	0.074 (0.072)	0.013 (0.043)	0.057* (0.033)
Athletic Perception	-0.079*** (0.024)	- (0.025)	- (0.030)	- (0.056)	-0.026 (0.072)	-0.012 (0.041)	-0.121*** (0.032)
Perception of Major	-0.029 (0.024)	-0.011 (0.025)	0.011 (0.030)	-0.049 (0.053)	-0.038 (0.114)	0.041 (0.037)	-0.053 (0.034)
Feelings About	-0.229*** (0.029)	- (0.029)	- (0.035)	- (0.064)	-0.156 (0.113)	-0.289*** (0.047)	-0.200*** (0.038)
Expected Academic	0.015 (0.025)	0.011 (0.025)	0.011 (0.031)	-0.001 (0.052)	0.041 (0.084)	0.006 (0.040)	0.005 (0.032)
Academic Engagement	0.033 (0.025)	0.037 (0.025)	0.020 (0.030)	0.066 (0.053)	0.012 (0.101)	-0.036 (0.042)	0.076** (0.031)
Division II	-0.005 (0.055)	-0.004 (0.056)				0.096 (0.095)	-0.072 (0.073)
Division III	-0.169** (0.072)	-0.137* (0.074)				0.000 (.)	-0.189** (0.080)
Low Profile	0.080 (0.054)	0.080 (0.054)	0.191*** (0.067)	-0.105 (0.119)	-0.082 (0.168)	0.156 (0.106)	0.074 (0.066)
Year in College		0.000 (0.003)	-0.000 (0.004)	0.000 (0.006)	0.160 (0.131)	0.002 (0.008)	0.000 (0.003)
First Gen. Student		- (0.052)	-0.123* (0.064)	-0.113 (0.111)	-0.038 (0.172)	- (0.088)	-0.062 (0.066)
Intercept	2.793*** (0.034)	2.828*** (0.037)	2.809*** (0.041)	2.875*** (0.076)	2.540*** (0.213)	2.827*** (0.058)	2.830*** (0.053)
N	452	440	278	107	54	169	270

Notes: Heteroskedasticity robust standard errors are in parentheses (* $p < .10$ ** $p < .05$ *** $p < .01$). The coefficients shown are generated by linear regression and illustrate the relationship between the dependent variable, GPA, and measures of academic, athletic, and social attitudes and behaviors. As specified models also include indicators for race, NCAA Athletic Division, and whether a sport is high profile or not.

Discussion

By centralizing and exploring the experiences of Black female athletes, the current study counters the taken-for-granted notion that intercollegiate athletics is synonymous with Whiteness and masculinity and highlights the perspectives of females as an important stakeholder group (Bruening, 2005; Carter-Francique, 2018). Moreover, we sought to fill an important contemporary gap in quantitative research on Black female athletes (Sellers & Damas, 1997) and, in doing so, we highlighted their distinct college experiences. Another beneficial aspect of this study was the disaggregation of female athletes' experiences across sport type and NCAA divisional classifications (Hoffman et al., 2016; Rankin et al., 2011; Umbach et al., 2006). Key findings revealed the nature and quality of Black female athletes' college experiences varies not only based on race, divisional classification, and sport type, but also on additional factors such as first-generation status, feelings about academics, perceptions of the impact of athletic participation, interactions with different races, and perceptions of college climate.

More specifically, findings indicated Black female athletes in high-profile Division I sports were less likely than their female peers in other sports and divisions to report positive experiences with, and perceptions of, campus climate. These findings buttress previous research on Black students' experiences at a HWIs (Hurtado et al., 1998), and more specifically Black female athletes' experiences at Division I HWIs (Bernhard, 2014; Carter & Hart, 2010; Carter-Francique, 2013, 2014, 2018; Carter-Francique et al., 2011; Cooper, Cooper, & Baker, 2016; Ferguson, 2015; Withycombe, 2011). Hurtado et al. (1998) described how the lack of structural diversity at HWIs results in chilly campus climates where groups that are racially underrepresented are less likely to experience a sense of belonging and more likely to feel isolated. Previous research has also documented Black female Division I athletes' encounters with negative stereotypes, discriminatory treatment, and a lack of same race and gender role models within and beyond the athletic department contribute to their adverse psychosocial outcomes at these institutions (Bruening, 2005; Bruening et al., 2005; Carter-Francique, 2013, 2014, 2018; Carter-Francique et al., 2011; Ferguson, 2015; Foster, 2003). Interestingly, additional findings also revealed Black female athletes in Division I high-profile sports reported above average race-relations compared to the average of female athletes overall. We interpret this finding as a testament to Black female athletes' acculturation strategies at HWIs (i.e., code switching in athletic and academic spaces) in order to alleviate stressors related to interracial interactions whereas White female athletes are less likely to interact with different race peers these institutions particularly outside of athletics and thus less comfortable with these interactions (Cooper et al., 2016). Related to Comeaux and Harrison's (2011) model, these findings illuminate how Division I Black female athletes in high-profile sports are less likely to be integrated into the social system, which can adversely impact their institutional goal commitments. As noted earlier, we posit the distinct experiences of Black female athletes, particularly those in high-profile sports, is a byproduct of the following conditions: a) disparate enrollment rates between Black students and Black athletes (Harper, 2016; NCAA, 2019a; NCES, 2017), b) a lack of culturally responsive supports within, and beyond, athletics (Carter, 2013, 2014, 2018), and c) pervasive anti-Black gendered racism (Carter-Francique, 2013; Ferguson, 2015; Foster, 2003). Said conditions contribute to Division I Black female athletes in high-profile sports being more susceptible stigmatization and being misunderstood (Carter-Francique, 2013, 2018; Carter-Francique et al., 2011; Ferguson, 2015).

Moreover, negative campus climate perceptions and experiences also correlated with lower academic success for Black female athletes in high profile sports (Hoffman et al., 2016). These findings support Comeaux and Harrison's (2011) model whereby academic success outcomes are largely contingent upon the extent to which athletes experience integration into institutional social and academic systems. The intense stress associated with competing in a Division I sport, along with a lack of culturally relevant supports and a sense of belonging outside of athletic spaces, can create stressors that adversely impact Black female high-profile athletes' college experiences (Carter-Francique, 2013). Since Black female athletes are overrepresented in the high-profile sports of basketball and track and field, those involved in these sports are more vulnerable to stereotype threat (Steele & Aronson, 1995) in athletic and academic spaces (Carter-Francique, 2013; Ferguson, 2015). For example, at the Division I level, many Black athletes in high-profile sports are often recruited primarily for athletic purposes with less concern for their cultural acclimation at HWIs (Carter-Francique, 2018; Cooper, Nwadike, & Macaulay, 2017; Ferguson, 2015). Consequently, these athletes tend to have less frequent interracial interactions, experience increased social tension between racial groups, and elevated psychological stress as individuals who are racially underrepresented (Hurtado et al., 1998). Informing Comeaux and Harrison's (2011) model, this study accounts for the impact of race, sport type, and divisional classification as it relates to athletes' academic and social integration.

In addition, Black female athletes in Division I low-profile sports reported possessing more positive expectations for their academic experiences. Applying Comeaux and Harrison's (2011) model, a possible explanation for this difference could be sport commitment may vary based on the high-profile or low-profile status of the sport and team, often associated with increased likelihood of scholarship-earning status (NCAA, 2018b) and the resultant increased sense of responsibility for athletic performance (Cooper, Davis, & Dougherty, 2017; Gayles & Hu, 2009). In other words, the structure and nature of high-profile sports may contribute to negative educational and holistic developmental outcomes for female athletes in general, and have an even more disparate impact on Black female athletes who racially underrepresented in the general study body (Carter-Francique, 2018). Conversely, since Black females are overrepresented in high-profile sports, they may experience a heightened sense of belonging and support in athletic spaces compared to their peers in low-profile sports. Low-profile sport athletes tend to compete with fewer teammates who share similar racial and ethnic backgrounds, and more likely to integrate with their peers who are non-athletes (Bernhard, 2014; Carter-Francique, 2013; Cooper et al., 2016; Cooper & Jackson, 2019). Therefore, even if initial commitments to institutional engagement from the athletes are present upon enrollment, if the social and academic systems are not culturally inclusive and/or if the structure of athletics is not conducive to campus integration more broadly, negative developmental outcomes may occur for sub-groups such as Black female athletes in high-profile sports (Carter-Francique, 2018; Comeaux & Harrison, 2011).

Additional findings revealed a negative correlation between Black female athletes' feelings about academics and their GPA particularly at the Division I level. Similar to previous findings with Black female athletes at a Division I HWIs, these findings suggest Black female athletes often separate their personal interest in, or enjoyment of, their courses and professors from their overarching goal of academic achievement and knowledge acquisition (Cooper et al., 2016). This reality underscores how Black female athletes who excel academically often do so in spite of academic environments that are either unwelcoming, unsupportive, or both, rather than as a result of these milieu (Carter-Francique et al., 2011; Cooper et al., 2016; Ferguson, 2015;

Foster, 2003). Beyond feelings about academics, we also found a negative association between first-generation college status for Division I full athletic scholarship recipients and GPA. Black athletes who are the first in their family to attend college are more likely to be admitted to postsecondary institutions academically underprepared compared to their White athlete counterparts (Cooper, Davis, & Dougherty, 2017; Cooper & Jackson, 2019). This finding buttresses the notion that pre-college characteristics, such as educational experiences and preparation also impact college academic outcomes when effective academic and social support, are not present or salient. The value of Comeaux and Harrison's (2011) model, like other college student development models (Astin, 1984; Pascarella & Terenzini, 2005; Tinto, 1975, 1987), is the recognition of the collective influence of pre-college and college environmental factors on student success outcomes. As such, our study indicates the problematic nature associated with recruiting talented athletes to postsecondary institutions and focusing more on their athletic prowess and performance (e.g., athletic based scholarship, social isolation, significant athletic time commitments, etc.) as opposed to providing culturally relevant, data-driven, and targeted supports for positive holistic outcomes (Carter-Francique, 2013, 2014, 2018; Comeaux & Harrison, 2011).

Regarding inter-divisional classification differences, Black female athletes in high-profile sports at the Division III level were less satisfied with their academic major compared to their same race Division III peers in low-profile sports. Since Division III schools are typically smaller than Division I and II schools, they are more likely to offer fewer academic majors for students to explore (i.e., fewer faculty across and within academic disciplines). Given the lack of research on Black female athletes at the Division III level, this finding offers insight into the notion that divisional classification alone does not determine the nature and quality of female athletes' experiences in college. Nonetheless, the reoccurring finding of Black female high-profile athletes reporting less satisfaction and integration compared to their same race low-profile athlete peers across Divisions II and III suggest the status of the sport and accompanying stereotypes (i.e., Black females are innately gifted at basketball and track and field) can adversely impact campus integration (academic and social) across divisions (Carter-Francique, 2018; Comeaux & Harrison, 2011; Cooper, Davis, & Dougherty, 2017).

Implications for Research, Practice, and Future Research

This study provides several implications for key stakeholders. For student affairs professionals, the results draw attention to the need for concerted institutional data collection and analyses along with the creation and enhancement of targeted supports for female athletes. Acknowledging differences within race and across sport types (high-profile versus low-profile) as well as pre-college characteristics such as first-generation status are notable findings in this study. Thus, creating supports that account for these statuses, identities, and experiences is recommended. The adoption of Comeaux and Harrison's (2011) model of student-athlete academic success is highly recommended. Student affairs personnel could collaborate with athletic departments to identify ways to facilitate the academic and social integration of female athletes, particularly those in high-profile sports. Intentional programming could also address the lack of educationally purposeful involvement among female athletes at the Division II and III levels, as well as the lack of academic engagement among female athletes in high-profile sports across all levels.

In addition, athletics departments should work with student affairs and culturally responsive spaces on campus (e.g., cultural centers, affinity student groups, etc.) to develop support outlets for Black female athletes. Several of these culturally affirming spaces have been documented in the literature and could be consulted for best practices (Carter-Francique, 2013, 2014, 2018). Along the same lines, more efforts can be geared towards connecting Black female athletes with their same race non-athlete peers who are actively involved in campus and community organizations such as sororities and Black advocacy groups (Carter-Francique, 2013, 2014; 2018; Ferguson, 2015). This recommendation is in concert with Comeaux and Harrison's (2011) model, which posited "intentional intervention strategies may translate into more empowered and engaged athletes who traverse the educational terrain seeking opportunities to compete in the classroom and in life" (p. 242).

Next, athletic departments should create action plans that foster more academic engagement between female athletes, their non-athlete peers, faculty, and staff. Incentives can be created whereby female athletes are expected to engage, and recognized for engaging, in effective educational practices (Umbach et al., 2006). Reducing practice time, especially during the off-season, can create additional academic engagement time. Another area of focus for both student affairs professionals and athletic department staff involves offering data-driven supports for athletes across pre-college academic backgrounds (e.g., GPA, racial composition of high school, etc.). For example, we recommend integrating summer bridge programs and student support services with athletic programming for first-generation collegians who are athletes in order to enhance athlete sense of belonging. Using data from studies such as ours could greatly enhance targeted programming efforts to improve educational outcomes for female athletes across sport types and Black female athletes in particular.

Additionally, the NCAA and member institutions could create benchmarks for engagement in educationally purposeful activities aside from athletics for teams to cultivate a more balanced college experience for female athletes. Relatedly, the NCAA and member institutions should consider highlighting best practices at each divisional level and encouraging the adoption and modification of these strategies across institutional contexts, as opposed to primarily citing individual success stories. The NCAA could also create a multi-divisional best practices report to disseminate quarterly and create incentives (e.g., conference presentations, monetary support, etc.) for institutions that utilize research and cross-divisional data to inform their support offerings.

Conclusion and Future Research

Overall, the current study underscores the importance of disaggregating data when examining the experiences of female athletes and creating data-driven support systems for them. Our findings indicate the profile status of the sport, race, first-generation status, and divisional classification influence Black female athletes' experiences in meaningful and distinct ways. As such, findings from the current study highlight the need to engage in examinations of female athletes from underrepresented racial groups across sport type (high profile and low-profile) to better understand how and why their experiences differ in academic and social settings. Relatedly, engaging in quantitative, qualitative, and mixed methods studies that explore differences in experiences based on scholarship status and college legacy (i.e., first generation) is also recommended. Additional quantitative studies could explore different aspects of athletes' experiences including identity salience, nature of involvement in-season versus out-of-season,

etc. Along the same lines, qualitative inquiries could provide more insights into the processes and reflections of athletes related to the how and why they experience college and certain outcomes under specified conditions. The inclusion of both methods (quantitative and qualitative) would enable the researcher to explore phenomena concurrently and/or sequentially using the strengths of each methodological approach (i.e., larger sample size inferences from quantitative approaches and more in-depth individual and small group understandings from qualitative approaches). Additionally, case studies examining institutional cultures across divisional classifications and size could inform researchers and practitioners on best practices for female athletes' holistic development, and specifically Black female athletes. Scholars could also design longitudinal studies examining the pre-college, in-college, and post-college experiences of female athletes to provide a more in-depth understanding of the interplay of factors that facilitate certain outcomes over time and space. In order to better understand the experiences and be able to design effective supports for all female athletes, a commitment to more nuanced approaches to data collection, analyses, and programming is imperative. We hope this study is one step towards this goal.

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