

Article

# Understanding Black Male Student Athletes' Experiences at a Historically Black College/ University: A Mixed Methods Approach

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#### **Abstract**

The purpose of this article is to describe how a mixed methods approach was employed to acquire a better understanding of Black male student athletes' experiences at a historically Black college/university in the southeastern United States. A concurrent triangulation design was incorporated to allow different data sources to be collected and analyzed simultaneously to identify areas of convergence. Quantitative findings served as complementary data to corroborate the emergent qualitative themes. Legitimation strategies were applied in identifying meta-inferences from the analysis of findings, which enabled a more comprehensive understanding of key institutional characteristics that contributed to Black male student athletes' academic achievement and positive college experiences at a historically Black college/university.

#### **Keywords**

mixed methods, legitimation types, concurrent triangulation design, student athlete development

Over past several decades, mixed methods research has emerged as an established form of inquiry in social science and educational research along with traditional positivistic (quantitative) and constructivist (qualitative) approaches (Creswell, 2009; Greene, 2007; Tashakkori & Teddlie, 1998). According to Greene (2007), mixed methods research is a form of social inquiry that "involves a plurality of philosophical paradigms, theoretical assumptions, methodological traditions, data gathering and analysis techniques, and personalized understandings and value commitments" (p. 13). The current study incorporated a mixed methods approach to examine Black male student athletes' experiences at a postsecondary institution to acquire a better understanding of the unique challenges these students face and more importantly to identify effective strategies for improving their academic achievement and overall college experiences. To date,

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the National Collegiate Athletic Association (NCAA), the largest intercollegiate athletics governing body in the United States, and its member institutions have been unable to address the persistent problem of low graduation rates among Black male student athletes (NCAA, 2013a, 2013b). Therefore, mixed methods research on this subgroup of students could not only assist in the identification of key factors related to their positive developmental outcomes (quantitative) but also explore the nature of their experiences in these contexts (qualitative). As a result, the study highlighted in this article addresses this gap.

The purpose of this article is to describe how a researcher (the first author) employed a mixed methods approach to acquire a better understanding of Black male student athletes' experiences at a historically Black college/university (HBCU) in the southeastern United States. More specifically, the authors' aim in this article is not to engage in a methodological discussion but rather to provide an overview of an empirical study that incorporated a mixed methods approach in the examination of Black male student athletes' experiences at an HBCU. First, a brief review of literature on Black male student athletes at U.S. institutions of higher education is provided. Next, the context of the study is given followed by a description of the concurrent triangulation design (Creswell, 2009) applied in this exploratory study. The subsequent section provides an overview of data collection and analysis techniques as well as the purpose for mixing methods. Then, an explanation of how the current study was enhanced by legitimation and inference quality strategies is presented (Onwuegbuzie & Johnson, 2006). The final sections include a presentation of three meta-inferences based on integrated findings, a discussion of the value added by using a mixed methods approach, a description of limitations, and a conclusion with directions for future research.

# Black Male Student Athletes' Experiences at Institutions of Higher Education

A long-standing problem facing the NCAA and its member institutions has been the persistent academic underperformance of Black male student athletes (NCAA, 2013a, 2013b). The preponderance of scholarly research on this subgroup of student athletes has primarily applied positivistic approaches to measure and explain their academic achievement/cognitive outcomes (Sedlacek & Adams-Gaston, 1992; Sellers, 1992) and quality of overall college experiences (Eiche, Sedlacek, & Adams-Gaston, 1997; Gaston-Gayles, 2004; Potuto & O'Hanlon, 2006; Sellers, Kuperminc, & Waddell, 1991). Collectively, these studies revealed Black male student athletes encountered unique challenges related to their lack of academic preparation prior to college and differential treatment on campus based on their various identities (race/ethnicity, gender, sociocultural background, and athletic status).

Despite identifying these alarming issues across different institutional settings, the aforementioned studies did not focus on the significant influence of contextual factors (e.g., institutional cultures) and socialization experiences (e.g., nature of faculty—student interactions, peer relationships, etc.). Therefore, a research approach that examines both the institutional context and subsequent experiences of Black male student athletes could provide vital insight into this phenomenon. In concert with this effort, a mixed methods approach was incorporated in this study. The purpose of this study was to identify key influences associated with the academic achievement and positive college experiences of Black male student athletes at an HBCU in the southeastern United States. Based on a review of the literature on Black male student athletes' experiences at institutions of higher education in the United States, the following research questions were investigated in this study to fulfill the current gap in the literature on Black male student athletes' experiences at HBCUs:

**Research Question 1:** What are the motivations for attending a historically Black college/university for Black male student athletes?

**Research Question 2:** How do Black male student athletes at a historically Black college/university make meaning of their holistic college experiences (overall, academic, athletic, and social)? **Research Question 3:** What are the key influences associated with the academic achievement of Black male student athletes at a historically Black university?

Previous research on Black student athletes' experiences at HBCUs have found that these institutions excelled at creating nurturing educational environments where student athletes experienced positive developmental outcomes (academically, psychosocially, athletically; Charlton, 2011; Cooper & Hawkins, 2012). Therefore, a mixed methods approach allowed the researcher to engage in an in-depth examination of key institutional characteristics that contributed to the academic achievement and positive college experiences of Black male student athletes at an HBCU.

## **Method**

## Institutional Context

Criterion sampling was used to target a specific institution (n = 1) and identify participants (N = 1)= 57) who met the study's criteria (Gratton & Jones, 2010; Patton, 2002). The following institutional criteria were used: (1) recognized as a historically Black institution of higher education in the United States, (2) an active member of the NCAA, (3) demonstrated a history of academic success among student athletes, and (4) sponsored both football and basketball. A historically Black institution was targeted for this study because of their unique educational environments (e.g., mission statements, historical development, etc.) and the fact that there is a dearth of research on student athletes' experiences at these institutions (American Institutes for Research, 1988, 1989; Charlton, 2011; Cooper & Hawkins, 2012; Person & LeNoir, 1997). Only NCAA member institutions were targeted because the NCAA is the largest governing body for intercollegiate athletics in the United States, and a majority of HBCUs that sponsor intercollegiate athletic programs are members of this association. The institution's academic reputation regarding student athletes' academic outcomes was also important to ensure proven strategies for success were identified. More specifically, the HBCU involved in the current study is ranked among the top 30 HBCUs in the United States (U.S. News and World Report, 2013) and has consistently graduated its Black football and men's basketball student athletes at rates higher than its Division II counterparts (between 1999 and 2005; NCAA, 2013a, 2013c).

Furthermore, only institutions that sponsored football and basketball were selected for three reasons: (1) Black males are significantly overrepresented in these two sports, (2) these two sports are the NCAA's largest revenue-generating sports, and (3) these two sports consistently produce the lowest graduation rates among all sports (NCAA, 2013a, 2013b; Sellers et al., 1991). Therefore, identifying key influences that contributed to positive developmental outcomes for Black male football and basketball student athletes at an academically reputable HBCU would provide insight into effective strategies that could be disseminated to all institutions that face this alarming problem. The targeted HBCU is a 4-year public university in the southeastern United States, with an enrollment of about 4,500 and a member of the NCAA's Division II classification.

## **Participants**

Participants were selected based on the following criteria: (1) self-identify as Black, (2) participate as a varsity football and/or basketball student athlete, and (3) enrolled as a full-time student

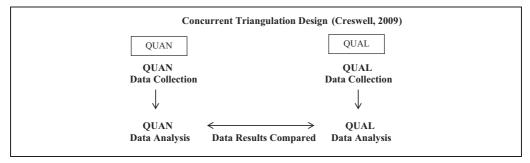


Figure 1. Graphical representation of mixed methods design.

at an HBCU. The participants (N = 57) in this study included 49 football and 8 basketball student athletes. This represented a 50.4% response rate (57 out of 113). Focus group participants (n = 17) included nine football and eight basketball student athletes, and individual interviewees (n = 4) included two football and two basketball student athletes who participated in one of the focus groups.

## Concurrent Triangulation Design

This exploratory study incorporated a concurrent triangulation design, which involved the simultaneous collection of data using different methods. Specifically, this treated quantitative findings as complementary to the emergent qualitative themes (see Figure 1; Creswell, 2009). A benefit of using this type of design is that it allows for a concomitant examination of a phenomenon with multiple methods, which provides a more holistic perspective and richer descriptions regarding the magnitude of observed patterns (Creswell, 2009). For this study, qualitative data (institutional document review, focus groups, and individual interviews) served as the primary data sources. These data offered contextual richness related to the culture of the HBCU as well as deeper insight into the participants' lived experiences in college (e.g., nature of relationships, socialization processes, etc.; Patton, 2002).

Conversely, the Student Athlete College Experiences Questionnaire (SACEQ) was viewed as secondary data for complementary and corroborative purposes. More specifically, the SACEQ provided descriptive data related to the motivations for choosing to attend an HBCU, commitment to academic major, personal role identities, frequency and type of campus activity involvement, and quality of overall experiences (academic, athletic, and social) among the larger sample of participants (N=57) at the HBCU. Thus, the qualitative approaches allowed the researcher to examine the influence of institutional culture of the HBCU (institutional document review) and socialization processes experienced by the participants (focus groups and individual interviews) while the quantitative approach (SACEQ) provided supplemental data to illustrate the salience of these experiences among a larger sample (see Table 1).

Purpose for Mixing. As the design name implies, triangulation was a primary purpose for using mixed methods in this study to enhance data quality and credibility of research findings (Greene, 2007). According to Greene, Caracelli, and Graham (1989), when a researcher uses triangulation he or she "seeks convergence, corroboration, correspondence of results from the different methods" (p. 259). Therefore, convergence across data sources was sought for each research question to strengthen confidence in inquiry inferences drawn from this study (Greene, 2007). Within the current study, both qualitative (e.g., institutional document review, focus

Table 1. Data Collection Instruments Table.

| Instrument                                     | Key topics covered                     |  |  |
|--|--|--|--|
| Institutional Document Review                  | Institutional Background               |  |  |
| Institutional Mission Statement                | Athletic Department Structure          |  |  |
| Athletic Department Archives Academic Policies | Academic Support Services              |  |  |
| SACEQ  | Demographic Information                |  |  |
| 53 items with 26 subitems                      | Sport Participation Background         |  |  |
| 10 sections                                    | Motivations for Attending an HBCU      |  |  |
| 63 Likert scale type questions                 | Commitment to Academic Major           |  |  |
| 6 Multiple choice questions                    | Frequency and Type of Campus Involveme |  |  |
| 8 Open-ended questions                         | Personal Identity Role Identities      |  |  |
| 2 Yes/no questions                             | Academic Experiences                   |  |  |
| ·  | Athletic Experiences                   |  |  |
|  | Social Experiences                     |  |  |
| Focus groups                                   | Motivations for Attending an HBCU      |  |  |
| Semistructured                                 | Overall Experiences                    |  |  |
| 8 Predetermined questions                      | Academic Experiences                   |  |  |
| Additional probing questions                   | Athletic Experiences                   |  |  |
|  | Social Experiences                     |  |  |
| Individual interviews                          | Motivations for Attending an HBCU      |  |  |
| Semistructured                                 | Personal Background                    |  |  |
| 13 Predetermined questions                     | Overall Experiences                    |  |  |
| Additional probing questions                   | Academic Experiences                   |  |  |
|  | Athletic Experiences                   |  |  |
|  | Social Experiences                     |  |  |

Note. HBCU = historically black college/university.

group, and individual interview data) and quantitative (e.g., SACEQ) data were triangulated to identify salient themes across data collection methods. Given the complex nature of the phenomenon, two primary types of triangulation were used: data and methodological (Patton, 2002). Data triangulation is the collection of information related to phenomena from multiple sources. Data sources for this study included five core institutional documents (additional description of these documents is provided in the data collection section) and Black male student athletes from different sports (football and basketball) and academic classifications (first year through senior). Methodological triangulation involves the use of multiple methods to examine a specific area of inquiry (Denzin, 1978; Patton, 2002). As mentioned earlier, the multiple methods in this study included an institutional document review, SACEQ, focus groups, and individual interviews. The researcher focused on triangulation to test for consistency of emergent findings across different data sources and methods (Greene, 2007).

# **Data Collection**

Review of Institutional Documents. A review of relevant documents (n = 5) was conducted to gain an understanding of the institution's culture including its mission, core values, goals, and objectives (Bowen, 2009). The following institutional documents were analyzed: (1) university mission statement, (2) athletic department mission statement, (3) academic support services mission statement, (4) student athlete handbook, and (5) athletic department compliance guidelines. All documents were retrieved online via the institution's website.

SACEQ. For the purpose of this study, one objective was to use the SACEQ as descriptive tool rather than an explanatory instrument to provide supplemental data about the participants' college experiences at an HBCU. Hence, the SACEQ was developed through a comprehensive review of literature, a pilot study with a focus group of seven Black male student athletes, and initial reliability analyses. This pilot study was conducted at another HBCU to verify the appropriateness and clarity of SACEQ items (Cooper & Hawkins, 2012). As a result, the SACEQ was modified based on feedback and preliminary statistical analyses (e.g., reliability results). The updated SACEQ is a 79-item instrument designed to measure student athletes' background characteristics and quality of college experiences. The SACEQ contains 63 five-point Likerttype scale questions (interval level), 6 multiple-choice questions (ordinal level), 8 open-ended questions (nonratio fill-in-the blank), and 2 yes/no questions (nominal level). Future exploratory factor analyses (EFAs) and confirmatory factor analyses (CFAs) will be performed to enhance instrument validity in order to use the SACEQ for explanatory inquiries (e.g., causal relationships); however, these efforts were beyond the scope and aim of this study (Fink, 2009). The three main sections of the SACEQ were constructed based on preexisting instruments designed to measure college student developmental outcomes (Astin, 1993, 1999), student athletes' experiences (American Institutes for Research, 1988, 1989), and levels of athletic identity (AIMS; Brewer, Van Raalte, & Linder, 1993; Martin, Eklund, & Mushett, 1997). Moreover, the SACEQ used in this study included subsections specifically related to student athletes' levels of engagement, quality of relationships, feelings of satisfaction, and frequency and type of involvement during their athletic in-season versus athletic off-season. After written consent was received from the participants (n = 57), the SACEQ was administered. Participants were provided with a hard copy of the SACEQ, a pencil to document their responses, and a copy of the consent form. All SACEQs were completed within 20 minutes.

Focus Groups. Immediately following the SACEQ phase, participants were recruited for the focus groups. All focus group participants were recruited from the one HBCU involved in the current study. Both focus group and individual interview questions were derived from a review of the literature and the identification of gaps, which did not include an understanding of why Black male student athletes choose to attend an HBCU as well as their holistic experiences within these unique educational environments. The protocols were also influenced from pilot study focus group conducted with seven Black male student athletes at another Division II HBCU and another pilot study with individual interviews with three Black male student athletes from another institution. Specifically, participants were asked to provide their thoughts about what questions would best capture their motivations for choosing to attend an HBCU, their holistic college experiences, and key influences associated with their academic achievement. Focus groups provided an opportunity to document and investigate the nuances of the participants' communication styles including their "day to day interaction, including jokes, anecdotes, teasing, and arguing" (Kitzinger, 1995, p. 299). Accessing this type of data was helpful for understanding participants' perceptions, values, and attitudes.

Three semistructured focus groups were conducted by the primary researcher. The focus group participants (n = 17) included nine football and eight basketball student athletes. The first focus group consisted of four football and four basketball student athletes. The second focus group consisted of four basketball student athletes. The third focus group consisted of five football student athletes. The semistructured nature of the focus groups focused on key areas of inquiry, and also provided participants with an opportunity to discuss additional topics related to the phenomena. Each focus group was video- and audio-recorded for transcription and lasted between 50 minutes and 1 hour.

Individual Interviews. Immediately following the focus group interviews, the primary researcher solicited participants for individual interviews. The individual interviews allowed the researcher to engage in personal dialogue with the participants about their lived experiences in a one-on-one setting and probe them for responses without the influence of others (Roulston, 2010). As mentioned in the previous section, the individual interview protocol was pilot tested with a group of three Black male student athletes at another institution. Feedback on the protocol was retrieved and updates were incorporated. Individual interviewees (n = 4) included two football and two basketball student athletes. Similar to focus groups, the semistructured nature of the individual interviews allowed the primary researcher to ask participants questions regarding key topics of inquiry while granting them the opportunity to discuss additional topics related to the phenomena. Interviews were audio-recorded for transcription and lasted between 25 and 40 minutes.

## **Analyses**

Reliability analyses were conducted on the following three SACEQ sections: (1) academic experiences (Items 16-25e;  $\alpha = .86$ ), (2) athletic experiences (Items 26-33e;  $\alpha = .86$ ), and (3) social experiences (Items 34-42d;  $\alpha$  = .93). A set of descriptive statistics and Pearson product moment correlation tests were computed to examine the participants' college experiences and key influences associated with their academic achievement (Fink, 2009). The qualitative data were analyzed using procedures of a thematic analysis (also referred to as content analysis; Biddle, Markland, Gilbourne, Chatzisarantis, & Sparkes, 2001; Gratton & Jones, 2010; Patton, 2002; Scanlan, Ravizza, & Stein, 1989; Scanlan, Stein, & Ravizza, 1991). The purpose of a thematic analysis is to examine data in a sequential manner that moves from raw data to first-order themes to second-order themes and then concluding with general dimensions or emergent themes (Biddle et al., 2001). The thematic analysis applied in this study involved four stages: (1) open coding, (2) axial coding, (3) comparative coding, and (4) selective coding (Biddle et al., 2001; Glaser & Strauss, 1967; Gratton & Jones, 2010; Patton, 2002; Scanlan et al., 1989; Scanlan et al., 1991). During the coding process, the researcher quantized codes by tabulating frequencies of each code within the transcript in order to cross-reference identified themes (Tashakkori & Teddlie, 1998). In addition, the researcher wrote memos to document key thoughts, revisions, and transitions made during coding refinement (Corbin & Strauss, 1990). In vivo coding was also incorporated to ensure emergent themes were grounded in data (Martin, Harrison, Stone, & Lawrence, 2010; Ryan & Bernard, 2000).

## Phases of Mixing

According to Teddlie and Tashakkori (2006), there are three stages or phases to a research study: (1) conceptualization stage, (2) experiential stage, and (3) inferential stage. The mixing of methods occurred at every stage. The conceptualization phase involves the development of research purposes and questions. The purpose of this study was to identify key influences associated with the academic achievement and college experiences of Black male student athletes at an HBCU in the southeastern United States. This purpose statement by design incorporated a mixed methods approach. Terms such as "identify" and "associated" generally indicates the use of quantitative methods of measurement such as descriptive statistics and correlation analyses. Conversely, the term "experiences" is often examined using qualitative approaches such as interviews. The intentional inclusion of these terms in the purpose statement along with the incorporation of mixed methods for each research question signified the mixing of methods at the conceptualization stage.

The next stage is the experiential stage, which involves methodological operations including data collection and analysis (Teddlie & Tashakkori, 2006). During the data collection stage, mixing occurred concurrently as the institutional document review, SACEQ, and interview data were collected simultaneously. Results were analyzed using techniques consistent with paradigmatic principles of the approaches used to ensure methodological integrity (Greene, 2007). The final stage of a research study is the inferential stage (Teddlie & Tashakkori, 2006). The inferential stage involves the explanation of the study's findings. In this stage, data from both methods were mixed and integrated to identify areas of convergence. The quantitative data were used primarily to provide descriptive information and corroborate with the emergent qualitative themes. The integration of these findings resulted in three meta-inferences, which were supported by legitimation and inference quality techniques.

# **Enhanced Legitimation and Inference Quality**

In mixed methods research, the term legitimation is used to measure the overall quality of a study (Onwuegbuzie & Johnson, 2006). This term is synonymous with the quantitative term of validity and the qualitative terms of trustworthiness, credibility, plausibility, and dependability. In an article, outlining the applicability of legitimation to mixed methods research, Onwuegbuzie and Johnson (2006) described nine different types of legitimation: (1) sample integration, (2) inside-outside, (3) weakness minimization, (4) sequential, (5) conversion, (6) paradigmatic mixing, (7) commensurability, (8) multiple variables, and (9) political. Of those types, this study incorporated legitimation through weakness minimization, conversion, commensurability, and multiple validities.

## Weakness Minimization

Weakness minimization refers to the strengths associated with one approach used to compensate for the weaknesses of another approach (Onwuegbuzie & Johnson, 2006). For example, some weaknesses associated with quantitative approaches include a lack of sensitivity to various contextual factors, an overemphasis on explanatory results without in-depth exploration, inflexible data collection procedures, narrow focus on generalizability rather than specificity, and a limited ability to capture and understand social realities (Gratton & Jones, 2010; Greene, 2007; Patton, 2002). To offset these weaknesses, qualitative approaches were incorporated in this study. The institutional document review allowed the researcher to collect contextual data about the institution's history, culture, and values. The focus groups and individual interviews enabled the researcher to engage in a deeper investigation of the participants' social realities within the specific context of an HBCU. In addition, the semistructured format of the interviews provided flexibility to explore previously unforeseen issues related to the phenomena.

Moreover, some weaknesses of qualitative methods include a limited ability to quantify the extent of a particular phenomenon among a larger sample of participants and create research conditions that can be repeated for finding verification (Gratton & Jones, 2010; Greene, 2007; Patton, 2002). As a result, a primary purpose of using the SACEQ was to address the aforementioned weaknesses. Specifically, the administration of the SACEQ to a sample of participants from two sports (football and basketball) across different academic classifications (first year through senior) allowed the researcher to measure the extent of shared experiences among participants regarding their motivations for choosing to attend an HBCU, levels of engagement, quality of relationships, feelings of satisfaction, and frequency and type of involvement during athletic in-season versus athletic off-season.

#### Conversion

Dependability of findings was enhanced by conversion legitimation, which refers to the quantizing or qualitizing of data to identify emergent meta-inferences (Onwuegbuzie & Johnson, 2006). Conversion legitimation was addressed through the quantizing of qualitative data (Tashakkori & Teddlie, 1998). Thematic analysis procedures included open, axial, comparative, and selective coding processes (Biddle et al., 2001; Gratton & Jones, 2010; Patton, 2002; Scanlan et al., 1989; Scanlan et al., 1991). Within each phase of the thematic analysis procedure, qualitative data were quantized to assist with the organization of data as well as to cross-reference code frequencies with emergent themes (Tashakkori & Teddlie, 1998). Quantizing qualitative data is particularly useful for identifying and verifying the most meaningful themes based on the type and volume of responses by multiple participants (Andersen, Williams, Aldridge, & Taylor, 1997; Gratton & Jones, 2010; Krane, Anderson, & Stean, 1997; Tashakkori & Teddlie, 1998). An extensive codebook with the quantized codes for each coding phase also increased transparency of the conversion process. In addition, detailed memos were documented throughout the coding process to convey the researcher's thoughts, revisions, and transitions in coding refinement (Corbin & Strauss, 1990).

## Commensurability

Another form of legitimation demonstrated in this mixed methods study was commensurability, which refers to "the extent to which the meta-inferences made reflect a mixed worldview based on the cognitive process of Gestalt switching and integration" (Onwuegbuzie & Johnson, 2006, p. 57). Commensurability legitimation was attained through the integration of findings at the interpretation phase. The integration of findings to highlight meta-inferences across data sources reflected the researcher's cognitive negotiation between the two paradigmatic approaches, which resulted in a third perspective that was more holistic (Onwuegbuzie & Johnson, 2006). Although this study was qualitatively dominant, the methods were mixed with the acknowledgement that combining both paradigms and their respective approaches would lead to a more comprehensive understanding of the phenomena. Furthermore, the emphasis of findings from each method at the interpretation phase was determined based on its relevancy to each research question (see Figure 2).

For example, related to Research Question 3 about the key influences associated with the participants' academic achievement, the corroboration of data from each method provided a better understanding of which and how aspects of the institutional culture enhanced participants' academic success. First, the data from the institutional document review highlighted the institution's policy that student athletes were required to attend 10 hours of study hall both in and out of season each week. Second, the SACEQ data provided information regarding the broad consensus among the larger sample of participants regarding their satisfaction with the time they spent on academics versus athletics and quality of relationships with professors, academic advisors, and support staff. For example, 75.4% (M = 3.96; SD = 0.73) of the participants reported being satisfied with the time they spent on athletics, 63.1% (M = 3.67; SD = 0.90) reported satisfaction with their academic performance, and 66.7% (M = 3.77; SD = 0.71) reported satisfaction with their academic experiences. Third, the focus group and individual interview data revealed a key reason why the implementation of the study hall policy enhanced the participants' academic experiences was the fact that it involved one-on-one time with peer tutors and professors, which was perceived as beneficial to participants' academic success.

| Research Question   | Paradigmatic<br>Emphasis | Methods*  |
|---|--------------------------|---|
| <ol> <li>What are the motivations for<br/>attending a HBCU for Black male<br/>student athletes?</li> </ol>                                    | QUAL + quan              | <ul> <li>Focus groups</li> <li>Individual interviews</li> <li>SACEQ</li> <li>Institutional document review</li> </ul> |
| 2. How do Black male student athletes at a HBCU make meaning of their holistic college experiences (overall, academic, athletic, and social)? | QUAL + quan              | <ul> <li>Focus groups</li> <li>Individual interviews</li> <li>SACEQ</li> <li>Institutional document review</li> </ul> |
| 3. What are the key influences associated with the academic achievement of Black male student athletes' at a HBCU?                            | QUAL + QUAN              | <ul> <li>SACEQ</li> <li>Focus groups</li> <li>Individual interviews</li> <li>Institutional document review</li> </ul> |

Figure 2. Research questions with paradigmatic emphases and methods.

## Multiple Validities

Multiple validities legitimation refers to the incorporation of mixed validity types (quantitative, qualitative, and mixed) to enhance the quality of inferences (Onwuegbuzie & Johnson, 2006). Multiple validities legitimation was achieved through the analysis of each method based on their respective paradigmatic traditions. For example, SACEQ data were validated using procedures consistent with quantitative methods such as content validity. As mentioned previously, existing instruments designed to measure college student developmental outcomes (Astin, 1993, 1999), student athletes' experiences (American Institutes for Research, 1988, 1989), and levels of athletic identity (AIMS; Brewer et al., 1993; Martin et al., 1997) influenced the construction of the SACEQ. Therefore, theoretically sound instruments substantiated SACEQ items. Additional content validity of the SACEQ was established through the administration of a pilot study with Black male football and basketball student athletes at another HBCU. Feedback from the pilot study allowed the researcher to refine the SACEQ for this study.

Qualitatively, data trustworthiness and credibility were enhanced through the following techniques: (1) a detailed subjectivity statement, (2) member checking or member validation of transcripts, (3) an audit trail, and (4) detailed transcriptions (Roulston, 2010). The researcher wrote a detailed subjectivity statement outlining his experiences and perspectives prior to this study. The subjectivity statement served as an ongoing reflective tool used to consider and appropriately respond to biases based the researcher's unique positionality. Member checks (also known as member validation) were also solicited from the participants by providing them with a copy of all interview transcripts and data analyses to ensure documentation and interpretations were accurate. Thus, the presented findings were co-constructed by the researcher and participants. Documentation of procedures, interpretations, and revisions conducted throughout the study served as an audit trail to make the research process transparent to readers who may want to replicate procedures. The audit trail also provided readers with an opportunity to vet materials and decisions made throughout the research process.

<sup>\*</sup>Methods are listed in order of analytical priority as it relates to each respective research question.

Similarly, detailed descriptions (e.g., codebook including codes from the open, axial, comparative, and selective coding processes) offered readers insight into the data analysis process (Roulston, 2010). In addition to establishing quantitative validity and qualitative trustworthiness and credibility, the researcher also incorporated mixed legitimation through the integration of findings from various data sources and methods. These integrated findings offered a multilevel analysis (e.g., institutional, team, and student athlete) of the phenomena. Collectively, the mixed methods approaches provided a comprehensive examination of a phenomena that otherwise would not have been feasible using each method independently (Onwuegbuzie & Johnson, 2006).

## **Meta-Inferences**

Once each data source was analyzed separately, consistent with their respective methodological paradigms, findings from each source were integrated and triangulated to identify and highlight areas of convergence (Creswell, 2009). From the triangulation of data and the legitimation strategies used to enhance inference quality, three emergent meta-inferences were identified: (1) strong relationships with individuals affiliated with HBCUs, (2) a nurturing familial environment, and (3) an institutional focus on student athletes' holistic development. Although there were other inferences drawn from this study, these meta-inferences represent findings that were supported by three or more methods.

## Strong Relationships With Individuals Affiliated With HBCUs

The first meta-inference of "strong relationships with individuals affiliated with HBCUs" refers to the participants' extensive relationships with individuals connected with an HBCU culture prior to their enrollment (e.g., family, friends, and coaches). Regarding the participants' motivation for attending an HBCU, nearly all interview participants described how someone close to them (e.g., parent, family member, friend, or coach) either attended an HBCU or encouraged them to attend because of the supportive environment and professional network opportunities available at these institutions. Although several of the interview participants expressed an initial interest in attending a predominantly White institution (PWI), their social connections with individuals affiliated with HBCUs influenced their decision to enroll at Northern Atlantic University (NAU). Corroborating SACEQ data (N = 57) revealed 61.4% (M= 2.56; SD = 1.04) cited attending an HBCU as moderately to extremely important, 52.6% (M = 3.54; SD = 1.07) cited social environment, and 52.6% (M = 3.57; SD = 1.20) cited location as among the most important factors related to their decision to attend. Additional findings from the institutional document review (n = 5) revealed how NAU placed an emphasis on enrolling and providing quality educational opportunities for African Americans particularly those who resided within the state and region. These findings corroborate focus group (n = 17), individual interview (n = 4), and SACEQ results (N = 57), which highlighted the participants' connections with individuals who lived in close proximity to them prior to enrollment and had a connection to an HBCU such as NAU.

## A Nurturing Familial Environment

The second meta-inference of "a nurturing familial environment" refers to the positive relationships and institutional support the participants experienced at NAU. The interview participants (n = 17) particularly highlighted how professors at NAU created a familial environment at the school. For example, one of the focus group participants (n = 17) captured the group's

sentiments about the culture at NAU when he said, "They made it feel like it was home . . . just made like a home feeling experience and like the people around here it just, you know, they felt like family." Comments such as these reflected how the participants' felt their peers, faculty, administrators, staff, and community members at NAU treated them with a level of care and compassion comparable to how family members care for one another. For example, SACEQ results (N = 57) revealed 66.6% (M = 3.73; SD = 0.84) reported having positive relationships with students who were nonteammates, 67.2% (M = 3.93; SD = 0.78) reported having positive relationships with their teammates, 64.9% (M = 3.68; SD = 0.99) reported having positive relationships with student athletes who were nonteammates, and 43.8% (M = 3.25; SD = 1.12) reported having positive relationships with community members.

Moreover, interview participants (n = 17) cited how their professors displayed their care for them by having routine out-of-class meetings with the participants, expressing a genuine concern for the participants' overall well-being by talking with them about nonacademic issues, and understanding their unique athletic schedules. Convergent SACEQ results (N = 57) indicated 50.9% (M = 3.63; SD = 0.88) of the participants reported having positive relationships with their professors, 59.7% (M = 3.66; SD = 0.90) reported having positive relationships with administration/staff, and 73.7% (M = 3.98; SD = 0.75) reported having positive relationships with academic advisors. These positive relationships also were reflective in the fact that 66.7% (M = 3.77; SD = .71) of the participants expressed satisfaction with their academic experiences at NAU. Furthermore, SACEQ correlation results also indicated a positive correlation between academic and social experiences (r = .662, p < .001), which underscored the significant influence of faculty-student relationships on the quality of student athletes' holistic experiences in college. In addition, findings from the institutional document review (n = 5) highlighted NAU's commitment to cultivating strong and meaningful faculty-student relationships. A common theme across all institutional documents, but particularly evident in the university mission statement document, was an emphasis on one-on-one instruction between faculty and students. The low student-to-faculty ratio (21 to 1) at NAU created an educational environment where students received personal attention for their academic needs. Consequently, the participants' beliefs or self-efficacy in their academic capabilities and performance were enhanced through their positive interactions with their professors at NAU (Bandura, 1993). Bandura (1993) conceptualized the relationship between environment and self-efficacy when he stated, "The impact of most environmental influences on human motivation, affect, and action is heavily mediated through self processes" (p. 118). Therefore, the participants' cognized goals of academic achievement perhaps could have been present prior to college enrollment and enhanced on exposure to the unique educational and sociocultural environment at NAU, which included nurturing professors and an overall supportive campus climate (Bandura, 1993). Evidence of participants' academic achievement at the institution was found with the SACEQ results, which indicated 61.4% (M = 2.81; SD = 0.79) reported earning a 2.50 GPA or higher.

Another key aspect of the NAU culture related to the theme of "a nurturing familial environment" was the interview participants' (n=17) involvement in culturally empowering events such as the annual homecoming. These annual homecoming events serve as a platform to celebrate African American culture and institutional excellence. These homecoming events are organized around annual athletic competitions, but include a week full of activities including band of the bands, step shows, music concerts, and community service outreach. A focus group participant (n=17) captured all the participants' feelings about homecoming when he said, "It's just the whole week it's just like a different vibe you feel . . . like something you're really not supposed to experience like that. It's just crazy." Corroborating SACEQ results (N=57) revealed 57.9% (M=3.68; SD=1.04) of the participants reported attending or participating in social events such as the annual homecoming activities and 67.9% (M=3.56; SD=0.93)

reported satisfaction with the campus environment. Along the same lines, additional SACEQ results revealed 56.1% (M = 3.56; SD = 0.85) of the participants expressed satisfaction with the social opportunities at NAU, and 54.4% (M = 3.60; SD = 0.82) reported being satisfied with their social experiences. The institutional document review data (n = 5) particularly the athletic department documents (athletic department mission statement, student athlete handbook, and athletic department compliance guidelines) also highlighted NAU's belief that athletics serves as an integral part of the institution's mission of African American cultural uplift. As a result, 47.3% (M = 3.30; SD = 1.08) of SACEQ participants reported feeling a part of the campus community. Collectively, NAU's focus on strong faculty—student relationships and culturally empowering campus activities created "a nurturing familial environment" for the participants.

## An Institutional Focus on Student Athletes' Holistic Development

The third meta-inference of "institutional focus on student athletes' holistic development" refers to the institutional culture at NAU that promotes the development of students as wellrounded citizens. Findings from the institutional document review (n = 5) revealed one of NAU's primary objectives is to graduate students who are equipped with the skills, tools, and knowledge necessary to become effective leaders in the world on graduation. The university mission statement document highlighted how NAU accomplishes this objective by providing students with numerous extracurricular opportunities such as student government, student publications, sororities and fraternities, and academic clubs and societies. Each of these programs is designed to assist students with the development of their leadership, interpersonal, and critical thinking skills. Convergent findings from the interview data (n = 17) indicated that over half of the participants, 58.8% (10 out of 17), were members of campus organizations (e.g., academic, community service, leadership, etc.). Additional SACEQ data (N = 57) also revealed that 66.7% (M = 4.02; SD = 1.01) reported identifying as a student first and an athlete second, compared to only 34.0% who expressed identifying as an athlete first and a student second (M = 3.04; SD =1.24). Hence, participants internalized their primary role at NAU as a student first. At NAU, participants were not forced to spend excessive amounts of time on athletics, which allowed them to pursue educationally purposefully activities on campus. This fact was reinforced by SACEQ results that revealed 75.4% (M = 3.96; SD = 0.73) of the participants reported being satisfied with the time they spent on athletics.

Related to the academic development of student athletes, institutional documents (n = 5) highlighted the practice of intra-institutional partnerships between the athletic department, academic advising office, faculty, counseling services, and career services in an effort to address the needs of its student athletes. Interview participants (n = 17) described the effectiveness of these intra-institutional programs such as the Study Tables program and mandatory study hall. One of the interview participants described the benefits of Study Tables:

You're with people who have the same problem as you sitting at the table. And you have your professor there. So, basically, you work together to get that problem solved. If you go to Study Table, you're going to get your work done.

The consensus among interview participants regarding these programs was the presence of peer tutors and their professors were key contributors to their enhanced academic engagement and achievement. In other words, participants' perceived academic self-efficacy was mediated by their relationships with peer tutors and professors (Bandura, 1993). Corroborating SACEQ data (N = 57) revealed that 63.1% (M = 3.67; SD = 0.90) reported being satisfied with their academic performance. NAU's emphasis and delivery of a wide range of extracurricular opportunities and

adequate academic support programs signaled to the participants that their holistic development particularly their academic achievement was a top institutional priority.

#### Discussion

This article highlighted how a researcher used a mixed methods approach to ascertain a better understanding of the relationship between the institutional culture at an HBCU and Black male student athletes' holistic experiences in college. Rather than present a methodological argument for mixed methods research, the authors instead provided a detailed description of an empirical study that incorporated a mixed methods approach in the examination of Black male student athletes' experiences at an HBCU. This exploratory study incorporated a concurrent triangulation design (Creswell, 2009), which involved the simultaneous collection of qualitative and quantitative data to engage in an in-depth investigation of key institutional characteristics at an HBCU that contributed to Black male student athletes' academic achievement and positive college experiences.

Each method used in this study provided a unique contribution to the comprehensive examination of the phenomena (see Table 1). The institutional document review (n = 5) involved a comprehensive analysis of five core institutional documents to gain an understanding of the institution's culture such as its missions, core values, goals, and objectives. Emergent themes from the review revealed NAU placed a priority on students' holistic development by emphasizing strong faculty-student relationships and by offering a range intra-institutional support programs and extracurricular opportunities. The inclusion of these data allowed the researcher to gain a sense of the institutional culture at NAU as expressed in its guiding documents. Another data collection method used in this study was the SACEQ (N = 57), which provided important quantifiable information regarding the extent or salience of perceptions, behaviors, and experiences among a larger sample of participants. More specifically, the SACEQ data allowed the researcher to investigate the larger sample of participants' motivations for choosing to attend an HBCU, personal role identities, frequency and type of campus involvement, levels of engagement, quality of relationships, and feelings of satisfaction with their college experiences. Without the inclusion of SACEQ data, the researcher would have been limited in the ability to identify the extent that the institutional culture at NAU influenced Black male football and basketball student athletes at large beyond a smaller sample of interview participants.

However, the institutional document review and SACEQ data were limited in terms of capturing how and why Black male student athletes experienced certain socialization processes. Thus, the inclusion of focus groups (n = 17) and individual interviews (n = 4) provided rich data regarding how participants interpreted their experiences and why certain influences (e.g., Study Tables, mandatory study hall, faculty—student athlete relationships, etc.) facilitated their academic achievement and positive college experiences. Furthermore, focus group data provided an opportunity to examine the prevalence of shared experiences and meanings among a collective group of participants, whereas the individual interviews enabled one-on-one dialogue for elucidation and elaboration on key topics of inquiry.

In conclusion, previous research has indicated HBCUs have been successful at creating positive educational environments for Black male student athletes to experience holistic development (Charlton, 2011; Cooper & Hawkins, 2012). Specifically, these institutions offer a wide range of academic programs, culturally relevant curricula, and a preponderance of talented Black faculty and staff. Inferences from this study provide insight into key institutional characteristics that contributed to the establishment of positive faculty—student relationships, academic behaviors, and social engagement on campus. Therefore, the integrated findings revealed a concerted institutional effort at an HBCU, which led to the creation of a familial and culturally

empowering environment for Black male student athletes. In addition, the meta-inferences reflect the benefits of applying a mixed methods approach when examining student athletes' experiences in college.

#### Limitations

Findings from this study should be evaluated with the consideration of the following limitations. First, the SACEQ in this exploratory study was to provide descriptive data to corroborate the emergent qualitative themes (Creswell, 2009). Therefore, identifying causal relationships via statistical procedures was not the primary goal for SACEQ inclusion. Nonetheless, the descriptive statistical data did serve the intended complementary purposes for this study and provided meaningful data for understanding the context of and participants' experiences at an HBCU. Another limitation of this study was the small sample size a group of Black male football and men's basketball (N = 57) student athletes at one HBCU in the southeastern United States (n =1). Therefore, the transferability of findings should be viewed with caution and findings cannot be generalized to the larger population. The use of estimated college GPA as a measure of academic achievement was another limitation of the current study. Academic success can measured in a multitude of ways; however, estimated GPAs has been among one of the most common outcome variables used in studies involving college students (Astin, 1993; Comeaux & Harrison, 2007; Pascarella & Terenzini, 2005). It is important to note, the researcher did attempt to access the participants' actual academic records, but was unable to receive access due to legal restrictions associated with the Buckley Amendment to the Family Educational Rights and Privacy Act of 1974 (FERPA).

#### **Future Research**

This article described the benefits of applying a mixed methods approach to research on a subgroup of intercollegiate student athletes. The dual emphasis on understanding the lived experiences of individuals as well as on measuring the salience of their experiences across a larger sample is one of the major advantages of incorporating the concurrent triangulation design (Creswell, 2009) in an exploratory study. The current study offered valuable insight into the process of how institutional actors at an HBCU enacted the institution's unique mission through formal and informal practices, which cultivated a positive educational environment for a group of Black male student athletes. Hence, future studies could build on the current study by expanding the sample size to include multiple institutional types (e.g., HBCUs across different regions, PWIs, community colleges, etc.) and student athletes from various backgrounds (e.g., race, gender, socioeconomic status, sport, etc.) and examine the relationship between perceptions of institutional mission, culture, and support and student athletes' levels of engagement, feelings of satisfaction, quality of relationships, and academic performance. In addition, future research should use mixed methods approaches with different research designs (experimental, cross-sectional, time series, longitudinal, case study, grounded theory, and ethnographic; Gratton & Jones, 2010) and mixed methods designs (sequential, concurrent, exploratory, explanatory, or transformative; Creswell, 2009) to explore student athletes' experiences. In addition, future research should also apply mixed methods approaches to the examination of a diverse group of student athletes' experiences (e.g., racial/ethnic groups, gender, sports, etc.) at different institutional types (e.g., demography, geography, enrollment size, academic and athletic classifications, etc.). Using the strengths of each methodological paradigm would enable researchers to collect richer data and enhanced inferences, which could lead to better informed policies and practices.

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#### **Notes**

- 1. The term interview participants will be used to reference both focus group and individual interview participants. When referencing findings unique to each data method, the specific method will be stated (e.g., focus group participants or individual interview participants).
- 2. A directional institutional pseudonym was assigned to the institution to preserve anonymity.
- 3. The term interview participants refers to the 17 participants who participated in the three focus groups and the four participants from these focus groups who also participated in the individual interviews.

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