Female Basketball Student#Athletes' Motivation: Analyzing Academic Standing and Ethnicity at Atlantic Coast Conference Institutions

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FEMALE BASKETBALL STUDENT-ATHLETES’ MOTIVATION: ANALYZING ACADEMIC STANDING AND ETHNICITY AT ATLANTIC COAST CONFERENCE INSTITUTIONS

By

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To My Parents, My Husband, and My Family:

Jarvis Earl Pettaway, Debbie D. Porter Pettaway, Donald Ray Willis, Jr., the Pettaway, Porter, Knight, Cyprien, Lloyd, Whitaker, Willis Families, and my church family at Truth Tabernacle Ministries:

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ABSTRACT

The purpose of this study was to survey female basketball student-athletes, participating in Atlantic Coast Conference (ACC) member institutions, in order to determine their academic, collegiate athletic, and career athletic motivation based on academic standing and ethnicity. Another purpose was to validate the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ), a newly developed instrument used to measure student-athletes’ motivation. The Expectancy Theory of Motivation was used to discuss the perception of valence exhibited by the female basketball student-athletes. The research population for this study was N = 111. The population represented female basketball players at nine member institutions of the ACC. Two of the institutions did not participate in the research study. The research sample for this study was n = 100, which yielded a 90% response rate.

Previous research that formed the basis for this study included ethnicity and motivation of student-athletes, academic standing and motivation of student-athletes, and limited literature regarding female basketball student-athletes’ academic motivation. Analysis of variance (ANOVA) results revealed there was no significant difference between academic, collegiate athletic, and career athletic motivation when analyzing academic standing.

Data results for ethnicity and motivation revealed there was no significant difference between academic motivation and collegiate athletic motivation, however, there was a significant difference when career athletic motivation and ethnicity were analyzed.

Exploratory factor analysis (EFA) of the SAMSAQ and the extraction method using principal axis factoring revealed two factors would be more beneficial in an explanation of variance instead of three or more factors. The two
factors were noted as academic and athletic motivation. EFA enabled the researcher to determine the SAMSAQ may need to examine two constructs instead of three (academic, collegiate, and career athletic motivation).
INTERCOLLEGIATE competition has long been constituted as one of the most powerful forces in American society (Bowen & Levin, 2003; Fagan, 1963; Long, 1963, Suggs, 2003) and an integral part of the university and college system. Researchers have shown athletics has become a motivational precedence over academics for some student-athletes (Adler & Adler, 1987, 1991; Miller & Kerr, 2002). Based on these motivational priorities toward athletics, there has been the belief that National Collegiate Athletic Association Division IA athletic institutions, and sport participation at these universities, provide an opportunity to prepare and train student-athletes for professional sport opportunities (Snyder, 1996). Headlines such as, “The NCAA Punishes U. of Georgia” (Nichols, 2004), “Former Coach Indicted on Fraud Charges for Providing Phony Academic Credits to Basketball Players” (Suggs, 2005), and “Georgia Tech Confesses to Violating NCAA Rule and Suggests Penalties” (Basinger, 2004) tend to reinforce the belief that universities, administrators, and student-athletes’ place more value on athletics instead of academics.

The sport of basketball has been credited to Dr. James Naismith in 1891 (NCAA, 2003a). A few years later, 1894, Senda Berenson was known for her literary acknowledgement of rules for women to adhere to while competing in the sport of basketball. Berenson created rules for women’s basketball and published her work in the Physical Education magazine (NCAA, 2003a). Women’s basketball was played as demonstration games, which were started by an instructor from Sophie Newcomb College in New Orleans, Louisiana. The instructor, Clara Gregory Baer, wrote and published Basquette, a 1908 rule book.
for women’s basketball (NCAA, 2003a). Since the development of basketball, many elements transpired in order to make the sport of women’s basketball what it is today. These include the opportunity to participate in collegiate basketball and professional basketball for women. These opportunities have become goals for some women while other goals may be to obtain a college education while participating in collegiate basketball competition.

The WNBA, Women’s National Basketball Association, is one of those stepping stones some female basketball student-athletes may desire to attain. This professional association was introduced April 24, 1996 with the slogan “We Got Next” (WNBA, 2004). The concept was approved and competition began in June 1997, which included eight teams; the Charlotte Sting, Cleveland Rockers, Houston Comets, New York Liberty, Los Angeles Sparks, Phoenix Mercury, Sacramento Monarchs, and the Utah Starzz (WNBA, 2004). More opportunities for female collegiate basketball student-athletes will become apparent with the expansion of another professional team in Chicago during the 2005 – 2006 year, the fourteenth team in the WNBA (WNBA, 2004).

Professional opportunities for the WNBA became reality for 39 women on April 15, 2005 (WNBA, 2005). The WNBA Draft consisted of three rounds where teams drafted a female basketball athlete. During the 2005 WNBA Draft, two Atlantic Coast Conference female basketball student-athletes were chosen in the second round (WNBA, 2005). This was an accomplishment for those athletes who strived to attain a goal of participating in professional athletics.

Existing literature has provided insight into the collegiate experiences and motivation of student-athletes (Adler & Adler, 1985, 1987, 1991; Meyer, 1990; Petrie & Stoever, 1997). Research has shown student-athletes participating in football and basketball view collegiate athletics as a stepping stone to professional athletics and a possible attainment of a college degree (Berry, 2001;
Lapchick & Malekoff, 1987). However, limited research has concentrated on motivation of female student-athletes participating in collegiate basketball. The researcher was unable to find literature supporting evidence of female student-athletes participating in collegiate basketball as a stepping stone to a career in professional basketball or participation in the Olympics.

Student-athletes’ educational successes and developments in the classroom should be ultimate goals and motivational aspirations towards their college education. Research has shown scholarship student-athletes have failed academic courses at various colleges and universities (The Economist, 1989). According to Adelman (1990), collegiate student-athletes earn fewer bachelor’s degrees than non student-athletes, student-athletes take longer to attain a college degree, student-athletes’ academic grades are lower than non student-athletes, and the curricula of student-athletes are less demanding than the curricula of non student-athletes.

Another unfortunate problem involved falsifying transcripts for student-athletes and giving them credit for courses they have never attended (Suggs, 2005; Underwood, 1984). These have been seen as problems associated with academic integrity that has transpired over the years. The need for institutional accountability is important in order for the academic affairs of student-athletes to be maintained.

**Statement of the Problem**

There is a dearth of information in sport research literature on academic motivation, collegiate athletic motivation, and career athletic motivation of female basketball student-athletes. Research has shown some student-athletes are more athletically motivated (Adler & Adler, 1985, 1987, 1991; Miller & Kerr, 2002) while others are more academically motivated (Astin, 1984; Ryan, 1989) and consider education to be a top priority. Although previous literature has
focused on academic and athletic motivation among student-athletes, limited research has focused on specifying a particular group of student-athletes, such as female basketball athletes in the collegiate setting. Considering men’s athletics in the collegiate environment has been determined as a powerful force in society (Suggs, 2003), more literary focus has researched and analyzed men’s sports; i.e. basketball, football, baseball, etc. (Adler & Adler, 1987; 1991; Bailey & Littleton, 1991; Kennedy & Dimick, 1987; Shapiro, 1984). Adler and Adler (1991) and Wempe (2001) discussed the relationship of gender and student-athletes’ motivation while Berry (2001) and Pascarella and Smart (1991) researched ethnicity and its relationship to student-athletes’ motivation. Overall, there is a gap in sport management literature and research regarding female basketball student-athletes’ motivational aspirations of academics, collegiate athletics, and career athletics based on dimensions of academic standing and ethnicity.

**Purpose of the Study**

The purpose of this study was to survey female basketball student-athletes, attending Atlantic Coast Conference member institutions, in order to determine their academic motivation, collegiate athletic motivation, and career athletic motivation based on dimensions of academic standing and ethnicity. Motivation among student-athletes has been known as a problem facing intercollegiate athletics and the college education. Differential elements as to why these issues occur may be due to the difference in motivation among academic standing of the student-athletes and differences among the ethnicity of the student-athletes.

The purpose of the study was threefold: (1) to analyze the differences between academic motivation, collegiate athletic motivation, and career athletic motivation of the female basketball student-athletes when academic standing was the independent variable, (2) to analyze the differences between academic
motivation, collegiate athletic motivation, and career athletic motivation of the female basketball student-athletes when ethnicity was the independent variable, and (3) to modify and validate the newly developed Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ) instrument using exploratory factor analysis.

These ancillary objectives of the current study were used to determine the internal consistency of the measuring SAMSAQ instrument for intercollegiate women’s basketball student-athletes. Another objective was to explore whether the independent variables, academic standing and ethnicity, contributed to group differences that may have existed in terms of women’s basketball student-athletes exhibiting academic motivation or athletic motivation.

The purposes of this study were based on findings from previous literature. Adler and Adler (1987; 1991) found male basketball student-athletes were more athletically motivated as junior and seniors. However, as freshman and sophomore male basketball student-athletes, they were more academically motivated. Berry (2001) showed some student-athletes become disconnected from the academic department once they were near completion of their collegiate athletic participation. This disconnection may further disable academic motivation of those student-athletes. Their drive and determination to successfully complete a college degree may be negatively affected (Berry, 2001, Lapchick, 1995). Universities and colleges must be able to prevent the motivational gap between athletics and academics in the college setting. Where does the prevention begin?

The National Collegiate Athletic Association

The purpose of the National Collegiate Athletic Association (NCAA) is “to initiate, stimulate, and improve intercollegiate athletics programs for student-athletes and to promote and develop educational leadership, physical fitness,
athletics excellence, and athletic participation in the intercollegiate athletics program” (NCAA, 2002, p. 69). Simultaneously improving athletics and academics among student-athletes has begun with the NCAA. Individual institutions must also initiate this promotion of dual improvement.

The Atlantic Coast Conference

The Atlantic Coast Conference is known as “one of the strongest and most competitive intercollegiate conferences in the nation” who believes its organization is “A Tradition of Excellence...Then, Now, and Always” (theacc.collegesports.com). On May 8, 1953, the Atlantic Coast Conference (ACC) was founded in Greensboro, North Carolina. Seven founding members included Clemson University, Duke University, University of Maryland, The University of North Carolina at Chapel Hill, North Carolina State, University of South Carolina and Wake Forest University (theacc.com, 2004). The University of Virginia officially became an ACC member institution on December 4, 1953. Eighteen years later, the University of South Carolina was no longer a member of the Atlantic Coast Conference (theacc.com, 2004).

On April 3, 1978, Georgia Institute of Technology (Georgia Tech) became an official member of the ACC. July 1, 1991, Florida State University expanded the ACC to nine member institutions. Exactly thirteen years later, two more institutions joined the ACC, the University of Miami and Virginia Polytechnic Institute and State University (Virginia Tech) (theacc.com, 2004).

As of July 1, 2004, the Atlantic Coast Conference was comprised of eleven collegiate academic institutions. One institution is located in the state of Georgia (Georgia Institute of Technology), Maryland (University of Maryland), and South Carolina (Clemson University). Two institutions are located in the state of Florida (Florida State University and The University of Miami) and the state of Virginia (Virginia Polytechnic Institute and State University, and University of
Virginia). Four institutions are located in the state of North Carolina (Duke University, North Carolina State University, The University of North Carolina at Chapel Hill, and Wake Forest University).

The focus of this study was to examine female basketball student-athletes’ valence towards academic motivation, collegiate athletic motivation, and career athletic motivation at Atlantic Coast Conference member institutions.

**Theoretical Model**

The theoretical model for this study was guided by the Expectancy Theory of Motivation (Vroom, 1964). The Expectancy Theory is based on the probability that an individual will complete a task or accomplish a goal and the value the individual places on successful completion of the task or goal. There is a relationship between the expectant attitudes of an individual and motivation of the individual. This theory asserts an individual believes a desired reward or outcome is closely linked to performance.

**Motivation**

According to Vroom (1964) motivation is a force that exhibits behavior, directs behavior, and sustains behavior. Motivation is behaviorally specific and is used to select the option with the greatest reward. It has a relationship to the expectations, perceptions, and values and individual places on attainment of a specific outcome.

The term “motivation” has been defined differently among researchers. According to Greenberg and Baron (1997), motivation is defined as “the set of processes that arouse, direct, and maintain human behavior toward attaining some goal” (p. 142). Carrell, Jennings, and Heavrin (1997) state motivation is “the effective stimulant that causes individuals to take action or to achieve different levels of productivity in pursuit of a goal” (p. 19).
Research has shown there is no single definition for the term motivation. Although there are different ways the term is defined, three characteristics exist for motivation: (1) a force is present and it impels one to believe in a goal or outcome, (2) the desire to adhere to the force is directed toward the goal or outcome, and (3) the individual comprehends the desire to pursue his or her goal (Smith & Carron, 1992).

**Expectancy Theory of Motivation**

The Expectancy Theory of Motivation (Vroom, 1964) enables comprehension of how one can make a decision based on different behavioral options and alternatives. As shown in Figure 1, the Expectancy Theory of Motivation has three key perceptions; expectancy, instrumentality, and valence.

![Vroom's (1964) Expectancy Theory of Motivation](image)

**Figure 1** Adopted from the works of Vroom, V. (1964). *Work and Motivation*. New York, NY: Wiley.

According to Vroom (1964) it is important to note each perception of the Expectancy Theory of Motivation represents a belief of effort, performance, and reward.
Vroom’s (1964) Elements of Motivation

\[
\text{EFFORT} \quad \rightarrow \quad \text{PERFORMANCE} \quad \rightarrow \quad \text{REWARD}
\]

**Figure 2** Adopted from the works of Vroom, V. (1964). *Work and Motivation*. New York, NY: Wiley.

Figure 2 represents a summary of Vroom’s (1964) elements of motivation. First, a behavior is initiated due to the level of *effort* the individual is willing to put forth and the amount of motivation exhibited by the individual. Second, *performance* is directed by choice and determining which behavior to choose. Direction of the motivation is based on the behavioral option the individual will most likely pursue. Finally, a *reward* is sustained when the level of persistence towards the behavior pattern is noted (Vroom, 1964).

As shown in Figure 3, motivational force (MF) is the product of three perceptions; expectancy, instrumentality, and valence. Individuals select the option or alternative with the greatest motivational force. A motivational reward or force directs specific behavioral alternatives and the behavior is a conscious choice decided among those alternatives. Behavioral options are chosen when the person selects options with the greatest motivational force.

Vroom’s (1964) Perception of Motivational Force

\[
\text{MF} = \text{Expectancy} \times \text{Instrumentality} \times \text{Valence}
\]

**Figure 3** Adopted from the works of Vroom, V. (1964). *Work and Motivation*. New York, NY: Wiley.
According to Vroom (1964) and Figure 4, expectancy probability \((E \rightarrow P)\) is the belief that effort will lead to a desired performance. Variables that contribute to this belief are self-efficacy, perceived control over the performance, and perceived difficulty of the goal. Self-efficacy is the belief one has the ability to successfully perform a task or skill (Gaston, 2002). Perceived control over the performance states motivation and expectancy is high when an individual perceives there is control over the expected outcome. The individual determines goal difficulty. Goals that are too difficult or set too high may lead to low expectancy perceptions and low motivation.

**Expectancy** is the relationship between perceived effort and performance. Examples of expectancy are:

![Expectancy Diagram](image)

<table>
<thead>
<tr>
<th>Effort</th>
<th>Performance</th>
</tr>
</thead>
</table>

a. If I (student-athlete) put forth more time in my course work (effort) will I improve (performance) my grade in the course?  
b. If I (student-athlete) put forth more determination during practice (effort) will I improve (performance) my shooting percentage this season?

**Figure 4** Perception of Expectancy

As shown in Figure 5, instrumentality probability \((P \rightarrow R)\) is the belief that if an individual meets his or her performance expectations or goals, he or she will receive a greater reward (Vroom, 1964). Variables that contribute to this belief are trust, control, and policies. Trust is believing in one who promises rewards
based on good performance. Control is when one believes he or she has some level of control over how and when rewards will be received. This control increases instrumentality. Policies are the degree to which rewards are formalized and how the individual will base those perceptions. Instrumentality is increased when those policies link rewards to performance (Vroom, 1964).

**Instrumentality** is the relationship between perceived performance and the reward. Examples include:

PERFORMANCE ➔ REWARD

![Instrumentality diagram]

a. If I (student-athlete) spend more time studying (*performance*) for my midterms will it improve my grade (*reward*) in the course?
b. If I (student-athlete) practice my free-throw shooting more (*performance*) will my WNBA draft status improve (*reward*) this year?

*Figure 5* Perception of Instrumentality

According to Figure 6, *valence* is the value an individual places on the reward V(R). According to Vroom (1964) valence is the level of satisfaction an individual expects to receive from the outcome. Variables that contribute to valence are values, goals, and preferences.
Valence is a function of an individual’s source of motivation. Examples include:

- Is it important to me to be the best student-athlete on the team?
- How important is it to me (student-athlete) to get an “A” in the course?

Figure 6 Perception of Valence

College student-athletes participate in collegiate athletics and attend classes in order to possibly attain a college degree. A student-athlete portrays the role of a student and as an athlete. Some student-athletes may be more academically motivated in order to reach their academic goals. Other student-athletes may be more athletically motivated in order to obtain their athletic endeavors. On the other hand, some student-athletes may be equally motivated to reach their academic and athletic goals.

This study was directly related to the perception of valence of the Expectancy Theory of Motivation. The value female basketball student-athletes place on academics may lead to the reward of graduating with a college degree. This represents the perception of valence and academic motivation. Another example is the value female basketball student-athletes place on collegiate athletics. Increased valence towards collegiate athletics may lead to the reward of more playing time or a starting position on the team. Finally, the value female basketball student-athletes place on career athletics may lead to the reward of competing on a professional or Olympic team. This represents the perception of valence and career athletic motivation.
Expectancy Theory of Motivation in sport. Research in the field of sport has used the Expectancy Theory of Motivation. Adler and Adler (1991) discussed Vroom’s (1964) theory as it related to male basketball student-athletes’ expectancy towards athletics and academics. Athletic, social, and classroom experiences created an environment of anti-intellectualism for the male student-athletes. The student-athletes’ academic motivation of performing well academically was inhibited due to limited effort and performance. Educational goals were no longer a priority of the student-athletes as their motivation was geared towards athletic achievements.

Clow (2000) used the Expectancy Theory of Motivation (Vroom, 1964) to determine student-athletes’ perceived value of education. The theory was used to analyze the perceptions of student-athletes’ taking a course in career exploration. The author examined the perceived value of education of student-athletes before and after they completed the career exploration course. It was assumed the student-athletes would be educated about their vocational options, therefore increasing their motivation towards academics. Student-athletes’ motivation towards education and their value of their educational endeavors were increased after taking the career exploration course.

Gaston (2002) developed an instrument, the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ), based on the Expectancy Theory and self-efficacy. The SAMSAQ was developed to measure academic and athletic motivation of student-athletes. Three constructs were determined; academic motivation, student athletic motivation, and career athletic motivation.

Gaston (2002) also discussed a continuum of student-athletes’ athletic and academic motivation. Figure 7 represents a continuum model, created by the researcher but discussed by Gaston (2002), of student-athletes’ athletic and
academic motivation. At one end of the continuum, a student-athlete is more athletically motivated. At the other end of the continuum, the student-athlete is more academically motivated. In the middle of the continuum, the student-athlete is equally motivated when analyzing athletics and academics.

**Figure 7** Adopted from the works of Gaston, J. (2002)  
Created by Willis, K. J. P. (2005)

The Continuum of Student-Athletes’ Athletic and Academic Motivation coincides with The Expectancy Theory of Motivation (Vroom, 1964). In relation to valence, student-athletes who are more athletically motivated may place more value on an athletic goal, such as being the best point guard in the conference. However, a student-athlete who is more academically motivated may place more value on performing better than other students in a course.

Athletically motivated student-athletes may attend college in order to participate in collegiate athletics and later pursue a career in professional sports. It cannot be assumed that basketball student-athletes have a goal to compete on the professional level while track and field student-athletes have a goal to compete in the Olympics. Student-athletes who are more athletically motivated may detach themselves from their academic commitments as a student. The primary focus of these student-athletes may be more athletically driven while the pursuit of successfully obtaining a college degree is neglected.
Academically motivated student-athletes may attend college in order to successfully complete their coursework and attain a college degree. It cannot be assumed that softball student-athletes have a goal to complete their college coursework and receive a college degree. Student-athletes who are more academically motivated may study harder, communicate more with professors, and spend more time preparing for their academic tasks. Academically motivated student-athletes may not put forth the same effort towards preparations for their sport.

Student-athletes who are equally motivated in athletics and academics may attend college in order to pursue their college degree and compete on the professional level. It cannot be assumed that student-athletes who compete in revenue-producing sports are equally motivated when analyzing athletics and academics. These student-athletes may equally study for exams, communicate with professors and spend time preparing for class assignments as well as practice harder in their sport, communicate with coaches, and spend time preparing for competition. Equally motivated student-athletes may put forth equal preparations for their sport and their college degree. The motivation of student-athletes allow researchers to comprehend why some student-athletes’ goals are more academically motivated, more athletically motivated, or equally athletically and academically motivated.

Critical analysis of the Expectancy Theory of Motivation in sport

Various researchers analyzed the perceptions of the Expectancy Theory; expectancy, instrumentality, and valence. Adler and Adler (1991) discussed male basketball student-athletes’ expectancy towards academics and athletics, Clow (2000) determined student-athletes’ perceptions of valence towards academics, while Gaston (2002) developed the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ) based on student-athletes’ perceptions.
of expectancy and instrumentality towards academics and athletics. The aforementioned literature provided support to researchers’ use of the Expectancy Theory of Motivation and determining student-athletes’ motivation.

The current research study was based on the work of Adler and Adler (1991), by focusing on female basketball student-athletes instead of male student-athletes. The works of Clow (2000) was incorporated into the study by discussing the perception of valence towards academic motivation, collegiate athletic motivation, and career athletic motivation. Finally, the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ), developed by Gaston (2002), was used for the female basketball student-athletes to complete. The data results from the questionnaire determined if significant differences were found between academic motivation, collegiate athletic motivation, and career athletic motivation when academic standing and ethnicity were used as independent variables.

**Research Questions**

The following research questions were written in support of the purpose.

(RQ1) Is there a significant difference between the female basketball student-athletes’ valence towards academic motivation (dependent variable) when analyzing academic standing (independent variable), based on the student-athletes’ responses to the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ)?

(RQ2) Is there a significant difference between the female basketball student-athletes’ valence towards collegiate athletic motivation (dependent variable) when analyzing academic standing (independent variable), based on the student-athletes’ responses to
the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ)?

(RQ3) Is there a significant difference between the female basketball student-athletes’ valence towards career athletic motivation (dependent variable) when analyzing academic standing (independent variable), based on the student-athletes’ responses to the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ)?

(RQ4) Is there a significant difference between the female basketball student-athletes’ valence towards academic motivation (dependent variable) when analyzing ethnicity (independent variable), based on the student-athletes’ responses to the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ)?

(RQ5) Is there a significant difference between the female basketball student-athletes’ valence towards collegiate athletic motivation (dependent variable) when analyzing ethnicity (independent variable), based on the student-athletes’ responses to the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ)?

(RQ6) Is there a significant difference between the female basketball student-athletes’ valence towards career athletic motivation (dependent variable) when analyzing ethnicity (independent variable), based on the student-athletes’ responses to the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ)?
Hypotheses

According to Salkind (2000), a hypothesis is an educated guess that reflects the statement of the problem that motivates the reason for researching a topic of interest. The research hypotheses for this study referred to the sample of student-athletes and were directly tested. The following hypotheses were written in support of the purpose.

(H1) There is no significant difference between female basketball student-athletes’ valence towards academic motivation when analyzing academic standing.

(H2) There is no significant difference between female basketball student-athletes’ valence towards collegiate athletic motivation when analyzing academic standing.

(H3) There is no significant difference between female basketball student-athletes’ valence towards career athletic motivation when analyzing academic standing.

(H4) There is no significant difference between female basketball student-athletes’ valence towards academic motivation when analyzing ethnicity.

(H5) There is no significant difference between female basketball student-athletes’ valence towards collegiate athletic motivation when analyzing ethnicity.

(H6) There is no significant difference between female basketball student-athletes’ valence towards career athletic motivation when analyzing ethnicity.

Significance of the Study

There was a need to conduct a study that showed a problem among collegiate student-athletes’ motivation towards academics and athletics. It was
important to comprehend assumptions could not be made among all student-
athletes; in which all student-athletes of the same ethnicity group or academic
standing, would exhibit the same motivation towards academics and towards
athletics. For the current study, it was important to focus on one group of
student-athletes that was lacking in the literature. After an exhaustive search,
results indicated there was a dearth of literature analyzing female basketball
student-athletes’ academic and athletic motivation. Researching motivation
towards the college education, collegiate athletics, and career athletics identified
and developed insight into female basketball student-athletes’ motivation. This
research was different from previous research because it assessed female
basketball student-athletes’ valence towards academic motivation, collegiate
athletic motivation, and career athletic motivation based on dimensions of
academic standing and ethnicity. This study also critically analyzed the newly
developed Student-Athletes’ Motivation toward Sports and Academics
Questionnaire (SAMSAQ).

With the emergence of opportunities for women to professionally compete
in the sport of basketball, and the possibility of competing in the Olympics, it
was interesting to determine if female basketball student-athletes’ collegiate
athletic motivation and career athletic motivation revealed a significant
difference when academic standing and ethnicity were analyzed. Due to a
dearth of literature and research on female basketball student-athletes’
motivation, and the opportunity to professionally participate in basketball, there
was a need to assess female basketball student-athletes’ motivation based on the
two aforementioned dimensions. There was also a need to determine if the
SAMSAQ measured the female basketball student-athletes’ academic, collegiate,
and career athletic motivation.
**Delimitations of the Study**

The scope of the study involved researching female basketball student-athletes’ academic motivation, collegiate athletic motivation, and career athletic motivation based on dimensions of academic standing and ethnicity. Atlantic Coast Conference member institutions had 136 female basketball student-athletes, however, the nine institutions that participated in the current study were 111 (N=111). This research investigation was conducted during the 2004–2005 academic school year. The type of instrument used in the study was the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ), a 27 agreement item, 5-point Likert scale questionnaire. Five demographic questions were included for female basketball student-athletes’ responses. There was no special equipment nor training used for the research study. Duration time of this study was two semesters of data collection and analyzing information for research purposes.

**Limitations of the Study**

According to DePoy and Gitlin (1994) bias or limitations refer to an unintended effect of the study. Factors that could unintentionally affect this study were the honesty among the female basketball student-athletes, sampling method, and instrumentation. One limitation was honesty among the student-athletes while completing the SAMSAQ. It was difficult to know if the student-athletes’ completion of the questionnaire was comprised of honest responses to the SAMSAQ.

The other limitation involved the instrument created by Gaston (2002), the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ). This instrument was newly developed and has not been used by many researchers in order to determine student-athletes’ motivation towards collegiate athletics and academics.
Assumptions of the Study

Assumptions for this study were as follows:

1. All female basketball student-athlete respondents would answer the questionnaire items independently.

2. All student-athlete respondents would answer the questionnaire items honestly.

3. All Atlantic Coast Conference member institutions would participate in the research study.

4. All Atlantic Coast Conference female basketball student-athletes would participate in the research study.

Definition of Terms

- **Academic Motivation** – A behavioral force energized, by student-athletes, towards excelling in academic tasks and the academic environment.

- **Academic Standing** – Academic year in collegiate coursework; freshman (first year of collegiate coursework), sophomore (second year of collegiate coursework), junior (third year of collegiate coursework), and senior/graduate (fourth or more year of collegiate coursework).

- **Career Athletic Motivation** – A behavioral force energized, by student-athletes, towards excelling in career athletic tasks and the professional athletic environment.

- **Collegiate Athletic Motivation** – A behavioral force energized, by student-athletes, towards excelling in collegiate athletic tasks and the collegiate environment.

- **Ethnicity** – Cultural characteristics, affiliation, and identification that connects a particular group of people to each other (Kottack, 2002).
• **Motivation** – A force that energies behavior, directs behavior, and sustains behavior. Motivation is behaviorally specific and is used to select the option with the greatest reward or force. (Vroom, 1964).

• **Student-athlete** – “a student whose enrollment was solicited by a member of the athletics staff or other representative of athletics interests with a view toward the student’s ultimate participation in the intercollegiate athletics program.” (NCAA, 2002, p. 69).

**Summary**

Lucas and Lovaglia (2002) stated student-athletes often struggle with academic and social problems during their collegiate experiences. Motivation of some student-athletes is diverted into collegiate athletic and career athletic ambitions. This diverted motivation towards athletics limits educational success and may lead to decreased motivational aspirations towards academic achievement and attainment of a college degree. Athletes occasionally exhibit unrealistic expectations for professional sports careers. Due to these expectations for careers in professional sports, student-athletes may exhibit decreased motivation towards academics and increased motivation towards collegiate athletics and career athletics. Institutional accountability and input from the NCAA is important in order for the academic affairs of student-athletes to be maintained.
The literature review provided support for the rationale and purpose of the study. It supported the purpose of the study by focusing on the following types of studies: (a) academic standing and student-athletes’ motivation, (b) ethnicity and student-athletes’ motivation and (c) other studies relating to student-athletes’ motivation.

Vroom (1964) stated motivation was as a force that energizes behavior, directs behavior, and sustains behavior. Motivation is behaviorally specific and is used to select the option with the greatest reward or force. According to Lapchick (1986) sports and athletic motivation have fractured the focus of academic success at universities. Student-athletes must determine if athletics, academics, or both are their priorities while attempting to complete a college degree. Motivation, focus, and priorities geared towards athletics instead of academics could decrease and dilute the academic welfare and quality of the student-athlete and the academic institution.

There has been scholarly interest in the relationship between collegiate athletics and the academic achievement and motivation of student-athletes (Adler & Adler, 1985, 1987, 1991; Ervin, Saunders, Gillis, & Hogrebe, 1985; Gaston, 2002; Gaston-Gayles, 2004; Figler, 1987; Hood, Craig, & Ferguson, 1992; Miller & Kerr, 2002; Pascarella & Smart, 1991; Shapiro, 1984; Stuart, 1985). Researchers have analyzed the comparison of student-athletes and non-student-athletes’ grades and graduation rates (Figler, 1987; Hood, Craig, & Ferguson, 1992; Shapiro, 1984), grade point averages and graduation rates of student-athletes compared to non-student-athletes (Miller & Kerr, 2002; Pascarella &
Smart, 1991), and control variables, such as high school grade point averages, ACT and SAT scores to analyze student-athlete academic success (Ervin, Saunders, Gillis, & Hogrebe, 1985; Gaston, 2002; Gaston-Gayles, 2004; Hood, Craig, & Ferguson, 1992; Petrie & Stoever, 1997; Ridpath, 2002; Wilson, 1992). Ridpath (2002) found SAT scores and a student-athlete’s motivation towards academics were predictors of academic performance.

Research has shown student-athletes focus more on athletics (Adler & Adler, 1985, 1987, 1991; Miller & Kerr, 2002) than academics. However, other research has shown participation in collegiate athletics had a positive impact and affect on academic motivation (Astin, 1984; Ryan, 1989; Wempe, 2001). The differences in motivational aspirations of the student-athletes will be further discussed.

**Academic Standing, Gender, and Student-Athletes’ Motivation**

For nearly two decades, several studies have been conducted in context of academic standing, gender, and how they relate to intercollegiate athletics and academics. There was an interest of athletic motivation and gender when Tutko and Richards (1976) stated athletic participation was seen as a method to enable a male or female student-athlete to comprehend elements of discipline as well as face mental and physical challenges displayed during competition. The purpose of Tutko and Richards (1976) was to discuss student-athletes’ athletic motivation by focusing on three issues: what made a winner, what was a student-athlete’s attitude towards competition and winning and what were the real reasons for participating in sports? Tutko and Richards (1976) used the Institute for the Study of Athletic Motivation in order to examine student-athletes’ athletic achievement and motivation.

Results of Tutko and Richards (1976) showed male and female student-athletes responded to the three issues by stating a winner was a person who was
talented and achieved his or her full potential. Athletic participation was seen as a method to enable an athlete to comprehend elements of discipline as well as face mental and physical challenges displayed during competition. Tutko and Richards (1976) stated reasons for competing in collegiate sports were the love for the sport, outside forces (to please parents, to impress others, or because it was an expectation), personal reasons (recognition, publicity, popularity, and sense of unity among a team), and motivation.

Following Tutko and Richards (1976), Astin (1984) developed and articulated a theory of student involvement and motivation in the higher education setting. The purpose of the research was to develop a theory of student motivation by using the term ‘involvement’ as a construct. Involvement was referred to as “the amount of physical and psychological energy that a student devotes to the academic experience.” (297). Elements of the theory developed by Astin (1984) stated a highly involved student interacted more with faculty, other students, and studied more. An uninvolved student did not communicate with faculty or other students and rarely studied.

After analyzing these elements of the theory, Astin stated the Student Involvement Theory consisted of five components: (1) investment of physical and mental energy, (2) occurrence on a continuum, (3) qualitative and quantitative elements, (4) student learning and personal development, and (5) effectiveness of educational practices. Astin (1984) stated athletic participation in intercollegiate athletics increased students’ involvement and motivation towards academics, however student-athletes who were “intensely involved” in their sports were academically isolated. In other words, participation in athletics motivated a student-athlete academically and athletically. The more the student-athlete was involved in athletics, regardless of academic standing, their motivation for academics would decline.
In another study, Blann (1985) examined intercollegiate athletic competition and students’ educational and career plans. The purpose of the research was to examine student-athlete relationships to participation in intercollegiate athletics and their abilities to formulate educational and career plans. Participants in the study consisted of two NCAA Division I institutions that gave scholarships to student-athletes and two Division III institutions that did not give scholarships to their student-athletes. A total of 568 (n=568) students were used in the fall 1982 study. There were 303 males and 265 females. From the total numbers for males and females, there were 203 male student-athletes and 147 female student-athletes.

Results showed freshman and sophomore student-athletes at Division I and Division III institutions did not formulate a mature educational plan when compared to freshman and sophomore non-student-athletes. Reasons were due to student-athletes spending more time with athletic training, competition, and practice. The student-athletes who attended these institutions exhibited patterns of academic detachment from their roles of being a student before being an athlete (Adler & Adler, 1985, 1987, 1991; Miller & Kerr, 2002).

Ervin, Saunders, Gillis, and Hogrebe (1985) assessed the relationship between academic performances of male student-athletes and academic entrance criteria. Debates and discussions analyzed the abuse of academically underprepared student-athletes who attended four-year institutions and participated in intercollegiate athletics. Abuses included transcript alterations, student-athletes receiving grades and credits for unattended courses, and preferential grading techniques by faculty members. The sample included football and men’s basketball players in developmental study programs from 1981-1982 and 1982-1983 school years. A total of 49 male student-athletes (n=49) were used for analyzing purposes. From the sample, 25 were Black American
student-athletes and 24 were White American student-athletes. Results showed SAT scores were related to completion of remedial requirements. The lower the scores, the less likely it was for student-athletes to successfully perform academically. Student-athletes participating in football and men’s basketball did not perform well academically. Their focus was more athletically driven than academically motivated.

Adler and Adler (1987) analyzed role conflicts among college student-athletes and the academic role of the student-athletes. The purpose of the study was to focus on 40 Division I men’s basketball student-athletes over a four-year period and analyze the student-athletes’ athletic, academic, and social experiences. The qualitative study documented student-athletes’ academic progress and performance over the four years. Results showed upon entry to the institution, basketball student-athletes were very optimistic about obtaining their college degree. As the male student-athletes progressed in status from freshmen to seniors, their optimisms changed. The student-athletes became more engulfed in their athletic achievements instead of their academic plans and careers.

Ryan (1989) examined the role of athletic participation and how it contributed to a student-athlete’s (1) satisfaction with college, (2) motivation to graduate with a college degree, (3) interpersonal skills, and (4) leadership abilities. This study was a reflection of Astin (1984). The sample of the study consisted of 368 NCAA member institutions and 3,800 students. There were a total of 1,150 students who participated in college athletics. A major finding showed intercollegiate athletics had not contributed to a decline of student-athletes’ academic interests. Athletic involvement was positively associated with the overall satisfaction of the student-athletes’ college experiences. Ryan (1989) also found overall motivation was predicted by five variables: opportunities to talk to professors, being a female student-athlete, student-athletes majoring in
business, attending a public institution, and participating in intercollegiate athletics.

As a follow-up study of Adler and Adler (1987), Meyer (1990) conducted a similar study. The purpose of Meyer (1990) shifted from analyzing male student-athletes (Adler & Adler, 1987) to concentrating on female student-athletes. The same three concepts used by Adler and Adler (1987); athletic, academic, and social experiences, were used by Meyer (1990). The qualitative study contained a sample of former and current Division I female basketball and volleyball student-athletes. Academic results found by Meyer (1990) showed academic inhibitions for female student-athletes were not the same as for male student-athletes. Female student-athletes’ academic priorities and achievements were a priority in their educational aspirations. Athletic, academic, and social conditions led to an increased commitment level of fulfilling their academic goals and career plans.

In addition to the research studies, Adler and Adler (1991) developed a follow-up book of their previous research (1985, 1987) of college athletes and their roles as student-athletes and college students. Adler and Adler (1991) further discussed basketball players and their optimisms of obtaining a degree. They found athletic, social, and classroom experiences of the male student-athletes led to an environment of anti-intellectualism for the basketball student-athletes. This environment caused significant problems for the male student-athletes and inhibited their motivation and successes of performing well academically.

Hood, Craig, and Ferguson (1992) examined participation in collegiate athletics and the effect it had on student-athletes at the University of Iowa. The purpose of the study was to analyze the impact of athletics, part-time employment and other activities on academic achievement. The methodology
consisted of two parts. The first section matched student-athletes with non-student-athletes. The second portion randomly selected samples of undergraduate students for the sample. There were 952 student-athletes, 952 “twins” groups comprised of matching student-athletes with non-student-athletes, and 952 undergraduate students selected from a random sample. 75% of the student-athlete sample was male and 25% was female.

High school achievement, SAT scores and ACT scores were analyzed through survey measurements. Results showed student-athletes had lower records of high school achievement and success than non-student-athletes. Academic tests, SAT scores and ACT scores, for student-athletes were also lower than non-student-athletes’ scores. Results also showed student-athletes achieved lower grade point averages in college than undergraduate students. Overall, the academic achievements of student-athletes were lower than non-student-athletes and other undergraduate students.

Petrie and Stoever (1997) examined academic and nonacademic predictors of female student-athletes’ academic performances. The purpose of the study was to investigate the effects of those predictors on college female athletes. The investigation consisted of two consecutive semesters of female student-athletes divided and researched by freshmen vs. non-freshmen. The sample consisted of 171 female soccer and volleyball student-athletes. The student-athletes were selected from 12 NCAA Division I institutions. From the 171 female student-athletes, 19 were excluded due to incomplete surveys. The final sample consisted of 45 freshmen female student-athletes and 107 non-freshmen female student-athletes. Major findings for academic variables were SAT and ACT scores. These variables were predictors of academic performance for freshmen and non-freshmen female student-athletes. Social support was a nonacademic variable that was related to academic performance for freshmen only.
In another follow-up study of Adler and Adler (1987), Wempe (2001) performed a study. The purpose of Wempe (2001) was to focus on the athletic, academic, and social experiences of female student-athletes. The purpose of this published dissertation was to compare the academic progress of student-athletes during their semesters of competition and non-competition by focusing on athletic, academic, and social experiences of female student-athletes. The sample consisted of 232 student-athlete participants in football, volleyball, softball, and baseball. The sample was taken from The University of South Dakota from 1998 to 2001. Major findings showed female student-athletes performed better academically than males; however, student-athletes’ grade point averages and motivation was higher during their semesters of competition.

Gaston (2002) developed a questionnaire to measure academic and athletic motivation of student-athletes. The purpose of this study was to determine if there was a difference in motivation and ACT scores as it related to gender and profile of sport. Another purpose was to determine how motivation predicted academic performance of the student-athletes. During the development of the questionnaire, three constructs were revealed; academic motivation, athletic motivation, and career athletic motivation. Results showed females had higher academic motivation than male student-athletes. However, male student-athletes had a higher career athletic motivation than female student-athletes.

The purpose of Miller and Kerr (2002) was to also use Adler and Adler (1987) and analyze the athletic, academic, and social experiences of intercollegiate student-athletes. The qualitative study performed by Miller and Kerr (2002) consisted of a sample of senior male and female student-athletes who participated in basketball, volleyball, track and field, and swimming. There were four males and four females; two from team sports and six from individual sports. Findings suggested male and female student-athletes were more
athletically motivated due to intrinsic factors, such as passion for the sport and personal drive. Extrinsic factors, such as athletic scholarships and tuition waivers, were not contributing factors to the student-athletes’ athletic motivation.

In a more recent study, Rishe (2003) analyzed athletic success and its impact on student-athletes. The purpose was to reexamine how athletic success impacted graduate rates of student-athletes while compared to non-student-athletes. The sample of the study consisted of student-athletes from 252 Division I institutions chosen by the researcher. A major finding showed athletic involvement was positively associated with the overall satisfaction of male and female student-athletes’ college experience. The overall motivation towards graduating with a college degree was high as well as the student-athletes’ developmental processes of interpersonal skills and leadership abilities (Astin, 1984; Ryan, 1989).

Summary

Academic standing and gender, as they relate to student-athletes and their relationship to academic motivation, collegiate athletic motivation, and career athletic motivation, has been shown in the literature review. Results regarding student-athletes’ academic standing, gender, and their relationship to academic, collegiate athletic, and career athletic motivation varied among researchers. Some researchers found female student-athletes were more academically motivated and performed better academically than male student-athletes (Gaston, 2002; Meyer, 2000; Wempe, 2001). Ryan (1989) determined athletics did not contribute to a decline in academic motivation, however, athletic involvement had a positive association with academic motivation among male and female student-athletes. Although Wempe (2001) found female student-athletes were more academically motivated than male student-athletes, results
also showed both male and female student-athletes’ academic motivation and grade point averages were higher during semesters of athletic competition.

Contradictory findings from other researchers were noted. Adler and Adler (1987; 1991) found academic motivation and success among male student-athletes was inhibited due to athletic, academic, and social experiences. Freshman and sophomore student-athletes were more academically motivated, however as they became junior and seniors, their academic motivation decreased and their athletic motivation increased. The follow-up study performed by Meyer (1990) revealed female student-athletes were more academically motivated when analyzing athletic, academic, and social experiences. Other researchers showed athletic motivation was higher among male student-athletes, noting female student-athletes are more academically motivated (Hood, Craig, & Ferguson, 1992; Gaston, 2002; Miller & Kerr, 2002). These researchers found athletic motivation was due to intrinsic factors determined by male and female student-athletes (Miller & Kerr, 2002) and male student-athletes’ career athletic motivation was higher than female student-athletes (Gaston, 2002).

This section of the literature review gave support to research questions one, two, and three and hypotheses one, two, and three. The following represents how the literature review supported the research questions and hypotheses based on the female student-athletes’ academic standing.

(RQ1): Is there a significant difference between female basketball student-athletes’ valence towards academic motivation when analyzing academic standing?

Research question was based on the findings of Meyer (1990).
(RQ2): Is there a significant difference between female basketball student-athletes’ valence towards collegiate athletic motivation when analyzing academic standing?

Research question two was based on results by Miller and Kerr (2002).

(RQ3): Is there a significant difference between female basketball student-athletes’ valence towards career athletic motivation when analyzing academic standing?

Research question three was based on the works of Wempe (2001). This literature was important because it showed how academic standing and gender were related to student-athletes’ motivation.

**Ethnicity and Student-Athletes’ Motivation**

Several studies have been conducted in context of ethnicity and its relationship to intercollegiate athletics and academics. The purpose of Purdy, Eitzen, and Hufnagel (1982) was to evaluate the educational attainment of collegiate student-athletes. The 10-year study researched over two thousand student-athletes at a university located in the west. Findings revealed student-athletes’ academic achievements were limited, student-athletes who had scholarships exhibited poor academic performance, African American student-athletes had poor academic performance, and student-athletes participating in football and basketball did not perform well academically. Possible explanations for the findings were scholarship student-athletes exhibited poor academic performance because they felt more like an employee for the university instead of a student, thus they had an obligation to athletics before academics.

Shapiro (1984) examined graduation rates of male student-athletes at Michigan State University. The sample consisted of 1,642 football, basketball, baseball, and hockey student-athletes. Results showed graduation rates for these sports decreased over the years. Findings also revealed Black student-athletes
had lower graduation rates than White student-athletes, performed less academically than White student-athletes, and football student-athletes performed less academically than other student-athletes participating in other sports.

Kennedy and Dimick (1987) identified career maturity and professional sports expectations of collegiate football and basketball players. A sample of 181 students (no football or basketball players) was used. From the sample, there were 101 women and 80 males. Professional sport expectations of the student athletes used another sample of 122 student athletes (n=106 football, n=16 basketball). There were a total of 84 (69%) White American student-athletes and 38 (31%) Black American student-athletes.

Results showed student-athletes who competed in revenue-producing sports had lower levels of career maturity than non-athletes. Student-athletes who were negatively affected by participating in collegiate athletics tended to be male, scholarship athletes in revenue-producing sports. Black American student-athletes were also negatively affected by collegiate athletic participation. When compared to non-athletes, Black American student-athletes were more athletically motivated and were not academically mature. Findings revealed student-athletes exhibited a lack of achievement, exhibited a disinterest in their education, were unmotivated personally and academically, and failed as a student. The student-athletes were less prepared for college and had lower admission scores than non-athletes.

The purpose of the study performed by Pascarella and Smart (1991) was to analyze intercollegiate athletic participation and the impact it had on the education of White and Black male student-athletes. The study used the seminal status attainment model and the theoretical model of the impact of college on student development was used as conceptual frameworks. The sample consisted
of 379 colleges and universities and the student-athletes completed the CIRP (Cooperative Institutional Research Program) surveys. Results showed there was a significant difference between ethnicity and levels of academic motivation and career development. Results also showed student-athletes competing in football and basketball had lower and decreased levels of academic motivation and career development than non-student-athletes.

The purpose of the Young and Sowa (1992) study was to analyze non-cognitive and cognitive variables as they related to academic progress and potential of Black student-athletes. The sample, which was taken from a Division I predominately White institution, consisted of 136 Black student-athletes who were enrolled in college courses for at least 12 credit hours (full-time student athletes) and were admitted as freshman between the Fall semester of 1984 and the Fall semester of 1988. There were 10 men’s sports and 9 women’s sports used for the study.

The NCQ (Non-Cognitive Questionnaire) was used to collect data. The NCQ was tested for reliability and validity by testing 1,529 Black and White college students. Cognitive variables determined by demographic data and official university transcripts were used in the methodology of the study. Non-cognitive variables measured three elements: self-concept relating to college expectations, self-appraisal regarding academic abilities, and comprehension and ability to deal with racism. Results showed there was no significant difference and cognitive variables alone did not consistently predict Black student-athletes academic potential.

The purpose of Synder (1996) was to compare levels of academic motivation among African American and Anglo student-athletes participating in collegiate athletics. The purpose was based on previous literature that determined football, baseball, and basketball student-athletes had low
graduation rates and low academic motivation. These student-athletes participated in revenue-producing sports. After performing a quantitative study, results revealed significant differences in athletic and academic motivation when ethnicity and level of athletic competition were analyzed. African American student-athletes were more athletically motivated than Anglo student-athletes.

Berry (2001) researched African American male student-athletes as athletic commodities. The purpose of the research was to investigate the attitudes, experiences, and perceptions of exploitation of African American male college athletes. Discussions of Dexter Manley, a former student at Oklahoma State University and a professional athlete for the Washington Redskins, and Kevin Ross, a former basketball player at Creighton University, revealed these African American student-athletes had neither graduated nor learned to read during their collegiate years. Research questions revolved around the exploitation of student-athletes in revenue producing sports of African Americans.

Findings revealed African American male student-athletes felt they were more exploited than others. Research showed more academic focus and support had been given to African American student-athletes during their time of eligibility. However, after the eligibility of the African American student-athlete expired, some of those student-athletes became disconnected from the athletic and academic departments.

The purpose of Hyatt (2001) was to focus on the commitment and persistence to attain a college degree among African American student-athletes who participated in football and basketball. Subjects were African American student-athletes participating in basketball and football. The researcher performed a qualitative study by conducting in-depth oral interviews. The interviews consisted of questions relating to level of commitment to collegiate athletics and attainment of a college degree during the following: before
entering college, during college, and after their collegiate experience was over. Variables included career goals and maturity, role engulfment, discrimination, academic readiness, and academic integration. Findings revealed African American student-athletes exhibited a higher level of commitment towards their athletic goals after college and a low level of commitment towards graduating with a college degree.

Gaston-Gayles (2004) examined student-athletes’ academic and athletic motivation at a Division IA university by predicting academic performance. The sample consisted of 211 student-athletes participating in eight team sports. Results revealed ethnicity, ACT scores, and academic motivation were significant, whereas Caucasian student-athletes exhibited higher grade point averages than minority student-athletes.

Summary

Ethnicity of student-athletes and its relationship to academic motivation, collegiate athletic motivation, and career athletic motivation has also been shown in the literature review. Results regarding student-athletes’ ethnicity and its relationship to academic, collegiate athletic, and career athletic motivation was consistent among the researchers. Shapiro (1984) and Stuart (1985) found African American and Caucasian American athletes had low graduation rates and academic preparations were significantly different than African American and Caucasian American non-athletes.

Athletic motivation and career athletic motivation findings were also similar among the researchers. Pascarella and Smart (1991) found Black and White male student-athletes had decreased levels of academic motivation due to athletic aspirations. Hyatt (2001) also found these student-athletes had increased levels of career athletic motivation and decreased motivation towards attaining a college degree.
This section of the literature review gave support to research questions four, five, and six. The following represents how the literature review supported the research questions based on the primary dimension of ethnicity:

(RQ4): Is there a significant difference between female basketball student-athletes’ valence towards academic motivation when analyzing ethnicity.

Research question four was based on the findings of Young and Sowa (1992).

(RQ5): Is there a significant difference between female basketball student-athletes’ valence towards collegiate athletic motivation when analyzing ethnicity?

Research question five was based on the findings of Pascarella and Smart (1991).

(RQ6): Is there a significant difference between female basketball student-athletes’ valence towards career athletic motivation when analyzing ethnicity?

Research question six was based on the findings of Snyder (1996). This literature was important because it showed how the primary dimension of ethnicity was related to student-athletes’ motivation.

**Other Studies Relating to Student-Athletes’ Motivation**

In addition to the two aforementioned, there were other relevant studies relating to athlete motivation towards college athletics and academics. Based on the review, there were studies involving student-athlete detachment (Adler & Adler, 1985), role conflict (Adler & Adler, 1991; Miller & Kerr, 2002), and motivation based on the type of sport the student-athlete participated in.

Most studies showed a negative relationship between athletic participation and academic performance (Blann, 1985; Bowen, 2003; Miller & Kerr, 2002; Nyquist, 1979; Stuart, 1985; Young & Sowa, 1992). Athletes were under-prepared for the academic demands of the institutions and uninterested in
their coursework. They came to college to advance their athletic careers rather than their academic aspirations. Research has shown student-athletes focused more on athletics (Adler & Adler, 1985, 1987, 1991; Miller & Kerr, 2002) than academics.

Student-athlete detachment. Although most student-athletes enter colleges and universities with optimistic and idealistic goals, attitudes, and aspirations regarding their academic plans and careers (Adler and Adler, 1985), athletic, social, and classroom experiences have led student-athletes to become detached from their previous academic successes and optimisms after they begin their educational experiences.

Adler and Adler (1985) examined relationships between athletic participation and academic performance. The purpose of the study was to analyze academic performance of college athletes at Division I programs. Major findings revealed a student-athlete’s involvement in intercollegiate athletics led to academic detachment. Winning athletic programs whose emphasis was more athletically oriented undermined the student-athletes’ attainment of academic goals and their aspirations. Academic detachment was a result of adjustments the student-athletes had to overcome.

Detachment from academics occurred as a result of abandonment of earlier academic aspirations and expectations of the student-athletes. The detachment led to inferior academic performance and decreased motivation to excel academically. More emphasis was placed on athletic achievement as the student-athletes’ role of being a student changed to being a successful collegiate athlete.

Role conflict. According to Adler and Adler (1991) roles are based on the different activities an individual would pursue when he or she followed the expectations of a position. Student-athletes identified themselves as a student
and an athlete, however; they adhered to each role differently. They may have identified themselves as a student first and then an athlete. Others may have considered their priority role to be an athlete first and then a student. Regardless of the two, student-athletes determined which role was considered more of a priority in their lives. The decisions would lead to role conflict and role overload.

Role conflict and overload occurred due to dual roles the student-athlete had to compromise with; the role of being a student and the role of being an athlete. Adler and Adler (1991) discussed how student-athletes must deal with role conflict. Role conflict occurred when student-athletes experienced role and identity problems. The role of a student was different than the role of an athlete. Student-athletes had to focus on academic roles, athletic roles, and social roles. Research showed a student-athlete focused on the academic role when he or she first entered college. The student-athlete believed he or she had necessary academic skills to successfully complete college. Limited value was put into this role unless the student-athlete’s motivation was academic success (Adler & Adler, 1985, 1987, 1991; Astin, 1984; Clow, 2000; Ryan, 1989; Wempe, 2001).

The purpose of Peters (2000) was to analyze the role of athletic participation and its relationship to student success. The sample consisted of 1,530 student-athletes from Division III institutions. The student-athletes’ grade point averages were used to analyze in-season and out-of-season academic progress. Findings showed with the exception of men’s football, participation in athletics had no relationship with academic performance and their roles of a student did not change as the student-athletes competed in their sports.

According to the published dissertation by Clow (2000), characteristics of student-athletes were: anticipation of professional athletic careers, lack of academic preparation, and false academic expectations. The purpose of this
research was to analyze student-athletes’ perceived value of the college education. Findings suggested student-athletes’ role of an athlete was more demanding and took precedence and priority. Academic roles of the student-athletes were minimized due to their priorities and demanding emphasis they put on intercollegiate athletics. Pressures were associated with student-athletes’ athletic roles, especially if they were key players. Social roles were displayed when student-athletes, who were expected to play on the professional level, had a role of portraying that of a professional athlete instead of a college student-athlete. This role caused limited value and motivation towards academics.

Role conflict was not the only factor associated with student-athlete academic and athletic development. Role domination and role abandonment or detachment among student-athletes was also noticed (Adler & Adler, 1985, 1987, 1991; Miller & Kerr, 2002). Role domination was defined as “the process by which athletes became engulfed in their athletic role as it ascended to a position of prominence” (Adler & Adler, 1991, p. 27) while role abandonment occurred when “they progressively detached themselves from their investment in other areas and let go of alternative goals or priorities (Adler & Adler, 1991, p. 28).

A student-athlete’s role domination may be present when he or she placed his or her highest priority and precedence on athletics instead of academics or academics over athletics.

Motivation and type of sport. Revenue-producing sports have been found to decrease a student-athlete’s academic motivation and success (Bowen, 2003; Ervin, Saunders, Gillis, & Hogrebe, 1985; Kennedy & Dimick, 1987; Pascarella & Smart, 1991; Suggs, 2003; Underwood, 1984). Revenue-producing sports and programs decrease the level of student-athlete career maturity and academic accomplishments. A student-athlete’s primary focus became athletics instead of academics.
The purpose of Shapiro (1984) was to examine graduation rates of student-athletes at Michigan State University. The sample consisted of 1,642 football, basketball, baseball, and hockey student-athletes. These student-athletes were freshmen between the fall of 1950 and the fall of 1974. Results showed graduation rates for the student-athletes participating in these sports decreased over the years. Collegiate athletics influenced graduation rates and education attainment of student-athletes participating in football, basketball, baseball, and hockey.

Underwood (1984) was a secondary source that stated revenue-producing sports, such as basketball, football, and baseball, were considered to be sports student-athletes perceived as opportunities for professional athletic development during competitions. This led to the student-athletes’ motivation being more athletically motivated than academically motivated.

Adler and Adler (1987, 1991) researched 40 Division I men’s basketball student-athletes and analyzed them over a four-year period. The purpose of the qualitative study was to document male student-athletes’ academic progresses and performances during their four years at their respective institutions. The research showed upon entry to the institution, basketball student-athletes were very optimistic about obtaining their college degree. As the basketball student-athletes progressed in status from freshmen to seniors, their optimism changed. They became more engulfed in their athletic achievements instead of their academic plans and careers. Athletic, social, and classroom experiences created an environment of anti-intellectualism for the basketball student-athletes. The environment caused significant problems for these athletes and inhibited their motivation and successes of performing well academically. Educational goals were no longer a priority of the student-athletes as their collegiate years came to
an end. Their focus shifted from academic progress and motivation to athletic achievement and success.

In *The Economist* (1989) information regarding graduation rates was identified. Congress’s General Accounting Office compiled figures to show the graduation rates of university football and basketball sports and those student-athletes. Of the two sports, 1/3 of 97 basketball programs graduated their student-athletes. This is a percentage of less than 20%. Less than 40% of football players graduated from their respective universities and colleges. Reports showed athletes participating in other sports tended to graduate at a higher rate than men’s basketball and football student-athletes.

Sperber (1990) stated institutions needed to put the ‘student’ back in ‘student-athlete.’ The purpose of the book was to analyze college sports and the issues associated with student-athletes. Sperber (1990) compared problems associated with the athletic department and the university. In 1983, a qualitative study was conducted at Iowa State. The academic counselor stated 10% of the school’s incoming football and men’s basketball student-athletes were “functionally illiterate.” This meant the student-athlete’s reading was below fourth-grade level. 95% of the student-athletes read below tenth-grade level. Findings revealed motivational factors of these student-athletes were geared towards athletics instead of academics because they were unable to successfully complete a college education with reading skills below a tenth-grade level.

The purpose of Bailey and Littleton (1991) was to research athletics and academics in the college setting and its affects on student-athletes. Findings suggested student-athletes who participated in collegiate basketball and football programs tended to be more motivated towards athletics instead of academics. These misplaced values caused problems for academic institutions. The student-
athletes struggled to attain a college degree, especially if they did not make it to the next level of professional competition.

Summary

The other related studies have shown student-athlete detachment, role conflict, and type of sport the student-athlete participated in relate to the motivational aspirations of the student-athletes. Some student-athletes became more motivated based on the priority of their roles of an athlete instead of a student (Adler & Adler, 1991). This detachment may lead to conflicts among the roles the student-athlete must adhere to. Athletically motivated student-athletes focused on their role of an athlete more than their role of a student, which may have led to decreased academic motivation (Clow, 2000; Peters, 2000). Decreased motivation was also found among student-athletes participating in revenue-producing sports (Bowen, 2003; Suggs, 2003). This literature was also important because it demonstrated student-athletes’ motivation based on student-athlete detachment, role conflict, and type of sport the student-athlete participated in.

Critical Analysis

The aforementioned literature discussed student-athletes’ motivation towards athletics, academics, or career endeavors. Some researchers found similar findings regarding student-athletes’ motivation (Adler & Adler, 1985, 1987, 1991; Miller & Kerr, 2002) while others found contradicting results from those researchers (Astin, 1984; Ryan, 1989; Wempe, 2001). This research study was different from the previous studies because the researcher determined Atlantic Coast Conference female basketball student-athletes’ academic motivation, collegiate athletic motivation, and career athletic motivation. Their motivation was examined by focusing on dimensions of academic standing and ethnicity. Previous researchers have not accomplished this aspect of researching female basketball student-athletes’ motivation, therefore this study was unique.
CHAPTER 3

METHOD

The purpose of the current study was to (a) determine if there was a significant difference between female student-athletes’ academic, collegiate athletic, and career athletic motivation when analyzing academic standing, (b) to determine if there was a significant difference between female student-athletes’ academic, collegiate athletic, and career athletic motivation when analyzing ethnicity, and (c) to modify, validate, and critique the newly developed Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ). This chapter will discuss the research design, population and sample size, data collection procedures, a description of the SAMSAQ, psychometric measurements detailing content and face validity, reliability, and significance level, the pilot study, and data analysis procedures.

Research Design

The current study was designed as a non-probability cross-sectional quantitative descriptive study. A cross-sectional study is defined as an examination of a phenomenon that occurs one point in time (Depoy & Gitlin, 1994). For the current study, data was collected at one point in time from female basketball student-athletes (N=111) participating in the Atlantic Coast Conference (ACC). The female basketball student-athletes were classified by academic standing and ethnicity (independent variables) and how they responded to athletically motivated, career athletically motivated, and academically motivated items (dependent variables) from the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ). The independent variables were not manipulated and the design quantified
phenomena that occurred naturally in order to determine a statistical analysis. The researcher did not possess control over independent variables used in the study.

**Population**

The target population for this investigation was all female basketball student-athletes enrolled in the eleven member institutions of the Atlantic Coast Conference during the 2004 – 2005 academic school year. According to DePoy and Gitlin (1994) individuals or a group of people who have the same set of characteristics defined by the researcher is a population. According to each of the Directors of Women’s Basketball Operations for each institution, there were 136 student-athletes participating on Atlantic Coast Conference Women’s Basketball teams. Of the eleven institutions and 111 female basketball student-athletes (N=111) contacted, nine of such institutions returned completed surveys from 100 of the respondents (n=100), which yielded a 90% response rate.

Respondents from the nine Atlantic Coast Conference institutions fell into the following categories: 35.0% of the respondents identified themselves as Caucasian, 59.0% as African American and 6.0% as another ethnicity group. 100.0% of the respondents received a full basketball scholarship while 0.0% received partial basketball scholarships. Freshmen accounted for 25.0% of the respondents, sophomores for 22.0%, juniors for 36.0%, seniors for 15.0% and graduates for 2.0%.

**Data Collection Procedures**

Data collection from each institution occurred from January 2005 until April 2005. Before data could be mailed to the respective institutions, the current study was approved by the Human Subjects Committee’s Institutional Review Board (IRB) after the researcher completed an IRB application and mailed it via campus mail to the committee for approval. After approval was granted from
the IRB committee, the researcher contacted the Directors of Compliance for each Atlantic Coast Conference institution, by telephone, to discuss the purpose of the study, questionnaire items, and sampling procedures before the SAMSAQ would be distributed to the respondents. After the researcher introduced herself to the each Director of Compliance, she continued the conversation with in-depth discussions involving informed consent forms, anonymity of the student-athletes, voluntary participation of the student-athletes, and the most convenient time for completion of the SAMSAQ.

Permission was obtained from the Directors of Compliance to continue with the research. Each Director of Compliance provided contact names and phone numbers for the Directors of Women’s Basketball Operations for their respective institution. The researcher contacted each Director of Women’s Basketball Operations via telephone, introduced herself, and discussed the purpose of the study, questionnaire items, and sampling procedures.

After discussions of the study were complete, the researcher obtained mailing addresses and contact names for mailing the instrument to the female basketball student-athletes. The SAMSAQ and a memo were mailed to each Director of Women’s Basketball Operations using the U.S. Postal mailing system. Individual Directors of Women’s Basketball Operations determined the best time to distribute and collect the SAMSAQ; prior to team meetings, during team practices, or after team practices. Each student-athlete was told the study was voluntary and information would be kept confidential by the researcher. Respondents to the SAMSAQ were reminded not to include their names, email address, or contact information on any section of the questionnaire.

Student-athletes completing the questionnaire were given a writing utensil and the SAMSAQ. Completion of the survey took approximately 10 minutes. After the student-athletes completed the SAMSAQ, they returned the
instrument and writing utensils to the Director of Women’s Basketball Operations. Each Director of Women’s Basketball Operations put the completed questionnaires in the prepaid self-addressed return envelope provided by the researcher. The completed instruments were sent back to the researcher using the U.S. Postal mail system.

Follow-up phone calls were made to the Director of Women’s Basketball Operations in order to remind them to send the surveys back to the researcher as soon as possible. One director emailed the researcher to ensure the surveys would be completed by the female basketball student-athletes’ during a team meeting. Another director contacted the researcher via phone and communicated that the surveys were mailed using the U. S. Postal service mailing system. The researcher obtained the nine survey packets from the nine ACC institutions that participated in the research study.

Two academic institutions located in North Carolina did not participate in the study. One institution’s Director of Compliance stated the research study could not be conducted due to a policy by the institution. The university did not allow non-graduate students to conduct research involving their student-athletes. Only graduate students attended the aforementioned institution were allowed to use student-athletes in their empirical research study. The other university did not return six phone calls that were made over a six-week time frame.

**Instrumentation**

According to DePoy and Gitlin (1994) a cross-sectional study is an examination of a phenomenon at one point of time. For this study, a cross-sectional study was used by obtaining a sample of female basketball student-athletes and examining the phenomena of student-athletes’ academic, collegiate athletic, and career athletic motivation during the 2004-2005 academic school...
year. The Student Athletes Motivation toward Sports and Academics Questionnaire (SAMSAQ), a questionnaire developed by Gaston (2002), was used to measure student-athletes’ motivation. The 6-point Likert type questionnaire ranged from VSD (very strongly disagree), SD (strongly disagree), D (disagree), A (agree), SA (strongly agree), to VSA (very strongly agree).

The instrument for measuring student-athletes’ motivation, the SAMSAQ, was originally comprised of a 30-item questionnaire designed and validated by Gaston (2002). The purpose of the SAMSAQ was developed in order to determine student-athletes’ athletic and academic motivation in the collegiate setting. Gaston (2002) based the creation of the instrument on an essential research question; would the SAMSAQ measure athletic motivation and academic motivation and was the SAMSAQ reliable? The development of the instrument was contingent on two assumptions; the first assumption being the instrument would measure student-athletes’ athletic and academic motivation and the final assumption was the instrument would be reliable in measuring student-athletes’ athletic and academic motivation.

Gaston (2002) found three items needed to be removed from the SAMSAQ due to low reliability. Those items were agreement item 6, agreement item 16, and agreement item 24 (Appendix E). From the questionnaire, Gaston determined there were three constructs; academic motivation (AM), student athletic motivation (SAM), and career athletic motivation (CAM). This was determined by using Exploratory Factor Analysis (EFA). After exploratory factor analysis was used, results showed two agreement items were considered to measure both academic motivation and athletic motivation. Those items are noted with an asterisk (*) (Appendix E).

Demographic information included type of sport the student-athlete participated in, gender of the student-athletes, if the student-athlete received an
athletic scholarship, level of education for the student-athletes’ parents, ethnicity, and date of birth. Appendix E. represents the original SAMSAQ developed by Gaston (2002).

**Modified Student-Athletes’ Motivation toward Sports and Academics Questionnaire.** The instrument used for this study was adapted from a survey used in a similar study (Gaston, 2002). The purpose of using this instrument was to determine the female basketball student-athletes’ academic motivation, collegiate athletic motivation, and career athletic motivation. Another purpose was to validate the existing instrument developed by Gaston (2002). The SAMSAQ was used for data collection purposes and consisted of a self-administered, pencil and paper questionnaire. The instrument was designed to collect information on factors that academically and athletically motivated female basketball student-athletes of an NCAA Division I Athletics Conference, the Atlantic Coast Conference. Quantitative data was also collected to describe the sample of basketball student-athletes who responded.

The instrument for the current study was comprised of two sections. Section I was designed to assess the student-athletes’ academic, collegiate athletic, and career athletic motivation using a 27-item 5-point Likert scaled agreement items. Section II was designed to obtain demographic responses from the female basketball student-athletes. This section included five demographic information questions.

For the current study, the SAMSAQ was modified by the researcher in order to measure the academic, collegiate athletic, and career athletic motivation of intercollegiate female basketball student-athletes. The original SAMSAQ (Gaston, 2002) was comprised of a 6-point Likert type questionnaire, whereas the current SAMSAQ was a numeric 5-point Likert scale questionnaire. According to Salkind (2000) and Polit and Beck (2003), a Likert scale is an attitude scale that
includes statements or viewpoints a respondent will agree to or disagree with. The level of agreement and disagreement is based on a five-point scale. Salkind (2000) stated three steps were involved in the development process of a Likert scale.

First, statements that express an opinion of the developer are written. Second, the developer decides which opinions or statements to select. Finally, the developer lists each statement or opinion. To the right of the opinions are sections for the respondent to indicate his or her level of agreement (Salkind, 2000). Indications are made based on assigned points that are used to determine an average of the opinion or statement. Salkind (2000) stated, “the rule is that favorable items are rated 1 through 5, with 5 representing Strongly Agree” (133). McMillan and Schumacher (2001) agreed with Salkind (2000) stating a true Likert scale includes Strongly Agree (SA), Agree (A), Undecided (U) or Neutral (N), Disagree (D), and Strongly Disagree (SD). It is better to include a neutral or undecided category because it allows the respondent to truthfully determine if he or she is ‘undecided’ about the opinion or if he or she has a ‘neutral’ response to the opinion (Polit and Beck, 2003). Based on the aforementioned researchers, the original SAMSAQ was modified from the 6-point Likert type scale to the 5-point Likert type agreement item scale.

Demographic information for this study was slightly changed from the original SAMSAQ. For the purpose of this study, “date of birth” of the student-athlete was eliminated. This decision was made due to confidentiality issues and concerns for the student-athletes. The researcher added the question, “What is your academic standing?” This question was included in order to determine the academic year of the respondents to the questionnaire. The following represented agreement items that were used to measure student-athletes’
academic, collegiate athletic, and career athletic motivation and demographic questions:

**Academic motivation.** Of the 27-item questionnaire, questions assessing student-athletes’ motivation toward academics were 16 agreement items. These items measured the degree to which student-athletes’ were motivated to accomplish their academic goals. Figure 8 represents items from the SAMSAQ that measured academic motivation.

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**Academically Motivated Items**

1. I am confident that I can achieve a high grade point average this year (3.0 or above).
3. It is important to me to learn what is taught in my courses.
4. I am willing to put in the time to earn excellent grades in my courses.
5. The most important reason why I am in school is to play my sport.
6. I will be able to use what is taught in my courses in different aspects of my life outside of school.
9. I chose (or will choose) my major because it is something I am interested in as a career.
10. Earning a high grade point average (3.0 or above) is not an important goal for me this year.
15. I get more satisfaction from earning an “A” in a course toward my Major than winning a game in my sport.
16. During the years I compete in my sport, completing a college degree is not a goal for me.
19. I have some doubt about my ability to earn high grades in some of my courses.
21. I am confident that I can earn a college degree.
22. I get more satisfaction from winning a game in my sport than from getting an “A” in a course towards my major.
23. It is not important for me to perform better than other students in my courses.
25. The content of most of my courses is interesting to me.
26. The most important reason why I am in school is to earn a degree.
27. It is not worth the effort to earn excellent grades in my courses.

*Figure 8* Academically Motivated Items from the SAMSAQ
**Collegiate Athletic Motivation.** Of the 27-item questionnaire, questions assessing student-athletes’ motivation toward athletics were eight agreement items. These items measured the degree to which student-athletes’ were motivated to accomplish their collegiate athletic goals. Figure 9 represents items from the SAMSAQ that measured collegiate athletic motivation.

<table>
<thead>
<tr>
<th>Collegiate Athletically Motivated Items</th>
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<tbody>
<tr>
<td>2. Achieving a high level of performance in my sport is an important goal for me this year.</td>
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<tr>
<td>11. It is important to me to learn the skills and strategies taught by my coaches.</td>
</tr>
<tr>
<td>12. It is important to me to do better than other athletes in my sport.</td>
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<tr>
<td>13. The time I spend engaged in my sport is enjoyable to me.</td>
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<tr>
<td>14. It is worth the effort to be an exceptional athlete in my sport.</td>
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<tr>
<td>15. I get more satisfaction from earning an “A” in a course toward my major than winning a game in my sport.</td>
</tr>
<tr>
<td>22. I get more satisfaction from winning a game in my sport than from getting an “A” in a course toward my major.</td>
</tr>
<tr>
<td>24. I am willing to put in the time to be outstanding in my sport.</td>
</tr>
</tbody>
</table>

*Figure 9 Collegiate Athletically Motivated Items from the SAMSAQ*

**Career Athletic Motivation.** Of the 27-item questionnaire, questions assessing student-athletes’ motivation toward athletics were five agreement items. These items measured the degree to which student-athletes’ were motivated to accomplish their career athletic goals. Figure 10 represents items from the SAMSAQ that measured career athletic motivation.
**Career Athletically Motivated Items**

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<tr>
<td>7.</td>
<td>I chose to play my sport because it is something I am interested in as a career.</td>
</tr>
<tr>
<td>8.</td>
<td>I have some doubt about my ability to be a star athlete on my team.</td>
</tr>
<tr>
<td>17.</td>
<td>My goal is to make it to the professional level of the Olympics in my sport.</td>
</tr>
<tr>
<td>18.</td>
<td>I am confident that I can make it to an elite level in my sport</td>
</tr>
<tr>
<td></td>
<td>(Professional/Olympic)</td>
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**Figure 10** Career Athletically Motivated Items from the SAMSAQ

**Type of sport.** Each student-athlete was asked “Which varsity sport do you participate in?” Student-athletes responded by writing the sport they participated in during the 2004-2005 academic school year.

**Athletic scholarship.** Each student-athlete was asked “Are you on an athletic scholarship?” Student-athletes responded by checking yes or no. The next question regarding athletic scholarship was “If yes, is your athletic scholarship full or partial?” Student-athletes responded by checking full or partial. Finally, student-athletes were asked, “Are you playing this year?” Student-athletes responded by checking yes or no.

**Parent’s level of education.** Each student-athlete was asked to check the highest level of education completed for her mother and father. Student-athletes responded by checking one of the following: some high school, high school, some college, college, or graduate school.

**Ethnicity.** Each student-athlete was asked to identify their ethnicity by checking the corresponding item that represented their ethnicity. Student-athletes chose from American Indian, Asian/Pacific Islander, Black/African American, Hispanic, White/Caucasian, or other. If a student-athlete chose other, they responded by specifying their ethnicity.
Academic standing. Each student-athlete was asked, “What is your academic standing?” Responses were based on student-athletes checking the corresponding responses of freshman, sophomore, junior, senior, graduate, or other. If a student-athlete chose other, they responded by specifying their academic standing.

Psychometric Measurement.

Polit and Beck (2003) defined psychometric assessment as measuring the quality of an instrument. Quality is determined by the instrument’s validity and reliability. Validity is assessed by determining if the instrument measures what it is intended to measure (Kerlinger & Lee, 2000; Polit & Beck, 2003). There are different methods used to determine validity: content validity, criterion related validity, construct validity, and face validity. For this study, the researcher chose to use content validity and face validity. Content validity is defined as “the degree to which the items in an instrument adequately represent the universe of content for the concept being measured” (Polit & Beck, 2003, p. 714) or the degree to which a measure relates to other variables as expected within a concept (Babbie, 2001)

The SAMSAQ was analyzed by a panel of experts to determine if the questionnaire items represented academic motivation, collegiate athletic motivation, and career athletic motivation of student-athletes. Face validity was also used to determine if the instrument looked as though it measured the desired constructs (Kerlinger & Lee, 2000). Desired constructs of the SAMSAQ instrument were academic motivation, collegiate athletic motivation, and career athletic motivation.

Content and Face Validity. Content and face validity were established by asking an NCAA DI Assistant Athletic Director, two Doctoral students, two NCAA DI Athletic and Academic Support Staff members, two NCAA DI
coaches, and two collegiate professors to critique, analyze, and validate the SAMSAQ. Each individual analyzed the instrument for grammatical errors, wording of survey items, questions relating to motivation of athletics and questions relating to motivation of academics. Overall, each individual determined the SAMSAQ measured student-athletes’ academic motivation, athletic motivation, and career athletic motivation.

**Reliability.** Cronbach’s alpha was used to determine reliability of three motivation constructs by determining the extent that the items of the SAMSAQ measured the desired constructs. Values between 0 and +1 were used to determine reliability using Cronbach’s alpha. According to DePoy and Gitlin (1994) Cronbach’s alpha states a correlation of .80 is interpreted as “adequate reliability.” However, Nunnally (1978) and Nunnally and Bernstein (1994) stated a correlation of .70 is sufficient for newly developed and exploratory instruments. A correlation of .70 infers a consistency of 70% and the possibility of an error occurring 30% of the time. A correlation as close to +1 indicates more consistency and minimal error.

Internal consistency and reliability of the three constructs; academic motivation, collegiate athletic motivation, and career athletic motivation, were established using Cronbach’s alpha. Academic motivation had a reliability coefficient of .84 while career athletic motivation had a correlation of .77. The internal consistency and reliability for collegiate athletic motivation was .63. These correlations differed from Gaston (2002). Table 1 represents reliability for the three constructs that was determined by Gaston (2002) and the current researcher.
Table 1.

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Construct</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Student athlete motivation</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td>Career athletic motivation</td>
<td>.84</td>
</tr>
<tr>
<td>Willis (2005)</td>
<td>Academic motivation</td>
<td>.84</td>
</tr>
<tr>
<td></td>
<td>Collegiate athletic motivation</td>
<td>.63</td>
</tr>
<tr>
<td></td>
<td>Career athletic motivation</td>
<td>.77</td>
</tr>
</tbody>
</table>

The researcher observed Cronbach’s alpha for collegiate athletic motivation (.63) was lower than .70. Although this represented a 63% level of consistency, the researcher determined it was beneficial to discuss the results and analyze exploratory factor analysis to determine if the construct should be omitted.

Cronbach’s alpha was not determined for the overall SAMSAQ instrument. This action was taken due to reversed items that were noted during reliability analysis and testing. A total of nine items had reversed Likert scales. For analysis purposes, these items were reversed in order to be consistent with the remaining agreement items. When reliability was tested for the 16 academic motivation items, seven items had to be reversed. Only one item was reversed for the eight collegiate athletic motivation and five career athletic motivation items. Appendix F represents the reliability analysis for the reversed items.

Level of significance. Babbie (2001) defined level of significance as “the probability of the measured associations being due only to sampling error” (p.
A level of .05 was used to determine the level of significance. The chance of sampling error using .05 as the level of significance was 5/100.

**Data Analysis Procedure.** Exploratory factor analysis (EFA) and analysis of variance (ANOVA) were used for this study. Swisher, Beckstead, and BeBeau (2004) defined exploratory factor analysis as a way to examine variables and reduce those variables to a smaller set of concepts or factors. Considering the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ) was a newly developed instrument created by Gaston (2002), it was better to use exploratory factor analysis, to simplify the existing instrument, instead of confirmatory factor analysis. According to Portney and Watkins (2000), exploratory factor analysis can be used to reduce the existing number of questionnaire items by analyzing the same constructs within the existing instrument.

According to Tate (1998) analysis of variance (ANOVA) is a method of comparing the means and determining whether there is a difference among the groups’ means. The ANOVA test was used to determine if there was a statistical significance among the means of academic standing results of the female basketball student-athletes and the ethnicity of the female basketball student-athletes. The Tukey post hoc multiple comparison test was used to compare each group mean to each other. This was done due to the limitation of making pair-wise comparisons using ANOVA.

Exploratory Factor Analysis (EFA) and analysis of variance (ANOVA) were used to determine general dimensions of academic, collegiate athletic, and career athletic motivation that existed within the items of the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ). Both methods were calculated using the Statistical Package for Social Sciences (SPSS) 11.5 software program.
Pilot Study

For the proposed study, the researcher performed a pilot study using the 27 agreement-item Student-Athletes’ Motivation toward Sports and Academics Questionnaire in order to determine student-athletes’ academic, athletic, and career athletic motivation (refer to Appendix D). The significance of the pilot study was to determine student-athletes’ motivation towards the college education, collegiate athletics, and career athletics. This research was different from previous research because it assessed student-athletes’ academic motivation, athletic motivation, and career athletic motivation simultaneously.

Victor Vroom’s 1964 Expectancy Theory of Motivation (Vroom, 1964) was the conceptual framework used for the pilot study. The purpose of the study was to survey student-athletes in order to determine their academic motivation, collegiate athletic motivation, and career athletic motivation. Three research questions were written in support of the purpose of the study:

(1) Is there a difference between student-athletes’ academic motivation when analyzing gender?

(2) Is there a difference between student-athletes’ collegiate athletic motivation when analyzing gender?

(3) Is there a difference between student-athletes’ career athletic motivation when analyzing gender?

The scope of the study involved researching a sample of 109 student-athletes’ attending a historically Black college and university located in the southeast. The 27 agreement-item Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ) was used to answer research question one, research question two, and research question three.

Results for research question one revealed there was a significant difference between student-athletes’ academic motivation when gender was
analyzed. Results for the second research question showed there was no significant difference between student-athletes’ collegiate athletic motivation when gender was analyzed. Finally, the results for the third research question showed there was no significant difference between student-athletes’ career athletic motivation when gender was analyzed. Appendix G. represents results for the pilot study.

The results revealed female student-athletes’ were more academically motivated than male student-athletes. However, when collegiate and career athletic motivation was analyzed, results revealed there were no significant differences between male and female student-athletes. Findings for the pilot study were similar to previous research findings (Adler & Adler, 1987; 1991; Meyer, 1990) by showing a difference between academic motivation of male and female student-athletes whereas female student-athletes were more academically motivated than male student-athletes.
CHAPTER 4

RESULTS

The purpose of this chapter was to discuss the findings of the current study’s research questions and to identify the results for exploratory factor analysis of the newly developed Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ). Demographic frequencies and percentages were also noted in this chapter. Shown in Tables 2 through 7 are the results of the findings that analyzed student-athletes’ motivation towards athletics and academics.

Results for Research Question One

Table 2 and Table 2.1 represent findings of the first research question: Is there a significant difference between the valence of female basketball student-athletes’ academic motivation when analyzing academic standing based on the student-athletes’ responses to the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ) scale? The 27-items from the Student-Athletes Motivation towards Sports and Academics Questionnaire (SAMSAQ) were analyzed. Findings revealed there was no significant difference between academic standing and academic motivation of the female basketball student-athletes ($F(3, 99) = .523; p = .667$).
Table 2

Is there a significant difference between female basketball student-athletes’ valence towards academic motivation when analyzing academic standing?

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
<th>Effect Size</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Standing</td>
<td>3</td>
<td>.523</td>
<td>.667</td>
<td>.016</td>
<td>.153</td>
</tr>
</tbody>
</table>

Table 2.1

A summary of means and SD results of female basketball student-athletes’ valence towards academic motivation when analyzing academic standing.

<table>
<thead>
<tr>
<th>Academic Standing</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>25</td>
<td>3.8325</td>
<td>.47349</td>
</tr>
<tr>
<td>Sophomore</td>
<td>22</td>
<td>3.7813</td>
<td>.55392</td>
</tr>
<tr>
<td>Junior</td>
<td>36</td>
<td>3.9583</td>
<td>.61709</td>
</tr>
<tr>
<td>Senior/Graduate</td>
<td>17</td>
<td>3.8493</td>
<td>.57157</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>3.8694</td>
<td>.55846</td>
</tr>
</tbody>
</table>

*Based on 5-point Likert type scale where 5 = SA, 4 = A, 3 = N, 2 = D, and 1 = SD.

Results for Research Question Two

Table 3 and Table 3.1 represent findings of the second research question: Is there a significant difference between the valence of female basketball student-athletes’ collegiate athletic motivation when analyzing academic standing based on the student-athletes’ responses to the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ) scale? The 27-items from the Student-Athletes Motivation towards Sports and Academics Questionnaire (SAMSAQ) were analyzed. Findings revealed there was no significant difference between academic standing and collegiate athletic motivation of the female basketball student-athletes (F (3, 99) = 2.455; p=< .068).
Table 3
Is there a significant difference between female basketball student-athletes’ valence towards collegiate athletic motivation when analyzing academic standing?

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
<th>Effect Size</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Standing</td>
<td>3</td>
<td>2.455</td>
<td>.068</td>
<td>.071</td>
<td>.594</td>
</tr>
</tbody>
</table>

Table 3.1
A summary of means and SD results of female basketball student-athletes’ valence towards collegiate athletic motivation when analyzing academic standing.

<table>
<thead>
<tr>
<th>Academic Standing</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>25</td>
<td>4.0550</td>
<td>.41313</td>
</tr>
<tr>
<td>Sophomore</td>
<td>22</td>
<td>3.8182</td>
<td>.47673</td>
</tr>
<tr>
<td>Junior</td>
<td>36</td>
<td>3.8646</td>
<td>.49944</td>
</tr>
<tr>
<td>Senior/Graduate</td>
<td>17</td>
<td>4.1397</td>
<td>.38498</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>3.9488</td>
<td>.46605</td>
</tr>
</tbody>
</table>

*Based on 5-point Likert type scale where 5 = SA, 4 = A, 3 = N, 2 = D, and 1 = SD.

Results for Research Question Three

Table 4 and Table 4.1 represent findings of the third research question: Is there a significant difference between the valence of female basketball student-athletes’ career athletic motivation when analyzing academic standing based on the student-athletes’ responses to the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ) scale? The 27-items from the Student-Athletes Motivation towards Sports and Academics Questionnaire (SAMSAQ) were analyzed. Findings revealed there was no significant difference between academic standing and career athletic motivation of the female basketball student-athletes (F (3, 99) = 1.320; p=< .272).
Table 4
Is there a significant difference between female basketball student-athletes’ valence towards career athletic motivation when analyzing academic standing?

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>F</th>
<th>Sig</th>
<th>Effect Size</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Standing</td>
<td>3</td>
<td>1.320</td>
<td>.272</td>
<td>.040</td>
<td>.342</td>
</tr>
</tbody>
</table>

Table 4.1
A summary of means and SD results of female basketball student-athletes’ valence towards career athletic motivation when analyzing academic standing.

<table>
<thead>
<tr>
<th>Academic Standing</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>25</td>
<td>3.480</td>
<td>.76158</td>
</tr>
<tr>
<td>Sophomore</td>
<td>22</td>
<td>3.0364</td>
<td>.98103</td>
</tr>
<tr>
<td>Junior</td>
<td>36</td>
<td>3.100</td>
<td>.88994</td>
</tr>
<tr>
<td>Senior/Graduate</td>
<td>17</td>
<td>3.0941</td>
<td>.87783</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>3.180</td>
<td>.88329</td>
</tr>
</tbody>
</table>

*Based on 5-point Likert type scale where 5 = SA, 4 = A, 3 = N, 2 = D, and 1 = SD.

Summary of Results for Female Basketball Student-Athletes’ Motivation based on Academic Standing

When female basketball student-athletes’ academic motivation, collegiate athletic motivation, and career athletic motivation were analyzed regarding academic standing of the respondents, results revealed there were no significant differences between female basketball student-athletes’ academic motivation, collegiate athletic motivation, and career athletic motivation. The effect sizes and observed powers of the results can not be discussed due to significance differences not being noticed between motivation and academic standing of the female basketball student-athletes.
Results for Research Question Four

Table 5 and Table 5.1 represent findings of the fourth research question: Is there a significant difference between the valence of female basketball student-athletes’ academic motivation when analyzing ethnicity based on the student-athletes’ responses to the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ) scale? The 27-items from the Student-Athletes Motivation towards Sports and Academics Questionnaire (SAMSAQ) were analyzed. Findings revealed there was no significant difference between ethnicity and academic motivation of the female basketball student-athletes ($F(2, 99) = 2.308; p< .105$).

Table 5

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
<th>Effect Size</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>2</td>
<td>2.308</td>
<td>.105</td>
<td>.045</td>
<td>.458</td>
</tr>
</tbody>
</table>

Table 5.1

A summary of means and SD results of female basketball student-athletes’ valence towards academic motivation when analyzing ethnicity.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>59</td>
<td>3.9608</td>
<td>.52573</td>
</tr>
<tr>
<td>Caucasian</td>
<td>35</td>
<td>3.7089</td>
<td>.61573</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>3.9063</td>
<td>.33249</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>3.8694</td>
<td>.55846</td>
</tr>
</tbody>
</table>

*Based on 5-point Likert type scale where 5 = SA, 4 = A, 3 = N, 2 = D, and 1 = SD.
Results for Research Question Five

Table 6 and Table 6.1 represent findings of the fifth research question: Is there a significant difference between the valence of female basketball student-athletes' collegiate athletic motivation when analyzing ethnicity based on the student-athletes' responses to the Student-Athletes' Motivation toward Sports and Academics Questionnaire (SAMSAQ) scale? The 27-items from the Student-Athletes Motivation towards Sports and Academics Questionnaire (SAMSAQ) were analyzed. Findings revealed there was no significant difference between ethnicity and collegiate athletic motivation of the female basketball student-athletes ($F(2, 99) = 1.737; p=.181$).

Table 6

Is there a significant difference between female basketball student-athletes' valence towards collegiate athletic motivation when analyzing ethnicity?

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
<th>Effect Size</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>2</td>
<td>1.737</td>
<td>.181</td>
<td>.035</td>
<td>.357</td>
</tr>
</tbody>
</table>

Table 6.1

A summary of means and SD results of female basketball student-athletes' valence towards collegiate athletic motivation when analyzing ethnicity.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>59</td>
<td>3.8877</td>
<td>.45111</td>
</tr>
<tr>
<td>Caucasian</td>
<td>35</td>
<td>4.0071</td>
<td>.48973</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>4.2083</td>
<td>.40052</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>3.9488</td>
<td>.46605</td>
</tr>
</tbody>
</table>

*Based on 5-point Likert type scale where 5 = SA, 4 = A, 3 = N, 2 = D, and 1 = SD.
Results for Research Question Six

Table 7, Table 7.1, and Table 7.2 represent findings of the final research question: Is there a significant difference between the valence of female basketball student-athletes’ career athletic motivation when analyzing ethnicity based on the student-athletes’ responses to the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ) scale? The 27-items from the Student-Athletes Motivation towards Sports and Academics Questionnaire (SAMSAQ) were analyzed. Findings revealed there was a significant difference between ethnicity and career athletic motivation of the female basketball student-athletes ($F(2, 99) = 5.012; p > .008$). Findings also showed there was a significant difference when examining the African American female basketball student-athletes and the Caucasian female basketball student-athletes whereas the African American female basketball student-athletes had a higher career athletic motivation.

Table 7

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
<th>Effect Size</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>2</td>
<td>5.012</td>
<td>.008</td>
<td>.094</td>
<td>.804</td>
</tr>
</tbody>
</table>
Table 7.1
A summary of means and ANOVA results of female basketball student-athletes’ valence towards career athletic motivation when analyzing ethnicity.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>59</td>
<td>3.390</td>
<td>.87750</td>
</tr>
<tr>
<td>Caucasian</td>
<td>35</td>
<td>2.8286</td>
<td>.81478</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>3.6667</td>
<td>.74476</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>3.1800</td>
<td>.88329</td>
</tr>
</tbody>
</table>

*Based on 5-point Likert type scale where 5 = SA, 4 = A, 3 = N, 2 = D, and 1 = SD.

Table 7.2
A summary of multiple comparisons and Tukey results of female basketball student-athletes’ valence towards career athletic motivation when analyzing ethnicity.

<table>
<thead>
<tr>
<th></th>
<th>Mean Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval Lower Bound</th>
<th>95% Confidence Interval Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>.5104*</td>
<td>.18125</td>
<td>.016</td>
<td>.0790</td>
<td>.9418</td>
</tr>
<tr>
<td>Caucasian</td>
<td>-.3277</td>
<td>.36403</td>
<td>.642</td>
<td>-1.1941</td>
<td>.5388</td>
</tr>
<tr>
<td>Other</td>
<td>-.5104*</td>
<td>.18125</td>
<td>.016</td>
<td>-.9418</td>
<td>-.0790</td>
</tr>
<tr>
<td></td>
<td>-.8381</td>
<td>.37537</td>
<td>.071</td>
<td>-1.7316</td>
<td>.0554</td>
</tr>
<tr>
<td>Caucasian</td>
<td>.3277</td>
<td>.36403</td>
<td>.642</td>
<td>-.5388</td>
<td>1.1941</td>
</tr>
<tr>
<td>Other</td>
<td>-.8381</td>
<td>.37537</td>
<td>.071</td>
<td>-.0554</td>
<td>1.7316</td>
</tr>
</tbody>
</table>

Based on observed means.
* the mean difference is significant at the .05 level

Summary of Results for Female Basketball Student-Athletes’ Motivation based on Ethnicity

When female basketball student-athletes’ academic motivation, collegiate athletic motivation, and career athletic motivation was analyzed regarding ethnicity of the respondents, results revealed no significant difference between
female basketball student-athletes’ academic motivation and collegiate athletic motivation when ethnicity was analyzed. There was a significant difference among female basketball student-athletes’ career athletic motivation when ethnicity was examined. Multiple comparisons of career athletic motivation of the female basketball student-athletes revealed, pair-wise, there was a significant difference between African American and Caucasian female basketball student-athletes. Mean scores revealed African American female basketball student-athletes were more career athletically motivated than Caucasian female basketball student-athletes. The effect size, partial eta squared = .094, was small, thus noting a small difference existed between career athletic motivation and ethnicity. Results revealed a high power, observed power = .804, which meant there was a lower chance of a Type II error occurring and there was a higher probability of correctly rejecting the null hypothesis.

**Results for Exploratory Factor Analysis of the SAMSQAQ**

Exploratory factor analysis (EFA) was performed in order to determine the reliability and validity of the newly developed Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSQAQ). The factors revealed by Gaston (2002) were named on three sub-scales: career athletic motivation, student athletic motivation, and academic motivation. For the current study, total variance explained of the SAMSQAQ revealed eight possible constructs could be used as factors for the newly developed instrument. Table 8 shows the factor and initial eigenvalue of the 27 agreement items used in the SAMSQAQ.
Table 8

Total Variance Explained and the Extraction Method: Principal Axis Factoring for the SAMSAQ.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Initial Eigenvalues</th>
<th>Initial Eigenvalues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>1</td>
<td>5.323</td>
<td>19.714</td>
</tr>
<tr>
<td>2</td>
<td>4.303</td>
<td>15.936</td>
</tr>
<tr>
<td>3</td>
<td>2.103</td>
<td>7.789</td>
</tr>
<tr>
<td>4</td>
<td>1.634</td>
<td>6.053</td>
</tr>
<tr>
<td>5</td>
<td>1.413</td>
<td>5.233</td>
</tr>
<tr>
<td>6</td>
<td>1.318</td>
<td>4.880</td>
</tr>
<tr>
<td>7</td>
<td>1.210</td>
<td>4.481</td>
</tr>
<tr>
<td>8</td>
<td>1.021</td>
<td>3.781</td>
</tr>
<tr>
<td>9</td>
<td>.957</td>
<td>3.545</td>
</tr>
<tr>
<td>10</td>
<td>.896</td>
<td>3.319</td>
</tr>
<tr>
<td>11</td>
<td>.770</td>
<td>2.850</td>
</tr>
<tr>
<td>12</td>
<td>.741</td>
<td>2.743</td>
</tr>
<tr>
<td>13</td>
<td>.664</td>
<td>2.458</td>
</tr>
<tr>
<td>14</td>
<td>.644</td>
<td>2.387</td>
</tr>
<tr>
<td>15</td>
<td>.545</td>
<td>2.019</td>
</tr>
<tr>
<td>16</td>
<td>.510</td>
<td>1.888</td>
</tr>
<tr>
<td>17</td>
<td>.437</td>
<td>1.617</td>
</tr>
<tr>
<td>18</td>
<td>.417</td>
<td>1.544</td>
</tr>
<tr>
<td>19</td>
<td>.390</td>
<td>1.444</td>
</tr>
<tr>
<td>20</td>
<td>.322</td>
<td>1.191</td>
</tr>
<tr>
<td>21</td>
<td>.311</td>
<td>1.153</td>
</tr>
<tr>
<td>22</td>
<td>.266</td>
<td>.983</td>
</tr>
<tr>
<td>23</td>
<td>.224</td>
<td>.830</td>
</tr>
<tr>
<td>24</td>
<td>.176</td>
<td>.651</td>
</tr>
<tr>
<td>25</td>
<td>.171</td>
<td>.635</td>
</tr>
<tr>
<td>26</td>
<td>.123</td>
<td>.455</td>
</tr>
<tr>
<td>27</td>
<td>.114</td>
<td>.422</td>
</tr>
</tbody>
</table>

The purpose of the eigenvalue was to determine how many factors or constructs may be extracted from the overall factor analysis of the instrument. This was determined by using the ‘greater than one rule.’ (Brown, 2001).
Gorsuch (1983) stated most researchers select the number of factors based on the eigenvalues that are 1.000 or higher. Using this concept, the ‘greater than one rule’ determined there were eight possible factors.

The rotated factor matrix for the eight possible factors revealed a possible need to select the number of factors based on the eigenvalues that were the highest. As seen in Table 8, two factors were determined, thus having a total initial eigenvalue of 5.323 and 4.303 respectively. Table 10 shows the rotated factor matrix for the two constructs. These constructs were determined as academic motivation items and athletic motivation items. Results of the factor analysis also revealed four possible items needed to be omitted from the SAMSAQ. Those items appeared to be weaker than the other 27 items due to the factor loadings being lower than .400. Factor loadings of .400 were an arbitrary number used by some researchers (Brown, 2001). The following table lists the agreement items that may need to be omitted due to low factor loadings.

Table 9
SAMSAQ Items with Low Factor Loadings

<table>
<thead>
<tr>
<th>Agreement Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM: I am confident I can earn a college degree.</td>
<td>.376</td>
<td>.165</td>
</tr>
<tr>
<td>AM: It is not important for me to perform better than Other students in my courses.</td>
<td>.340</td>
<td>.088</td>
</tr>
<tr>
<td>AM: The content of most of my courses is interesting to me.</td>
<td>.350</td>
<td>-.056</td>
</tr>
<tr>
<td>CoAM: Achieving a high level of performance in my sport is an important goal for me this year.</td>
<td>.097</td>
<td>.363</td>
</tr>
</tbody>
</table>

AM represents Academic Motivation,
CoAM represents Collegiate Athletic Motivation
**Table 10**

Rotated Factor Matrix for SAMSAQ Agreement Items

<table>
<thead>
<tr>
<th>Agreement Item</th>
<th>Academic Motivation</th>
<th>Athletic Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1</td>
<td>Factor 2</td>
</tr>
<tr>
<td>ACAD1</td>
<td>.495</td>
<td>.033</td>
</tr>
<tr>
<td>COLATH1*</td>
<td>.097</td>
<td>.363</td>
</tr>
<tr>
<td>ACAD2</td>
<td>.500</td>
<td>-.098</td>
</tr>
<tr>
<td>ACAD3</td>
<td>.667</td>
<td>.217</td>
</tr>
<tr>
<td>ACAD4</td>
<td>-.657</td>
<td>.016</td>
</tr>
<tr>
<td>ACAD5</td>
<td>.480</td>
<td>.155</td>
</tr>
<tr>
<td>CAM1</td>
<td>-.103</td>
<td>.499</td>
</tr>
<tr>
<td>CAM2</td>
<td>-.138</td>
<td>-.422</td>
</tr>
<tr>
<td>ACAD6</td>
<td>.432</td>
<td>.170</td>
</tr>
<tr>
<td>ACAD7</td>
<td>-.592</td>
<td>.009</td>
</tr>
<tr>
<td>COLATH2</td>
<td>.249</td>
<td>.509</td>
</tr>
<tr>
<td>COLATH3</td>
<td>-.180</td>
<td>.487</td>
</tr>
<tr>
<td>COLATH4</td>
<td>.029</td>
<td>.449</td>
</tr>
<tr>
<td>COLATH5</td>
<td>.187</td>
<td>.575</td>
</tr>
<tr>
<td>AC8COL6</td>
<td>.459</td>
<td>-.095</td>
</tr>
<tr>
<td>ACAD9</td>
<td>-.402</td>
<td>.125</td>
</tr>
<tr>
<td>CAM3</td>
<td>.030</td>
<td>.663</td>
</tr>
<tr>
<td>CAM4</td>
<td>-.208</td>
<td>.742</td>
</tr>
<tr>
<td>ACAD10</td>
<td>-.558</td>
<td>-.102</td>
</tr>
<tr>
<td>CAM5</td>
<td>-.095</td>
<td>.761</td>
</tr>
<tr>
<td>ACAD11*</td>
<td>.376</td>
<td>.165</td>
</tr>
<tr>
<td>AC12COL7</td>
<td>-.521</td>
<td>.143</td>
</tr>
<tr>
<td>ACAD13*</td>
<td>-.340</td>
<td>-.088</td>
</tr>
<tr>
<td>COLATH8</td>
<td>.055</td>
<td>.652</td>
</tr>
<tr>
<td>ACAD14*</td>
<td>.350</td>
<td>-.056</td>
</tr>
<tr>
<td>ACAD15</td>
<td>.678</td>
<td>-.051</td>
</tr>
<tr>
<td>ACAD16</td>
<td>-.594</td>
<td>.231</td>
</tr>
</tbody>
</table>

ACAD: measured academic motivation
COLATH: measured collegiate athletic motivation
CAM: measured career athletic motivation
ACCOL: measured academic and collegiate athletic motivation
Figure 11 represents the scree plot of the eigenvalues and the number of factors that were determined. The purpose of the scree plot was to provide a representative diagram of the number of factors appropriate for the analysis of the SAMSAQ. This was determined by the number of factors noted before the plotted line sharply turned right. Based on these results, there were two factors determined.

![Scree Plot for SAMSAQ](image-url)
Demographic Information for the Female Basketball Student-Athletes

The following represents the demographic for the female basketball student-athletes based on their responses to the SAMSAQ. Information from Table 11 illustrates 100% of the respondents received full-athletic scholarships.

Table 11
Demographic Frequencies and Percentages for Scholarship Type

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full</td>
<td>100</td>
<td>100.0</td>
</tr>
<tr>
<td>Partial</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 12 represents demographic frequencies and percentages for female basketball student-athletes’ participation in their sport during the 2004-2005 academic year. 94.0% of the respondents stated “yes,” they did participate in collegiate athletics this year while 6.0% stated “no,” they did not participate in collegiate athletics this year.

Table 12
Demographic Frequencies and Percentages for Participation in Sport

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participate in Sport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>94</td>
<td>94.0</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>6.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Tables 13 and 14 represent demographic frequencies and mother and father’s education. Of the 100 respondents, 42 (42.0%) student-athletes stated “college” for mother’s education while 38 (38.0%) student-athletes stated “college” for father’s education.

Table 13

Demographic Frequencies and Percentages for Mother’s Education

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some high school</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>High School</td>
<td>22</td>
<td>22.0</td>
</tr>
<tr>
<td>Some college</td>
<td>25</td>
<td>25.0</td>
</tr>
<tr>
<td>College</td>
<td>42</td>
<td>42.0</td>
</tr>
<tr>
<td>Graduate School</td>
<td>9</td>
<td>9.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 14

Demographic Frequencies and Percentages Father’s Education

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some high school</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>High School</td>
<td>26</td>
<td>26.0</td>
</tr>
<tr>
<td>Some college</td>
<td>20</td>
<td>20.0</td>
</tr>
<tr>
<td>College</td>
<td>38</td>
<td>38.0</td>
</tr>
<tr>
<td>Graduate School</td>
<td>14</td>
<td>14.0</td>
</tr>
<tr>
<td>Missing Responses</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 15 reveals the ethnicity of the student-athletes. The respondents were 59 (59.0%) African American, 35 (33.0%) Caucasian American, and 6 (6.0%) who considered themselves as “other.” An ethnicity report conducted by the
NCAA (2003b) showed during the 2001-2002 academic school year, there was a percentage of 10.4 total African American female student-athletes. During the 2002-2003 academic school year, the NCAA (2004) ethnicity report for Division IA revealed African American female basketball student-athletes represented 41.6%, Caucasian female basketball student-athletes represented 46.8% while the ‘other’ ethnicity group was 11.6%.

Table 15
Demographic Frequencies and Percentages for Ethnicity

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>59</td>
<td>59.0</td>
</tr>
<tr>
<td>Caucasian American</td>
<td>35</td>
<td>35.0</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>6.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 16 demonstrates the demographic frequencies and percentages for academic standing of the female basketball student-athletes. Data revealed there were 25 (25.0%) freshmen, 22 (22.0%) sophomores, 36 (36.0%) juniors, and 17 (17.0%) senior/graduate student-athletes. The category for senior and graduate student-athletes was combined due to the low number of respondents who stated they were graduate students. Only two student-athletes responded by stating they were graduate students, therefore this category of academic standing was grouped with senior student-athletes.
Table 16

Demographic Frequencies and Percentages for Academic Standing

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>25</td>
<td>25.0</td>
</tr>
<tr>
<td>Sophomores</td>
<td>22</td>
<td>22.0</td>
</tr>
<tr>
<td>Juniors</td>
<td>36</td>
<td>36.0</td>
</tr>
<tr>
<td>Seniors/Graduates</td>
<td>17</td>
<td>17.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
The purposes of this study were threefold: (1) to analyze the differences between academic motivation, collegiate athletic motivation, and career athletic motivation of the female basketball student-athletes when academic standing was the independent variable, (2) to analyze the differences between academic motivation, collegiate athletic motivation, and career athletic motivation of the female basketball student-athletes when ethnicity was the independent variable and (3) to modify and validate the newly developed SAMSAQ instrument using exploratory factor analysis.

This study used a quantitative approach to assess female basketball student-athletes’ valence of academic motivation, collegiate athletic motivation, and career athletic motivation when ethnicity and academic standing were analyzed. Findings revealed there were no significant differences when assessing academic standing of the student-athletes and their academic, collegiate athletic or career athletic motivation. Findings also showed there were no significant differences when assessing ethnicity and academic motivation or collegiate athletic motivation. However, data indicated there were significant differences when ethnicity was the independent variable and career athletic motivation was the dependent variable.

The results of this study cannot be generalized beyond the sample of student-athletes who responded to the SAMSAQ. However, the results reinforced previous findings relating to student-athlete motivation towards academics and athletics (Astin, 1984; Hyatt, 2001; Kennedy & Dimick, 1987; Meyer, 1990; Rishe, 2003; Ryan, 1989; Snyder, 1996; Wempe, 2001) but
contradicted findings that showed significant differences between student-athletes’ academic standing and gender in relation to their academic motivation (Adler & Adler, 1991; Blann, 1985; Young & Sowa, 1992).

Previous literature stated there were differences between academic and athletic motivation of student-athletes when ethnicity was examined (Hrabowski, 2002; Hyatt, 2001; Snyder, 1996). Although there is a dearth of literature discussing female basketball student-athletes, there are researchers who discuss the academic and athletic issues affecting student-athletes, especially African American males. Lapchick and Malekoff (1987) discussed the differences in expectancy among two-student athletes and their motivation towards collegiate athletics and academics. One student-athlete, Stefan Humphries from the University of Michigan and later the Chicago Bears, valued his college experience, collegiate athletics, and attainment of a college degree. The other student-athlete’s sheer motivation was competing in collegiate athletics and playing in the National Football League. One-student athlete graduated from college while the other, Fred Butler of Cal-LA State, struggled academically, did not complete a college education, and did not make it to the professional realm of athletics.

We always hear the term student-athlete. Well, ‘student’ always comes first, and it should. Very few high school athletes go on to become college athletes, and even fewer become pros. The odds against it are tremendous. But far more high school students can become college students. And a college degree is the key that unlocks the door to your future, whatever you want it to be. Stay in school, but more important, learn while you’re in school. Magic Johnson, Los Angeles Lakers

(Lapchick & Malekoff, 1987; p. xvii)

The findings of the current study have shown female basketball student-athletes participating in the Atlantic Coast Conference place similar value
academics when analyzing academic standing. This may suggest female basketball student-athletes will not fall victim to the aforementioned example discussed by Lapchick and Malekoff (1987), although Bruening, Armstrong, and Pastore (2005) found African American female student-athletes tended to be ignored by athletic administrators, coaches, and other student-athletes.

**Academic Standing and Motivation**

Female basketball student-athletes’ motivation towards academics and athletics revealed there were no significant differences when academic standing was analyzed. Considering there was a dearth of literature that analyzed female basketball student-athletes participating in collegiate athletics, the researcher had to rely on studies that included female student-athletes and studies similar to those performed by Adler and Adler (1987).

Findings from the current study contradicted the findings of Adler and Adler (1987; 1991) and Miller and Kerr (2002). Although Adler and Adler (1987; 1991) analyzed male basketball student-athletes, their focus included academic standing of the student-athletes; which stated freshmen and sophomores were more academically motivated while juniors and seniors were more athletically motivated. Results of the current study revealed female basketball student-athletes’ academic standing did not exhibit a significant difference when attempting to determine their motivation towards athletics or academics.

Previous researchers’ findings were similar to the current study (Meyer, 1990; Rishe, 2003; Ryan, 1989; Wempe, 2001). Prior literature revealed female student-athletes, participating in various female sports, exhibited motivation towards academics. It can not be assumed that these student-athletes’ did not possess athletic motivation as well. The previous research showed participation in collegiate athletic competition did not contribute to decreased academic motivation. The current study revealed there were no significant differences
between freshman, sophomore, junior, or senior/graduate female basketball student-athletes. From these results, the researcher concluded academic standing of the student-athletes did not determine if freshmen and sophomore female basketball student-athletes exhibited more motivation to excel academically or athletically than junior and senior/graduate female basketball student-athletes.

Possible contributions to the findings of the current research study may be female basketball student-athletes participating in the Atlantic Coast Conference are motivated to excel both academically and athletically. Considering the ACC is known for academics and athletics at each institution, female basketball student-athletes may feel it is important to excel in the academic environment. Freshmen and sophomores may feel it is important to become accustomed to the strenuous academic challenges they will have to conquer during their collegiate experiences. Juniors and seniors/graduates may feel it is important to exhibit academic motivation in hopes of attaining a college degree. Freshmen, sophomores, juniors, and seniors/graduates may place value on excelling in the classroom. The reward of placing value on excelling in the classroom may be academic honors, graduating with a college degree, and remaining academically eligible for competition. These may be reasons each student-athlete was similarly motivated, therefore significant differences would not be noticed when academic standing was analyzed.

Other possible contributions to no significant differences between academic standing and athletic motivation may be freshmen, sophomores, juniors, and seniors/graduates may feel athletics is an important aspect of participating in an elite conference, such as the ACC. Freshmen and sophomores may view the opportunity of competing in collegiate basketball as an honor and accomplishment that others may desire. Juniors and seniors/graduates may be
athletically motivated because they may hope to have a winning season and possibly compete for the national championship honors. Some female basketball student-athletes may hope to compete on the professional level. Possible conference championship honors, winning seasons, and the opportunity to participate in the Women’s National Basketball Association (WNBA) may be reasons female basketball student-athletes are athletically motivated. Freshmen, sophomores, juniors, and seniors/graduates may place value on excelling athletically. The reward of placing value on excelling athletically may be national championships, athletic honors, and participation in the sport as a career. These may be reasons each student-athlete was similarly motivated, therefore significant differences would not be noticed when academic standing and athletic motivation was analyzed.

**Ethnicity and Motivation**

Female basketball student-athletes’ motivation towards academics revealed there were no significant differences when ethnicity was analyzed. Findings did show a significant difference when ethnicity and career athletic motivation was researched. Considering there was a dearth of literature that analyzed female basketball student-athletes participating in collegiate athletics, the researcher had to rely on studies that included ethnicity and motivation towards sports and academics.

Findings from the current study contradicted the findings of Young and Sowa (1992). Young and Sowa (1992) stated there were no significant differences found when analyzing athletic motivation and ethnicity of the student-athletes. Results of the current study revealed female basketball student-athletes’ ethnicity did contribute to a significant difference when attempting to determine their motivation towards career athletics. From these results, the researcher concluded ethnicity of the student-athletes could determine if African American
female basketball student-athletes exhibited more motivation to excel athletically among female basketball student-athletes of a different ethnicity group.

Although there were contradictory findings, the researcher did notice similar findings (Hyatt, 2001; Pascarella & Smart, 1991; Snyder, 1996). Prior literature from Hyatt (2001) and Snyder (1996) revealed African American student-athletes were more athletically motivated than other ethnicity groups. Based on these findings, it can not be assumed that African American student-athletes do not possess academic motivation as well. African American student-athletes may be more career athletically motivated because of the many opportunities that exist to compete professionally. Previous researchers have stated some African American student-athletes felt they were viewed as commodities (Hyatt, 2001) and they may place more value on the chance to become a part of a professional athletic team.

Possible contributions to the findings of the current research study may be African American female basketball student-athletes participating in the Atlantic Coast Conference are more career athletically motivated because they view the opportunity to compete professionally as a major accomplishment. These student-athletes may place more value on attaining the reward of playing professional sports. This represents valence of the expectancy theory. Valence may have been noticed during the 2005 WNBA Draft, when two African American Atlantic Coast Conference female basketball student-athletes were chosen in the second round (WNBA, 2005). This was an accomplishment for those athletes who strived to place value on attaining a goal of participating in professional athletics. Only two ACC female basketball student-athletes were drafted in the WNBA 2005 Draft, and those two were African American.

Possible contributions to no significant differences between ethnicity and academic motivation may be female basketball student-athletes of all ethnicity
groups valued academics as an important priority. The student-athletes may have placed similar value on graduating with a college degree or remaining academically eligible, as previously stated. The reward of placing value on excelling academically may be reasons each student-athlete was similarly motivated, therefore significant differences would not be noticed when academic standing and athletic motivation was analyzed.

**Exploratory Factor Analysis of the SAMSAQ**

Exploratory factor analysis (EFA) was performed in order to determine the validity of the newly developed Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ). The factors revealed by Gaston (2002) were named on three sub-scales: career athletic motivation, student athletic motivation, and academic motivation. Factors revealed for the current study were two sub-scales: academic motivation and athletic motivation. Elimination of the third construct may be beneficial to the reliability and validity of the SAMSAQ, considering the collegiate athletic motivation sub-scale’s Cronbach’s alpha was .63.

Gaston (2002) omitted three agreement items from the original 30-item SAMSAQ. Results for factor analysis of the current study revealed four more possible items may need to be omitted from the SAMSAQ. Those items appeared to be weaker than the other 27 items due to the factor loadings being lower than .400.

According to Gaston (2002), two agreement items measured academic motivation and collegiate athletic motivation. Those items were “I get more satisfaction from earning an “A” in a course toward my major than winning a game in my sport,” and “I get more satisfaction from winning a game in my sport than from getting an “A” in a course towards my major.” The rotated factor matrix for the SAMSAQ two constructs (Table 9) showed both agreement
item questions loaded higher on the academic motivation sub-scale. These results would eliminate possible questionnaire items being measured on both sub-scales, as noted by Gaston (2002).

Appendix H represents the possible Revised Student-Athletes’ Motivation toward Sports and Academics Questionnaire (RSAMSAQ). This questionnaire would be comprised of 22 agreement items using a 5-point Likert type scale. Two constructs, academic motivation and athletic motivation, would measure student-athletes’ motivation toward sports and academics in the college setting.

**Recommendations for Future Research**

The findings of this study reveal there is a need for future research examination of female basketball student-athletes attending Division I, II, and III institutions. Another recommendation includes replicating the study using a larger sample size. Results should encourage various professionals in collegiate athletics and the sport management field to consider further research of student-athletes’ academic motivation and athletic motivation.

This study should also be replicated from a qualitative perspective. This approach should allow for insights not confined only to quantitative items. Also, a qualitative approach would provide more reliable questionnaire items for better quantitative studies in the future. Further qualitative research may explore in-depth expectations of female basketball student-athletes’ academic and athletic career motivations. Caldwell (1997) suggested more qualitative research should focus on the quality, motivation, and satisfaction of the student-athlete’s college experience. More analysis on factors that cause student-athletes to continue and discontinue their college education should also be examined.

Future research may also focus on African American intercollegiate student-athletes, considering research has shown African American student-athletes who compete in basketball and football demonstrate the lowest
graduation rates (Adler & Adler, 1991; Hyatt, 2001) and are seen as athletic commodities (Berry, 2001). Future research in these areas would be beneficial to researchers, educational institutions, and academicians in comprehending motivational aspirations of African American student-athletes.

Another recommendation for future researchers would be to incorporate the three perceptions of the Expectancy Theory of Motivation; expectancy, instrumentality, and valence. Finally, confirmatory factor analysis (CFA) should be conducted in order to test the Revised Student-Athletes’ Motivation toward Sports and Academics Questionnaire. CFA would confirm or disconfirm the underlying constructs of the instrument. Confirmation of the Revised Student-Athlete’s Motivation toward Sports and Academics Questionnaire would provide a valid instrument to measure student-athletes’ academic and athletic motivation toward sports and academics.

**Limitations of the Current Investigation**

Limitations to the current study included restricting the sample to female basketball student-athletes in the Atlantic Coast Conference. Although the large sample size (n=100) added strength to the findings, the results cannot be generalized beyond the female basketball student-athletes who responded during this time.

Another limitation was honesty among the student-athletes. It was difficult to determine if the respondents were honest while completing the questionnaire items. The researcher did not personally distribute the questionnaire to the respondents. Instructions were given to each of the Directors of Women’s Basketball Operations to distribute the questionnaires to the female basketball student-athletes. The respondents may not have answered items truthfully if the Director of Women’s Basketball Operations was present while they completed the SAMSAQ.
A final limitation involved the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ). This questionnaire was a newly developed instrument created by Gaston (2002). Considering the instrument was newly developed, it has not been used by many researchers to determine student-athletes’ motivation towards collegiate academics and athletics.

**Conclusion**

According to the data results, female basketball student-athletes participating in the Atlantic Coast Conference did not exhibit differences in academic motivation, collegiate athletic motivation, nor career athletic motivation when academic standing was analyzed. Second, differences were not noted when academic motivation or collegiate athletic motivation was analyzed based on ethnicity. These results coincided with the researchers’ hypotheses which stated there were no significant differences between female basketball student-athletes’ valence towards academic, collegiate athletic, and career athletic motivation when analyzing academic standing and ethnicity. Finally, significant differences were noticed when career athletic motivation was analyzed based on ethnicity; thus not coinciding with the stated hypothesis.

When discussing career athletic motivation, results revealed African American female basketball student-athletes placed more value on career athletic motivation than Caucasian female basketball student-athletes. This may not be a concern considering results revealed these student-athletes possess similar academic motivation, stating there was no significant difference. The findings from the current study may show female basketball student-athletes could excel both athletically and academically if their motivational values and forces are geared towards being the best athlete and attaining a college degree.
APPENDIX A.

Letter to Student-Athlete

January 20, 2005

Dear Student-Athlete,

I am currently undertaking a quantitative research study to analyze student athletes’ motivation towards their college education and collegiate athletics. I am asking you to voluntarily participate in my study. Your valued input and participation is extremely important in assisting me with this study.

The “Female Basketball Student-Athletes’ Motivation: Analyzing Academic Standing and Ethnicity at Atlantic Coast Conference Institutions” study will be researched by Kimberly Pettaway Willis of Florida State University, a Doctoral Candidate in the Department of Sport Management, Recreation Management, and Physical Education. You may withdraw from this study at any time and may refuse to answer any of the questionnaire items. Upon completion and return of the questionnaire, it will be taken that you have agreed to participate in the study. It should take no longer than ten minutes to complete the questionnaire and demographic items.

All questionnaires will be kept confidential. The returned responses will be stored in a locked and secured file cabinet. I will be the only individual to have access to the questionnaire items and responses. Your anonymity will be maintained to the extent allowed by law.

Please complete and return the survey in the enclosed stamped envelope to me on or before February 20, 2005. If you have any concerns or questions regarding this research, please contact me, Kimberly Pettaway Willis in the Department of SMRMPE at Florida State University at (850) 644-9560. You may also send an email to kip3007@fsu.edu or my major professor, Dr. Jerome Quarterman at quarter@coe.fsu.edu or (850) 644-9560. If you have questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Office of the Vice President for Research, at (850) 644-8633.

Sincerely,
Kimberly Pettaway Willis, Doctoral Candidate
APPENDIX B.

Informed Consent Form

TO: Student-Athletes
FROM: Kimberly Pettaway Willis, Doctoral Candidate
Department of Sport Management, Recreation Management and
Physical Education
200 Tully Building, Tallahassee, FL 32306
kip3007@fsu.edu
RE: Informed Consent

Dear Student-Athlete,

This is an informed consent for the “Female Basketball Student-Athletes’ Motivation: Analyzing Academic Standing and Ethnicity at Atlantic Coast Conference Institutions” study. There may not be any direct benefits to you; however the possible benefits of your voluntary participation will assist me and other researchers in developing a better comprehension of student-athletes and their perceptions of collegiate athletics and the college education.

As a participant in this study, you are asked to complete the Student-Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ) and demographic information. The completion of the SAMSAQ and demographic information involve no foreseeable risks to you. Participants must be at least 18 years of age in order to participate in this study. You, the student-athlete, may refuse to answer any of the questionnaire items and may withdraw from the study at any time.

All questionnaires will be kept confidential by the researcher. The questionnaires and responses will be kept in a locked and secured file cabinet. The anonymity of the student-athlete will be maintained to the extent allowed by law.

I, the student-athlete, have read this informed consent form and voluntary consent to participate in the “Female Basketball Student-Athletes’ Motivation: Analyzing Academic Standing and Ethnicity at Atlantic Coast Conference Institutions” study for the betterment of the field of sport management and administration. Return of this survey indicates consent to participate in the “Female Basketball Student-Athletes’ Motivation: Analyzing Academic Standing and Ethnicity at Atlantic Coast Conference Institutions” study.

Thank you for your participation.
Kimberly Pettaway Willis
APPENDIX C.

Memo to the Director of Women’s Basketball Operations

Dear ______________,

Thank you for allowing me to send my surveys to the ___________________ Women’s Basketball team. The surveys are enclosed for the women to complete. Each survey is attached with a letter to the student-athlete and an informed consent memo. Once the surveys are completed, please put them in the self-addressed envelope and send back to me. Once again, I appreciate your willingness to assist me in my doctoral research.

Sincerely,

Kimberly Pettaway Willis
APPENDIX D.

Student-Athletes’ Motivation toward Sports and Academics Questionnaire

The purpose of the Student- Athletes’ Motivation toward Sports and Academics Questionnaire is to evaluate your motivation toward your tasks regarding athletics and academics as a student athlete. Your honesty in responding to the statements in this questionnaire will enable us to better comprehend your aspirations, goals and expectations as student athlete.

Directions:

- Please read each statement carefully and respond to all of the items on the questionnaire.
- Indicate the extent to which you agree or disagree with each statement by circling one of the choices provided across from each statement.
- On the last page of the survey you will find and complete demographic information.
- Please refer to the key below for a description of the codes you will use in answering the questionnaire items.

Agreement Items:
SA = Strongly Agree
A = Agree
N = Neutral
D = Disagree
SD = Strongly Disagree

All of your responses to the questionnaire items and demographic information on this survey will be kept confidential. Thank you for agreeing to participate in the Student-Athletes’ Motivation toward Sports and Academics Questionnaire.
1. I am confident that I can achieve a high grade point average this year (3.0 or above). 5 4 3 2 1
2. Achieving a high level of performance in my sport is an important goal for me this year. 5 4 3 2 1
3. It is important to me to learn what is taught in my courses. 5 4 3 2 1
4. I am willing to put in the time to earn excellent grades in my courses. 5 4 3 2 1
5. The most important reason why I am in school is to play my sport. 5 4 3 2 1
6. I will be able to use what is taught in my courses in different aspects of my life outside of school. 5 4 3 2 1
7. I chose to play my sport because it’s something I’m interested in as a career. 5 4 3 2 1
8. I have some doubt about my ability to be a star athlete on my team. 5 4 3 2 1
9. I chose (or will choose) my major because it is something I am interested in as a career. 5 4 3 2 1
10. Earning a high grade point average (3.0 or above) is not an important goal for me this year. 5 4 3 2 1
11. It is important to me to learn the skills and strategies taught by my coaches. 5 4 3 2 1
12. It is important for me to do better than other athletes in my sport. 5 4 3 2 1
13. The time I spend engaged in my sport is enjoyable to me. 5 4 3 2 1
14. It is worth the effort to be an exceptional athlete in my sport. 5 4 3 2 1
15. I get more satisfaction from earning an “A” in a course toward my major than winning a game in my sport. 5 4 3 2 1
16. During the years I compete in my sport, completing a college degree is not a goal for me. 5 4 3 2 1
17. I am confident I can be a star performer on my team this year. 5 4 3 2 1
18. My goal is to make it to the professional level or the Olympics in my sport. 5 4 3 2 1
19. I have some doubt about my ability to earn high grades in my courses. 5 4 3 2 1
20. I am confident that I can make it to an elite level in my sport (Professional/Olympics). 5 4 3 2 1
21. I am confident that I can earn a college degree. 5 4 3 2 1
22. I get more satisfaction from winning a game in my sport than from getting an “A” in a course toward my major. 5 4 3 2 1
23. It is not important for me to perform better than other students in my courses.

24. I am willing to put in the time to be outstanding in my sport.

25. The content of most of my courses is interesting to me.

26. The most important reason why I am in school is to earn a degree.

27. It is not worth the effort to earn excellent grades in my courses.
Demographic Information

1. Which varsity sport do you participate in? _____________________________

2. Are you on an athletic scholarship? (please check one) _______ Yes _______ No
   If yes, is your athletic scholarship (please check one)  _____ Full  or  ___ Partial
   Are you playing this year? (please check one)  _______ Yes _______ No

3. Highest level of education completed for (check one)
   **Mother:**
   ______ some high school
   ______ high school
   ______ some college
   ______ college
   ______ graduate school
   **Father:**
   ______ some high school
   ______ high school
   ______ some college
   ______ college
   ______ graduate school

4. Are you (please check one)
   ______ Asian/Pacific Islander American
   ______ Black/African American
   ______ Hispanic/Latino
   ______ Native American
   ______ White/Caucasian American
   ______ Other: (specify)_________________________

5. What is your academic standing? (check one)
   ______ Freshman   ______ Junior   ______ Graduate
   ______ Sophomore   ______ Senior   ______ Other
   (specify)___________________
### APPENDIX E.

**Original SAMSAQ**

<table>
<thead>
<tr>
<th></th>
<th>Level of Agreement</th>
<th>VSD</th>
<th>SD</th>
<th>D</th>
<th>A</th>
<th>SA</th>
<th>VSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am confident that I can achieve a high grade point average this year (3.0 or above).</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>2. Achieving a high level of performance in my sport is an important goal for me this year.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>3. It is important to me to learn what is taught in my courses.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>4. I am willing to put in the time to earn excellent grades in my courses.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>5. The most important reason why I am in school is to play my sport.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>6. The amount of work required in my courses interferes with my athletic goals.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>7. I will be able to use what is taught in my courses in different aspects of my life outside of school.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>8. I chose to play my sport because it is something I am interested in as a career.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>9. I have some doubt about my ability to be a star athlete on my team.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>10. I chose (or will choose) my major because it is something I am interested in as a career.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>11. Earning a high grade point average (3.0 or above) is not an important goal for me this year.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>12. It is important to me to learn the skills and strategies taught by my coaches.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>13. It is important for me to do better than other athletes in my sport.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>14. The time I spend engaged in my sport is enjoyable to me.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>15. It is worth the effort to be an exceptional athlete in my sport.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
<tr>
<td>16. Participation in my sport interferes with my progress towards earning a college degree.</td>
<td>VSD</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
<td>VSA</td>
<td></td>
</tr>
</tbody>
</table>
17. *I get more satisfaction from earning an “A” in a course toward my major than winning a game in my sport.

18. During the years I compete in my sport, completing a college degree is not a goal for me.

19. I am confident that I can be a star performer on my team this year.

20. My goal is to make it to the professional level or the Olympics in my sport.

21. I have some doubt about my ability to earn high grades in some of my courses.

22. I am confident that I can make it to an elite level in my sport (Professional/Olympics).

23. I am confident that I can earn a college degree.

24. I will be able to use the skills I learn in my sport in other areas of my life outside of sports.

25. *I get more satisfaction from winning a game in my sport than from getting an “A” in a course toward my major.

26. It is not important for me to perform better than other students in my courses.

27. I am willing to put in the time to be outstanding in my sport.

28. The content of most of my courses is interesting to me.

29. The most important reason why I am in school is to earn a degree.

30. It is not worth the effort to earn excellent grades in my courses.
Demographic Information

1. What varsity sport do you participate in? (the one you referred to in this questionnaire)?

2. What is your gender/sex? (check one) _____ male _____ female

3. Are you on an athletic scholarship? (check one) ______ Yes ______ No
   If yes, is your athletic scholarship (check one) ______ Full or _____ Partial
   Are you playing this year? (check one) ______ Yes _____ No

4. Highest level of education completed for (check one)
   **Mother:**
   _____ some high school
   _____ high school
   _____ some college
   _____ college
   _____ graduate school

   **Father:**
   _____ some high school
   _____ high school
   _____ some college
   _____ college
   _____ graduate school

5. Race/Ethnicity (check one)
   _____ Black/African American
   _____ American Indian
   _____ White/Caucasian
   _____ Hispanic
   _____ Asian/Pacific Islander
   _____ White/Caucasian American
   _____ Other: (specify)_________________________

6. Date of Birth: Month______ Day ______ Year ______

97
APPENDIX F.

Reliability Analysis of SAMSAQ Motivation Items

<table>
<thead>
<tr>
<th>Motivation Item</th>
<th>Corrected Item Total Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM: The most important reason why I am in school is to play my sport.</td>
<td>-.5703</td>
</tr>
<tr>
<td>AM: Earning a high grade point average is not an important goal for me this year.</td>
<td>-.5367</td>
</tr>
<tr>
<td>AM: During the years I compete in my sport, completing a college degree is not a goal for me.</td>
<td>-.3374</td>
</tr>
<tr>
<td>AM: I have some doubt about my ability to earn high grades in some of my courses.</td>
<td>-.5161</td>
</tr>
<tr>
<td>AM: I get more satisfaction from winning a game in my sport than from getting an “A” in a course towards my major.</td>
<td>-.4836</td>
</tr>
<tr>
<td>AM: It is not important for me to perform better than other students in my courses.</td>
<td>-.3429</td>
</tr>
<tr>
<td>AM: It is not worth the effort to earn excellent grades in my courses.</td>
<td>-.5614</td>
</tr>
<tr>
<td>CoAM: I get more satisfaction from earning an “A” in a course toward my major than winning a game in my sport.</td>
<td>-.2550</td>
</tr>
<tr>
<td>CAM: I have some doubt about my ability to be a star athlete on my team.</td>
<td>-.3287</td>
</tr>
</tbody>
</table>

Academic Motivation items are notated by AM
Collegiate Athletic Motivation items are notated by CoAM
Career Athletic Motivation items are notated by CAM
APPENDIX G.

Pilot Study Results

Pilot Study Research Question One:

Is there a difference between student-athletes’ academic motivation when analyzing gender?

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2.543</td>
<td>.026</td>
</tr>
</tbody>
</table>

A summary of significant differences between student-athletes’ academic motivation when analyzing gender.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>4.09</td>
<td>.686</td>
<td>47</td>
</tr>
<tr>
<td>Males</td>
<td>3.38</td>
<td>1.061</td>
<td>62</td>
</tr>
</tbody>
</table>
Pilot Study Research Question Two:

Is there a difference between student-athletes’ *collegiate athletic motivation* when analyzing gender?

<table>
<thead>
<tr>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.917</td>
<td>.507</td>
</tr>
</tbody>
</table>

A summary of significant differences between student-athletes’ *collegiate athletic motivation* when analyzing gender.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>4.135</td>
<td>.721</td>
<td>47</td>
</tr>
<tr>
<td>Males</td>
<td>4.043</td>
<td>.961</td>
<td>62</td>
</tr>
</tbody>
</table>
Pilot Study Research Question Three:

Is there a difference between student-athletes’ career athletic motivation when analyzing gender?

<table>
<thead>
<tr>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.445</td>
<td>.311</td>
</tr>
</tbody>
</table>

A summary of significant differences between student-athletes’ career athletic motivation when analyzing gender.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>2.91</td>
<td>1.259</td>
<td>47</td>
</tr>
<tr>
<td>Males</td>
<td>3.38</td>
<td>1.465</td>
<td>62</td>
</tr>
</tbody>
</table>
APPENDIX H.

Revised Student-Athletes’ Motivation toward Sports and Academics Questionnaire

Revised Student-Athletes’ Motivation toward Sports and Academics Questionnaire

Revised by Kimberly Pettaway Willis (2005)

The purpose of the Revised Student-Athletes’ Motivation toward Sports and Academics Questionnaire is to evaluate your motivation toward your tasks regarding athletics and academics as a student athlete. Your honesty in responding to the statements in this questionnaire will enable us to better comprehend your aspirations, goals and expectations as student athlete.

Directions:
- Please read each statement carefully and respond to all of the items on the questionnaire.
- Indicate the extent to which you agree or disagree with each statement by circling one of the choices provided across from each statement.
- On the last page of the survey you will find and complete demographic information.
- Please refer to the key below for a description of the codes you will use in answering the questionnaire items.

Agreement Items:
SA = Strongly Agree
A   = Agree
N   = Neutral
D   = Disagree
SD  = Strongly Disagree

All of your responses to the questionnaire items and demographic information on this survey will be kept confidential. Thank you for agreeing to participate in the Revised Student-Athletes’ Motivation toward Sports and Academics Questionnaire.
1. I am confident that I can achieve a high grade point average this year (3.0 or above).
   Level of Agreement
   SA A N D SD
   5 4 3 2 1
   5 4 3 2 1

2. It is important to me to learn what is taught in my courses.
   5 4 3 2 1
   5 4 3 2 1

3. I am willing to put in the time to earn excellent grades in my courses.
   5 4 3 2 1
   5 4 3 2 1

4. The most important reason why I am in school is to play my sport.
   5 4 3 2 1
   5 4 3 2 1

5. I will be able to use what is taught in my courses in different aspects of my life outside of school.
   5 4 3 2 1
   5 4 3 2 1

6. I chose to play my sport because it’s something I’m interested in as a career.
   5 4 3 2 1
   5 4 3 2 1

7. I chose (or will choose) my major because it is something I am interested in as a career.
   5 4 3 2 1
   5 4 3 2 1

8. I have some doubt about my ability to be a star athlete on my team.
   5 4 3 2 1
   5 4 3 2 1

9. Earning a high grade point average (3.0 or above) is not an important goal for me this year.
   5 4 3 2 1
   5 4 3 2 1

10. It is important to me to learn the skills and strategies taught by my coaches.
    5 4 3 2 1
    5 4 3 2 1

11. It is important for me to do better than other athletes in my sport.
    5 4 3 2 1
    5 4 3 2 1

12. The time I spend engaged in my sport is enjoyable to me.
    5 4 3 2 1
    5 4 3 2 1

13. It is worth the effort to be an exceptional athlete in my sport.
    5 4 3 2 1
    5 4 3 2 1

14. I get more satisfaction from earning an “A” in a course toward my major than winning a game in my sport.
    5 4 3 2 1
    5 4 3 2 1

15. During the years I compete in my sport, completing a college degree is not a goal for me.
    5 4 3 2 1
    5 4 3 2 1

16. I am confident I can be a star performer on my team this year.
    5 4 3 2 1
    5 4 3 2 1

17. My goal is to make it to the professional level or the Olympics in my sport.
    5 4 3 2 1
    5 4 3 2 1

18. I have some doubt about my ability to earn high grades in my courses.
    5 4 3 2 1
    5 4 3 2 1

19. I am confident that I can make it to an elite level in my sport (Professional/Olympics).
    5 4 3 2 1
    5 4 3 2 1

20. I get more satisfaction from winning a game in my sport than from getting an “A” in a course toward my major.
    5 4 3 2 1
    5 4 3 2 1

21. I am willing to put in the time to be outstanding in my sport.
    5 4 3 2 1
    5 4 3 2 1

22. The most important reason why I am in school is to earn a degree.
    5 4 3 2 1
    5 4 3 2 1
23. It is not worth the effort to earn excellent grades in my courses.  

**Demographic Information**

1. Which varsity sport do you participate in? __________________________
2. Are you on an athletic scholarship? (please check one) ______ Yes ______ No  
   If yes, is your athletic scholarship (please check one)  _____ Full  or  ___ Partial  
   Are you playing this year? (please check one) ______ Yes ______ No  
3. Highest level of education completed for (check one)  
   **Mother:**  
   _____ some high school  
   _____ high school  
   _____ some college  
   _____ college  
   _____ graduate school  
   **Father:**  
   _____ some high school  
   _____ high school  
   _____ some college  
   _____ college  
   _____ graduate school  
4. Are you (please check one)  
   _____ Asian/Pacific Islander American  
   _____ Black/African American  
   _____ Hispanic/Latino  
   _____ Native American  
   _____ White/Caucasian American  
   _____ Other: (specify) __________________________  
5. What is your academic standing? (check one)  
   _____ Freshman  
   _____ Sophomore  
   _____ Junior  
   _____ Senior  
   _____ Graduate  
   _____ Other  
   (specify) __________________________
APPENDIX I.

Permission Statement from Dr. Joy Leigh Gaston

Dear Dr. Joy L. Gaston:

I am completing a pilot study/dissertation at Florida State University entitled “Student-Athlete Motivation towards the College Education and Collegiate Athletics.” I would like your permission to reprint in my pilot study and dissertation the following:

Student Athletes’ Motivation toward Sports and Academics Questionnaire (SAMSAQ)
Created by Dr. Joy Leigh Gaston

The requested permission extends to any future revisions and editions to my dissertation including non-exclusive world rights in all languages. These rights will in no way restrict republication of the material in any other form by you or by others authorized by you. This authorization is extended to University Microfilms International, Ann Arbor, Michigan, for the purpose of reproducing and distributing copies of the dissertation. Your signing of this letter will also confirm that you own the copyright to the above-described material.

If these arrangements meet your approval, please sign this letter where indicated below and return it to me. Thank you very much.

Sincerely,

Kimberly Juanell Pettaway

PERMISSION GRANTED FOR THE USE REQUESTED ABOVE:

Joy Leigh Gaston

Date: 5/19/04
APPENDIX J.

Human Subjects Committee Approval Memorandum

Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2763
(850) 644-8633  FAX (850) 644-4392

REAPPROVAL MEMORANDUM

Date: 9/23/2004

To: Kimberly Pettaway Willis
MC: 4280

Dept.: Physical Education

From: John Tomkowski, Chair

Re: Reapproval of Use of Human subjects in Research:
"An Analysis of Student Athletes’ Motivation Towards the College Education and Collegiate Athletics"

Your request to continue the research project listed above involving human subjects has been approved by the Human Subjects Committee. If your project has not been completed by 10/21/2006 please request renewed approval.

You are reminded that a change in protocol in this project must be approved by resubmission of the project to the Committee for approval. Also, the principal investigator must report to the Chair promptly, and in writing, any unanticipated problems involving risks to subjects or others.

By copy of this memorandum, the Chairman of your department and/or your major professor are reminded of their responsibility for being informed concerning research projects involving human subjects in their department. They are advised to review the protocols of such investigations as often as necessary to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

Cc: Jerome Quartermann
HSC No. 2004-831-R
REFERENCES


Atlantic Coast Conference and College Sports Online, Inc. (2004). This is the ACC. Retrieved September 10, 2004 from [http://www.theacc.collegesports.com/this-is/acc_this-is.html](http://www.theacc.collegesports.com/this-is/acc_this-is.html)


Ridpath, B. D. (2002). *NCAA Division I student-athlete characteristics as indicators of academic achievement and graduation from college*. Published Dissertation, West Virginia University.


BIOGRAPHICAL SKETCH

KIMBERLY JUANELLE PETTAWAY WILLIS

Education
The Florida State University
Doctoral Candidate, 2001-2005
Sport Administration: Sport Law Emphasis

The Florida State University
M.S., Sport Administration, 2000

The University of North Carolina at Chapel Hill
B.A., Exercise Sport Science, 1999

Professional Experience
Department of Sport Management, Recreation Management, and Physical Education
The Florida State University
The Sport Management Society
Treasurer, 2004

Department of Sport Management, Recreation Management, and Physical Education
The Florida State University
Lecturer, 2002-2005
Research Assistant, 2001-2005

Department of Athletics & Academic Support Services
The Florida State University
Educational Assistant, 2001-2004
Instructional Mentor, 2001-2004
Sport Marketing & Promotions Assistant, 2000

The Mid-American Conference
MAC Properties & Cleveland Cavaliers
Sport Marketing Assistant, 2001
Coordinator MAC Basketball Tournaments, 2001
First Aeropostale’ Minority Sport Marketing Internship Recipient
Honors
Pi Lambda Theta International Honor Society
Phi Sigma Theta National Honor Society
Kappa Delta Pi Honor Society
The Chancellor’s List
Outstanding Teaching Assistant Award Nominee (OTAA)

Professional Organizations
American Alliance for Health, Physical Education, Recreation, & Dance (AAHPERD)
Florida Alliance for Health, Physical Education, Recreation, & Dance (FAHPERD)
National Association for Sport and Physical Education (NASPE)
North American Society for Sport Management (NASSM)
Sport and Recreation Law Association (SRLA)

Presentations


Publications

Courses Taught
Theory Courses (Undergraduate)

PET 4401 Administration in Sport Management
The purpose of Administration in Sport Management was to provide students with the opportunity to become knowledgeable of organizational behavior topics and leadership roles in sport and physical activity. Administration in Sport Management provided and introduced students to a variety of sport and physical activity topics and roles within the field of sport management. Insight of organizational behavior topics in sport were analyzed, researched, and discussed during class sessions.

PET 4491 Sport Law
The purpose of Sport Law was to provide students with the opportunity to become knowledgeable of legal issues that are involved in sport and physical activity. Sport Law provided legal issues, court cases, and aspects of law that were often encountered in sport and physical activity. This course provided legal terminology, previous sport related court cases, and awareness of the rights of sport and physical activity as it related to participants, spectators, managers, and teachers. Further insight of other sport and physical activity issues and their relationship to sport law were further discussed.
PET 4471 Issues in Sport Management
The purpose of Issues in Sport Management was to discuss critical issues that economically, socially, and professionally affect the sport industry. Topics explored in this course included gender issues in the sport industry, sexuality issues in professional and collegiate sport, sport and the media, race and ethnicity in sport, and hiring practices of professional coaches. Strategies for analyzing and coping with issues in sport were also considered.

PET 4930 Sport Governance
The purpose of Sport Governance was to provide a comprehension of international, national, and local organizational structures in the sport industry. Students were able to evaluate, examine, and analyze the governance structure of the NCAA, Olympics, and other sport entities. Topics explored in the course included the Olympic Movement, Collegiate Sports, Professional Sports and their Governing Structures, and Collegiate Conferences.

PET 4254 Gender Issues in Sport
The purpose of Gender Issues in Sport was to examine various feminist theories and to critically evaluate the stereotypes and notions surrounding gender and sport. According to literature, sport is considered to be a socially constructed exclusionary institution that often perpetuates and reinforces traditional ideologies of gender. Topics explored included the social construction of gender, the politics of sexuality in sport and physical activity, gender and the formal and informal organization of sport, and media produced and circulated images of sport. Strategies for reconstructing sport as a more empowering and equitable practice for men and women were also analyzed.