The Effects of Daily Training on Time Management, Athletic, and Academic Motivation for Collegiate Female Student Athletes: A Mixed Methods Study

A Dissertation submitted
to the Graduate School
Valdosta State University

in partial fulfillment of requirements
for the degree of

DOCTOR OF EDUCATION

in Adult and Career Education

in the Department of Leadership, Technology, and Workforce Development of the Dewar College of Education and Human Services

December, 2024

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ABSTRACT

Female student athletes at junior colleges across the country are competing in college sports that require different motivations and time management skills to be successful. The purpose of this study is to examine junior college female student athlete's motivations and time management skills based on their daily training demands. An explanatory sequential mixed methods design was utilized to compare sport, race, and academic year amongst junior college female student athletes in the states of Georgia and Florida. The quantitative portion of the study examined sport and race as it relates to academic, athletic, and career motivation on the Student Athletes Motivation on Sport and Academics Questionnaire (SAMSAQ) instrument. Additionally, the Time Management Survey (TMS) instrument examined sport and academic year as it relates to time management skills based on the daily training demands of the junior college female student athletes. For the qualitative portion of the study six focus group discussions took place to gain more insight on the quantitative results.

The results from the observed research concludes that female student athletes for this study regardless of race, sport, and academic year are comparatively motivated to be successful in the classroom, and they prioritize their time spent on academics regardless of their daily training demands. Additionally, female student athletes in the sport of basketball tend to have higher career aspirations to play at the professional level. Speculation of these results is related to the small percentage of female student athletes that need their college sport to stay focused to attain a degree even though they still have hopes to make a professional career out of their sport.

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ACKNOWLEDGMENTS

I would like to express my deepest gratitude to Dr. Steven Downey and Dr. Lantry Brockmeier for their unwavering support and guidance throughout this doctoral research. Their expertise, encouragement, and dedication were instrumental in helping me navigate the complexities of this study.

I would also like to extend my sincere thanks to all the NJCAA institutions and the female student-athletes across Georgia and Florida who participated in this study. Your willingness to contribute your time and experiences made this research possible, and I am profoundly grateful for your involvement.

DEDICATION

I would like to dedicate this study to Dr. Greg Tanner for encouraging me to pursue my doctoral degree, to my parents for instilling in me the values of work ethic and perseverance from an early age, and to my wife for always believing in me and never letting me give up.

CHAPTER I

INTRODUCTION

Today, scholars have asserted the majority of the literature surrounding college athletics is primarily focused on NCAA Division I athletes. During a study done on athletics in community colleges, Castaneda wrote, "The vast majority of scholarly, media, organizational, and congressional attention has focused on the elite sports teams operated by large four-year universities participating in Division I of the National College Athletic Association," (Bush et al. 2009, p.110). Bush, Castaneda, and Katsinas performed a study in 2009 on athletics in community colleges and found that despite the limited empirical attention paid to intercollegiate athletics at community and junior colleges, with more than 70,000 participants nationwide, they are clearly one of the most popular and important student activities on community college campuses (Bush, 2009).

In 2016, the NCAA established a study labeled as GOALS (Growth, Opportunities, Aspirations, and Learning of Students in College) to provide data to committees, policy makers, and member institutions the national trends related to studying the student athlete's well-being and academic success. Through Academic Progress Rates (APR) APR institutions are held accountable for the academic progress of their student athletes through a team-based metric that accounts for eligibility and retention. During the latest 2016 study, the average APR for NCAA Division One women's sports in basketball, soccer, and softball range from 983 (basketball teams), 989 (soccer teams), and 988 (softball teams). This analysis is based on the 5,636 Division

One teams that sponsored the sport during each of the past seven years (NCAA, 2019). Initial findings from the 2016 GOALS study provides that Division One athletes (male and female) are spending 34 hours a week on athletics, 38.5 hours a week on academics, and more than three-quarters of NCAA women reported that their overall academic experience has been positive (NCAA, 2016). In addition, the GOALS report shows that although time spent on athletics has increased, the 2016 report of missed classes were generally low and very similar to those seen in 2010 (NCAA, 2016).

Based on the variables in the 2016 NCAA Division I GOALS study, similar variables need to be observed amongst junior college female student athletes.

Statement of the Problem

The focus of this study was on how female student athletes balanced their motivations to be athletically and academically motivated along with how they managed their time with daily training demands at the National Junior College Athletic Association (NJCAA) participation level. Many of the athletes' teachers, fans, and peers outside of sports do not understand the time management skills and level of responsibility a student athlete must maintain in order to perform well academically and athletically. "Intercollegiate athletes are asked to navigate the dual role of student and athlete successfully despite time-constraints and competing external pressures from both athletic and academic entities, intertwining practices and athletic contests with classes and academic demands, student-athletes must balance these often-divergent roles," (Parson, 2013, p. 401). Focusing on how female athletes balanced their academic duties and the motivations to perform well in the classroom addresses the deficient amount of literature on academic motivation and athletic motivation for NJCAA female athletes.

Purpose and Scope of the Study

The overall goal of this study was to create awareness on the impact of academic, athletic, and career motivation along with daily training demands on time management for NJCAA female student athletes. Though there is a tie to junior college athletics in rural communities, there is a deficiency of research surrounding NJCAA athletes, particularly female student athletes. Bush, Castaneda, and Katsinas (2009) state, "Despite the low attention in book length studies and treatments of community colleges, it is clear that intercollegiate athletics represent a very important student activity for public community colleges in the United States," (p.110). They go on to say, "Intercollegiate athletics are a very important student activity for public community colleges in the United States generally, and for rural-serving community colleges specifically" (2009, p. 97).

To fulfill the goals of this study, examinations of daily training demands on NJCAA female student athletes took place by researching the amount of time spent on a weekly basis for practice, strength and conditioning, injury treatment and prevention, team meetings, and team competitions. In addition, academic, athletic, and career athletic motivations were researched by evaluating factors that motivated the female student athlete to achieve, such as the desire to earn a degree, sport participation, and competition eligibility requirements.

Research Questions

To fulfill the purpose of the study, the following research questions were addressed through an explanatory sequential mixed methods approach. Factorial ANOVA data collection was used for the five research questions with focus group discussions to follow.

RQ 1: Is there a significant difference between race by sport for female student athletes on the SAMSAQ academic motivation scale?

RQ 2: Is there a significant difference between race by sport for female student athletes on the SAMSAQ athletic motivation scale?

RQ 3: Is there a significant difference between race by sport for female student athletes on the SAMSAQ career athletic motivation scale?

RQ 4: Is there a significant difference between race by sport for female student athletes on the SAMSAQ total score scale?

RQ 5: Is there a significant difference by sport and academic year for female student athletes on the TMS total score scale?

RQ 6: How do the selected demographics, motivation scales, and total score scales in the SAMSAQ and TMS surveys explain the similarities or differences among female student athletes participating in sport at the NJCAA competition level?

Theoretical Framework

The theoretical framework for this study was a blend of two different theories, Expectancy Value theory and the Threshold Model theory. The Expectancy Value theory, created by John William Atkins in the 1950's, examines achievement motivation (Drew, 2023). The Threshold Model theory, developed by James Minoru Sakoda in the 1970's, proposes that participation in a moderate number of activities has a positive outcome, but that there is a point when the extent of time spent on extracurricular activities is too great and the positive outcomes may diminish (Marsh, 2002). Each theory serves as a structure for the different research questions and the scales used to measure each question.

Research questions one through four were guided by literature provided from Joy Gaston Gayles article in 2005 on, "The Factor Structure and Reliability of the Student Athletes' Motivation toward Sports and Academics Questionnaire (SAMSAQ)." Therefore, individuals such as student athletes may approach specific athletic or academic tasks with a high level of motivation to approach success while applying a great amount of effort to successfully complete that task.

Research question number five was guided by literature provided in which authors Shelby Hinkle Smith discusses five theoretical models related to athletics and academics among high school athletes. The author discusses sport-related social networking, school identification and commitment, relationships with significant adults, and developmental benefits in relation to how they positively affect academic outcomes. The five theoretical models described in the article are the developmental model, the identification/commitment model, the zero-sum model, the threshold model, and the social inequity gap reduction model. The threshold model discusses the top 3 demands of being a female college athlete such as, physical, scheduling, and academic demands. Each of these model's value and expose the relationship between academics and athletics with hopes to determine the overall effect of athletics on academics (Hinkle, 2015).

Implementation of these blended theories helped the researcher examine NJCAA female student athletes by race and if there are differences by sport that are positively or negatively affecting athletic, academic, career motivation, and their time management with daily training demands.

Research Design

For this study, an explanatory sequential mixed methods design was used (Creswell & Plano Clark, 2011). Mixed-methods research provides an opportunity to

develop novel theoretical perspectives by combining the strengths of quantitative and qualitative methods (Brown, Sullivan, Venkatesh, 2016). This approach allowed the researcher to build quantitative data first and shaped the construct for the qualitative approach. The quantitative data was surveyed first to provide thorough and extensive detailed focus group questions. The qualitative data and their analysis refined and explained those statistical results by exploring participants' views in more depth (Creswell, 2006). Furthermore, the protocol that was followed is a ten-rule guideline developed by Creswell, Ivankova, and Stick (2006) which described the sequence of the research activities in the study, indicated the priority of the qualitative phase and specified all the data collection and analysis procedures, "and listed the products or outcomes of each stage of the study (Creswell et al., 2006). The explanatory sequential mixed methods design allowed the researcher flexibility to observe the survey data broken down by race, sport, and academic year as they pertain to the differences among athletic, academic, career motivation, and the effects of daily training on time management. Brown, Sullivan, and Venkatesh (2016) stated, "mixed-methods research provides an opportunity to develop novel theoretical perspectives by combining the strengths of quantitative and qualitative methods" (p.436).

Data Collection

IRB approval, found in Appendix A, and the approval email sent to athletic directors at each institution, found in Appendix B, were asked to provide a student email address for each of their student athletes. The data collection process used for this study was conducted during the academic school year. The allocated institutional representative (head coach) for each female sport provided student athletes email addresses in order to email the survey links. The emails sent to the student athletes with

the SAMSAQ survey link can be found in Appendix C and the TMS survey link can be found in Appendix D. After completion, the researcher confirmed completion of the student athlete surveys through survey completion rates using Qualtrics. Once the surveys were completed, the data gathered from the surveys provided guidance in shaping the questions for the player focus group discussions. The protocol from the Richard A. Krueger Focus Group Protocol Guide will guide the discussions (Krueger, 2002). This protocol provides a recommended pattern for introducing the group discussion as follows: welcome, overview of the topic, ground rules, and the first question (Krueger, 2002).

During the qualitative phase of the study, the researcher completed an online focus group discussion per six institutions. The focus group consisted of randomly selected female student athletes per institution. The focus group discussion questions can be found in Appendix E. At the beginning of the focus group discussion, the researcher asked for permission from each female student athlete to audio record the discussion and take notes. After completion of the focus group discussions at each institution, the data was transcribed and analyzed in order to determine if an association exists between athletic, academic and career motivation with training demands and time management.

Data Analysis

Data analysis was performed through a factorial analysis of variance (ANOVA) approach for five of the six research questions. This data analysis approach was used to compare means across two or more independent variables. Nominal level data was collected based on sport, race, and academic year. Interval level data related to athletic, academic, and career motivation was collected using the SAMSAQ. Daily training demands were observed using the time management scale (TMS). Inferential statistics

were used to describe the study's sample and generalize about the future findings produced by the sample. Post hoc tests were conducted to compare between factor levels. The basic overall significance of this data shows if there is a significant difference between race by sport for female student athletes on the SAMSAQ athletic, academic, and career motivation scales, and the significant difference by sport and academic year on the time management scale (TMS). The qualitative data was analyzed and transcribed through participant feedback upon reviewing audio recordings and notes taken during the focus group discussions.

Significance of Study

This study is significant as it contributes to filling the gaps in literature surrounding NJCAA female student athletes. The NJCAA female student athlete population is an overlooked audience as these female student athletes are not getting the same attention as their male counterparts or NCAA female student athletes. As previously stated, "The vast majority of scholarly, media, organizational, and congressional attention has focused NCAA Division I student athletes" (Bush, 2009, p.110). This study addresses the deficient in literature regarding the NJCAA female student athletes, daily training demands, time management, and motivation.

Terms and Definitions

The following are the terms and definitions used throughout this study.

Academic Progress Rates (APR): APR holds institutions accountable for the academic progress of their student-athletes through a team-based metric that accounts for the eligibility and retention of each student-athlete for each academic term (NCAA, 2024).

Community College: a nonresidential junior college offering courses to people

living in a particular area (Education USA, 2024).

Division I: Division I member institutions have to sponsor at least seven sporting events each for men and women (or six for men and eight for women) with two team sports for each gender. Each playing season has to be represented by each gender as well. There are contest and participant minimums for each sport as well as scheduling criteria (NCAA, 2020a).

Four-year Institution: A four-year college or university is an institution that grants bachelor's degrees, and can also offer associate degrees, master's degrees, and in some cases, doctoral degree programs. While most colleges and universities are four-year institutions, some offer both two-year programs and four-year programs (Campus Explorer, 2024).

Growth Opportunities Aspirations and Learning of Students in College (GOALS): GOALS is a study that is conducted by NCAA to observe the experiences and well-being of current student-athletes. The GOALS study was designed to provide data to NCAA committees, policymakers, and member institutions on a range of issues that are important to the student-athletes of today (NCAA, 2016).

Junior College: a college offering courses for two years beyond high school, either as a complete training or in preparation for completion at a four-year college (Merriam-Webster, 2024).

National Collegiate Athletic Association (NCAA): NCAA is a member-led organization that is dedicated to the well-being and lifelong success of college athletes (NCAA, 2020a).

National Junior College Athletic Association (NJCAA): The NJCAA's mission is

to promote and foster two-year college athletics (NJCAA, 2024).

Student Athletes' Motivation towards Sports and Academics Questionnaire (SAMSAQ): The SAMSAQ was created to measure academic and athletic motivation of college athletes. The items were constructed from the basic principles and assumptions of expectancy-value, self-efficacy, and attribution theories (Gayles, 2005).

Time Management Survey (TMS): Online survey that consists of 48 questions that revolve around the theme of how student-athletes budget their time between athletics, academics, and their social life (Yu, 2012).

Two-year Institution: An educational institution that offers a two-year course that is generally the equivalent to the first two years of a four-year undergraduate course (Big Future, 2024).

Technical College: An institution for further education that provides courses in technology, art, secretarial skills, agriculture, etc. (Free-Dictionary, 2024).

CHAPTER II

LITERATURE REVIEW

This chapter contains an overview of literature for this study. The first portion reviews student athlete training demands, tracking team and non- team activities, and regulation comparisons between the NCAA and the NJCAA. The second portion reviews academic motivation, athletic motivation, and career athletic motivation factors. The third portion details the theoretical framework for the study. Primarily, the bulk of the literature relates to major revenue generating NCAA sports such as football and men's basketball. For this study, observation took place of female student-athletes at the NJCAA competition level with hopes to add to the scholarly literature based on the topic of female student athletes, daily training demands, time management, academic, athletic, and career motivation.

Training Demands

Daily training demands can differ between sports at the collegiate level. Dawson et al. (2012) state, "Participation in a varsity athletic program requires a great amount of time and effort to meet the demands of practices, meetings, training, film sessions, and games," (p. 243). Each demand requires weekly, if not daily, attendance for most student athletes (Miller, 2012).

The student athlete in the NCAA spends hours training, watching film, participating in workouts, and traveling to and from games (Miller, 2012). Regulations on daily training demands and countable athletic related activities are necessary to protect

young people from the dangerous and exploitative athletics practices of time. Today, the NCAA regulates some 400,000 student athletes and boasts around 1,000 member institutions (Miller, 2012).

Regulating and Tracking Team Activities

Currently, for NCAA athletes most commitments to daily training demands are regulated by the NCAA based on sport and championship and non-championship segments of the year. The NCAA coined the term "countable activity" which is defined as any required activity with an athletics purpose that involves student-athletes and is at the direction of, or supervised by, any member of an institution's coaching staff, including strength and conditioning coaches (Miller, 2012). Labeled on the NCAA Division II *Quick Tips* (2020) guidance sheet, competition, practice, skills instruction, individual workouts, and the use of an institutional athletics facility where any instruction is provided or supervised by any member of the coaching staff will count towards student athlete countable activity hours. The NCAA has mandated that student athletes may only be required to participate in athletic activities for 20 hours per week, four hours max per day, with a required one day off during the championship-playing segment of the season (NCAA, 2020). During the non-championship playing segment of the season, athletes are not allowed to participate in activity more than four hours per day and 15 hours per week with a required two days off during a set 45-day period window (NCAA, 2020). Completely outside of the playing season athletes are allowed to perform countable related activities for eight hours in the week with two required off days.

Tracking Non-team Activities

Although countable related team activity is monitored at the NCAA level, there are still elements to "daily training demands" and "countable activity" that athletes are participating in daily that are not a part of countable related activity hours that are monitored by the NCAA. One of the main components not monitored by the NCAA is the amount of time a student athlete may spend traveling to and from a game. The monitored limit is three hours for travel when often student athletes are spending well over three hours of travel to competition sites (Jacobs, 2015). Furthermore, performing rehabilitation or injury prevention for their bodies is not a countable related activity. Voluntary activities are not monitored where an athlete may do skills work on their own. Competition travel, rehabilitation, injury prevention, study hall, tutoring sessions, and voluntary activities can take up a valid amount of time during the day for a student athlete in addition to their countable activity hours.

NCAA vs. NJCAA Regulations

Unfortunately, different sports may have a different duration for each particular demand and each demand is affected based on whether the observed sport is participating in season or out of season. Even though the NCAA has set guidelines in place to monitor countable related activity, the NJCAA has not done so. Institutions that participate in NJCAA athletics are not provided with "countable related activity" guidelines and requirements in order to monitor and limit the amount of time a student athlete may spend on daily training demands, nor are they required to follow NCAA guidelines.

Stated by the NJCAA coaches handbook published in 2024, the NJCAA recommends that all member colleges limit in season practices and contests to a combined 20 hours per week, yet there is no required or recommended days off and no requirement or guideline system set in place by the NJCAA that has to be met in order to maintain that the student athlete does not exceed the 20 hour time limit in that week or four hours in a day (NJCAA, 2024).

The NJCAA (2024) is the second-largest national intercollegiate athletic organization in the United States with over 500 member schools in 43 states. Each year over 3,400 teams compete in 25 different sports across multiple divisions in the NJCAA and the organization sponsors 47 national championship events and nine football bowl games (NJCAA, 2024). Institutions competing in NJCAA athletic activities are not required to have an athletics compliance director that strictly evaluates the amount of time spent on countable related athletic activities and the student athlete eligibility.

Often, NJCAA eligibility and compliance related matters at most institutions fall on the coaches that operate their sport or by the athletic administrator at the institution. Compounding the difficulty of studying student athletes is the fact that non-revenue NCAA sports are absent from the large amount of literature, which calls for scholars to pay more attention to the lived experiences of student athletes at all levels (Gilson & Paule, 2010).

Time Management

Time management is having the ability to manage one's time effectively and productively, especially at work (Google, n.d.). Having daily training demands to attain for each sport, time management for student athletes can become complicated and often

overwhelming. In 2018, Rosina Hesla and John Pellegrini examined academic performance and time allocation of athletes at NCAA Division III Women's University. Surveys conducted during this study suggested that, during the season, these student athletes typically spent about 20 hours per week on their sport and a similar amount of time on academics. While the researchers note this time allocation is nearly ideal, surveyed faculty members thought students should be spending twice as much time on academics as they do on sport (Hesla & Pellegrini, 2018). Additionally, Heslea and Pellegrini (2018, p.242) state, "Athletes often report that they are better students during their highly structured sport season than they are out of season." Structure and routine are important pieces for student athletes to stay on track and balance their athletic and academic commitments.

Kristina Yu (2012) examined student athletes and time management; she constructed an online time management survey (TMS) with questions designed to investigate how student-athletes budget their time between athletics, academics, and their social life at a NCAA Division III institute, Trinity College (Yu, 2012). Yu stated, "It is important to study the student-athlete population. Student athletes have an extreme amount of time commitments, so it is important to examine how they budget their time" (p.3). Throughout Yu's research, she also referenced Richard and Aries (1999) who found that athletics are, in fact, the most time-consuming extracurricular activities on a college campus" (as cited in Yu, 2012, p. 3). Yu (2012) states, "Student athletes have dual roles at both students and athletes and have certain responsibilities to both roles" (p.2). Yu argues that athletes feel that their athletics and academics are the most important thing

to them and therefore budget their time accordingly. Additionally, Yu believes that female student athletes are more self-motivated to budget their time management.

The findings from Yu's study showed that females reported dedicating less time to their sport than males both in season and out of season (2012). Student athletes reported being more efficient with their time during season and facing more procrastination when they were out of season. Time management is an important piece for the NJCAA female student athletes due to the lack of research surrounding the amount of time spent on athletics at this competition level. Although, the NJCAA recommends a 20-hour limit per week for athletes it is unclear that any accountability or repercussions are being held through compliance officials or administrators. This alone is reason to believe that NJCAA student athletes are spending more than 20 hours per week on their athletics.

There are benefits and challenges to time management skills needed to compete in college athletics. The advantage to balancing athletic and academic commitments prepares the student athlete for success out of the classroom and in the professional world once their athletic careers are completed. However, an overemphasis on athletics may diminish the student-athlete experience and negatively impact academic performance. Gilson and Paule (2010) conducted a study examining NCAA athletes in non-high revenue sports. They examined the benefits and challenges of being a college athlete at their given institution. One of the main benefits the surveyed athletes noted related to time management skills and how that was a benefit of being a college athlete. Athletes who discussed time management highlight how balancing school, life, and sport all required planning (Gilson & Paule, 2010). A female soccer player in the Big-10

conference stated, “Well, I definitely had to figure out time management real quick because you don’t have 8 hours a day of free time like everybody else does. Traditional students go to class and they are done at two or whatever had have the rest of the day to do whatever they want. I have 3 to 4 hours every day taken up by soccer. You come home from soccer and you have to do your homework, that’s like the only time of the day you have to do it” (Gilson & Paule, 2010, p.38).

The challenges mentioned by the same student athletes refer to the lack of free time and missing out on things in college due to the commitment to their sport. Because of time commitments to their sport they felt that they couldn’t make time for things that were important to them outside of their sport (Gilson & Paule, 2010). A female tennis player in the PAC-10 conference stated, “You are constantly having to choose to do something you want to do (socialize) or do something I need to do (study). After a while, in the back of your mind you think you should be doing something else, so it makes it really difficult to enjoy things that aren’t school or tennis related” (Gilson & Paule, 2010, p.342).

Upon reviewing time management benefits and concerns, it is clear that daily training demands and time management are critical components to the life of a student athlete at any level, competing in any sport.

Academic Motivation

Academic motivation relates to an individual’s desire to complete an academic task, earn high grades, and their commitment to invest time and energy to complete academic tasks (Parson, 2013). In college athletics, academic motivation is a topic that has been studied among student athletes. Most studies assert that student-athletes’

commitment to their athletic role negatively influence their academic motivation (Parsons, 2013). Parson quotes Mahoney as saying, "much of the research on student-athletes' academic motivation is centered on their lack of academic motivation due to the time and energy investing tin their athletic role" (Parson, 2013). Often, the athletic role consumes that student athlete leaving them with poor academic performance and instead of focusing on their academic work; student athlete's main goal is to remain eligible to compete athletically (Parson, 2013). The findings of that study drew a connection between student-athletes' motivation, self-esteem, commitment, and positive reinforcement. Ultimately, the positive reinforcement received from coaches, teammates, parents, friends, and fans enhanced the student athlete's self-esteem, which enhanced their academic motivation and commitment to their academic and athletic role (Marx et al., 2008).

Bowen and Levin (2003) suggest that academic performance "depends on interests, motivation, time management, skills, creativity and other late developing qualities that no better of tests captures well" (p.117). One of the main points this study also aims to identify is whether participating in a sport as an NJCAA female student-athlete motivates one to achieve high academic standards. In order to observe motivational factors for student-athletes to achieve high academic standards, the researcher studied the conceptual framework described by Jelenc (2015): the correlation between athletic intrinsic motivation and academic intrinsic motivation of student athletes at the secondary level. Jelenc (2015) identified the term "academic success" in a variety of ways, such as, but not limited to graduating high school, passing classes, receiving all A's, or scoring a perfect 36 on the American College Test (ACT). The results from this

study support the value of student athletics in relation to a student-athlete's motivation for academic success.

Although student-athletes may be more inclined to value athletics over their academics, many studies show that participation in athletics make a positive impact on academics. Fredricks and Eccles (2006) studied extracurricular activities and the association of beneficial outcomes. The researchers indicated that "activity participation has been positively linked to academic outcomes, including grades, test scores, school engagement, and educational aspirations (Fredricks & Eccles, 2006). The data from this study show a positive association with extracurricular activities including academic, psychological, and positive behavioral outcomes.

Throughout Jelenc's article, she states that most athletes often decide to favor athletics over academics when conflicts exist between the demands of the two (Jelenc, 2015). The Sports Motivation Survey (SMS) designed by Pelletier in 1995 and the Academic Motivation Survey (AMS) designed by Vallerand et al. in 1993 was administered to 78 athletic participants at Marionville High School in Marionville, Missouri. The objective of their study was to determine if there is a correlation between athletic intrinsic motivation and academic intrinsic motivation among student athletes at the secondary level along with determining if high school student athletes apply intrinsic motivation to their academics (Jelenc, 2015). The results of the study show a negative correlation, which indicates student athletes have higher intrinsic motivation towards athletics than academics (Jelenc, 2015).

Although several resources provide positive feedback related to athletics and academics, there are several experts that disagree and believe athletic involvement

diminishes academic performance. Blum and Sanford (2015) conducted interviews with 11 graduated student- athletes and collected their feedback related to the balance between the books and the playing field. This study displayed the negative effects of how students divided their time and energy among academics and athletics (Blum & Sanford, 2015). Additionally, these researchers cited a study conducted by Adler and Adler in 1985, who studied the relationship between athletic participation and academic performance among athletes involved in big-time college sports, namely football and men's basketball; results showed a shift from optimism to pragmatism and eventually academic apathy in those student athletes (Adler & Adler, 1985). "Most athletes enter college with optimistic and idealistic goals and attitudes about their impending academic careers. However, their athletic, social and classroom experiences lead them to become progressively detached from academics. As a result, they make pragmatic adjustments, abandoning their earlier aspirations and expectations and gradually resigning themselves to inferior academic performance" (Adler & Adler, 1985, p. 241). In this study, athletic involvement is portrayed as a negative influence, often detaching student athletes from their academic expectations and goals.

Likewise, many student-athletes often enter college with a fear about academics and may expect to receive good grades as long as they excel athletically. Whitner and Meyers (1986) studied male student-athletes, and their expectations related to school. One of the student-athletes they profiled thought college would be a lot like high school and if he was good at his sport, he would get a passing grade even if he did not do his class work (Whitner & Myers, 1986). Another male athlete from the same study stated, "They didn't really need to show up for class, the teacher did not care whether they were

present in class or not" (Whitner & Myers, 1986). Both of these male athletes perceived class attendance as optional and perceives athletics to be more important than academics. Many athletes, male or female, have negative experiences and perceptions related to academics; therefore, these issues must be further studied in order to provide guidance and motivation to these student athletes. Although negative themes and perceptions are apparent between academics and athletics, the researcher believes there are more positive factors influencing female college athletes rather than negative. Beron and Piquero (2016) suggested that literature and research are missing from this topic and that more academic and sport-related factors may influence academic performance and motivation.

Furthermore, eligibility requirements play a role in academic motivation as student athletes must adhere to certain GPA and hour requirements to participate in their given sport. NCAA athletes have different standards across different divisions. For NCAA division one athletes to maintain eligibility in their sport they must be enrolled full-time (12 credit hours) at their institution and meet progress toward degree requirements. By the end of their second year of college, 40% of their required coursework must show progress towards a degree while by the third year, they must show 60%, and by the fourth year, they must show 80% of their coursework is progress towards a degree (NCAA, 2019). While meeting progress towards a degree they must pass at least six credit hours each term to remain eligible for the following term and meet the minimum grade-point average requirements related to the schools GPA standards of graduation (NCAA, 2019).

Conversely, eligibility standards are different for NJCAA student athletes. To maintain eligible, NJCAA student athletes must be enrolled full- time (12 credit hours)

and pass with a 2.0 GPA (NJCAA, 2024). The different in eligibility requirements are significant; however, there is a lack of research on the motivation surrounding NJCAA eligibility and motivation.

Athletic Motivation

Athletic motivation is a topic studied over time concerning both coaches and student athletes. Motivation is defined as the direction and intensity of one's effort (Weinber, 2023, p. 7). Robert S. Weinberg wrote a chapter on motivation in the, "Handbook of Sports Medicine and Science: Sport Psychology" and he states, "Great coaches can get their athletes to perform up to their various levels of ability as well as get them to work together for the betterment of the team/group. Great performers are highly motivated to hone their skills, practicing consistently for years to reach their goals. Thus, the motivation to practice, condition, and preserver, with the commitment to improve and attain a level of excellence, is at the heart of achieving" (Weinber, 2023, p. 9).

Coaches play a critical role in a student athlete's motivation as there are athletes that are motivated differently from others. Factors like personality needs, goals, and interests can dictate how some athletes interact and factors that need to be considered when determining an effect way to motivate (Weinberg, 2023, p. 8). Weinberg found that there are different techniques to enhance motivation in the student athlete along with establishing techniques that may have a negative effect on one's athletic motivation. These different techniques discussed for athletic motivation are goal setting, goal orientation, rewards/punishments, and intrinsic motivation (Weinberg, 2023, p. 9).

Effective goal setting is based on task performance with differences among goal setting such as outcome goals, performance goals, and process goals (Weinberg, 2023, p.

8). Each of these techniques may affect some athletes differently than others. Most commonly, outcome goals are used because they are primarily focused on winning and losing. The problem with outcome goals is to many people focus on the results and often do not realize outcome goals are often out of their control (Weinberg, 2023, p. 8). Performance goals focus on the actual performance of the individual and there is no mention of outcome, which leaves it primarily in the person's control. Process goals focus mainly on the process of reaching one's performance goals (Weinberg, 2023). Weinberg states there are four primary reasons that goals work and keep one athletically motivated. First, they direct attention to important elements of the skill being performed. Second, they mobilize performance efforts that allow for a series of short-term goals in order to real larger scale goals. Third, goals help performers persist over time as they strive to reach their goals. Lastly, goals foster the development of new learning strategies (Weinberg, 2023, p. 9).

Goal orientation is another technique used that is based on the athletes' perceptions of whether they have reached their personal goals and how they perceive an outcome as a success or failure (Weinberg, 2023). In order to understand an athlete's goal orientation, it is important to recognize how they define success or failure. Weinberg's research states two predominant goal orientations, task (mastery) oriented and ego (competitive) oriented (Weinberg, 2023, p. 10). Task orientated individuals are primarily focused on the development of their competence and ability to improve in a task while ego-oriented individuals are purely focused on success and their comparison to others (Weinberg, 2023). Task orientated athletes tend to view ability as being determined by their improvement and are satisfied if their performance reflects extracting

the best out of their current ability by mastering a particular technique, increasing tactical awareness, or making improvements in learning or performing a task (Weinberg, 2023, p. 10). Ego orientated athlete's value achievement in beating the opposition and achieving a similar result at the expense of less effort. These athletes feel successful when they feel like they demonstrated the ability superior to someone else (p. 10). Understanding each of these orientations helps breakdown an athlete's motivation tactics, and how each athlete among different sports is centrally oriented.

Most coaches commonly use the reinforcement and feedback method in order to motivate student athletes. Weinberg states, "The theory behind the use of feedback and reinforcement is based on operant conditioning principles, that argue that our behaviors can be influenced by and eventually controlled by manipulating consequences" (2023, p. 12). Some athletes simply perform better from positive reinforcement and feedback while others through negative, although researchers would argue that 80%-90% of feedback should be positive (Weinberg, 2023). There are different ways to provide reinforcement and feedback such as through positivity, schedules and timing reinforcement, reward successful approximations, reward emotional skills, reward effort and not only outcome, and through punishment. When coaches use positivity as reinforcement and feedback the coach is emphasizing more on improvement rather than on "screw ups'; therefore, through this approach a more positive learning environment and player coach relationship is fostered (Weinberg, 2023).

Schedules and timing reinforcement hold two different types of reinforcement, continuous and intermittent. Every time an athlete performs the desired behavior, continuous reinforcement is applied, whereas intermittent reinforcement involves

providing reinforcement to athletes only occasionally. Preferably, Weinberg recommends that continuous reinforcement is best when learning a new skill, as intermittent reinforcement applied once the skill is well learned (2023). Rewarding a newly learned skill as the skill improves over time is known as rewarding successful approximations (Weinberg, 2023). When learning a new skill, mistakes are inevitable; therefore, rewarding small progress over time "shapes" the learner to improve, as they get closer to the desired learned skill (Weinberg, 2023). Additionally, demonstrating good sporting behaviors, responsibility, judgment, and self-control are ways to reward emotional and social skills (Weinberg, 2023). Rewarding effort and not only outcome focuses on the notion of rewarding effort regardless of the outcome, positive or negative. Reinforcement through punishment can be necessary and often a means to controlling a certain behavior, yet this is not recommended in the coaching environment (Weinberg, 2023).

Intrinsic motivation is the last technique Weinberg (2023) suggests affects one's athletic motivation. Weinberg states, "Intrinsic motivation focuses on striving inwardly to be competent and self-determining in the quest to master the task at hand. In sport, intrinsically motivated people tend to enjoy competition, they like action and excitement, focus on having fun, and want to learn new skills to the best of their ability" (p.14). Those athletes that are highly intrinsically motivated often demonstrate a love and passion for the activity and a strong sense of pride. Intrinsic motivation can be broken down based on a continuum that considers purely intrinsic motivation and extrinsic motivation (with a motivation, no motivation at all, and at one end of the continuum). Research shows that high levels of intrinsic motivation relate to those athletes with higher levels of self-determination, while high levels of extrinsic motivation led to lower levels

of self-determination (Weinberg, 2023). There are different ways to enhance intrinsic motivation through varying content and a sequence of practice drills, involving participants in decision-making, verbal and non-verbal praise, performance goals, and giving rewards contingent upon performance. Motivation is one of the most important aspects for peak performance and understanding the four different areas of motivation (goal setting, goal orientation, feedback/reinforcement, and intrinsic motivation) can help boost a student athlete's effort, persistence, enjoyment and ultimately their performance (Weinberg, 2023).

Career Athletic Motivation

Career athletic motivation is a component that involves the desire for a college student athlete to continue to play sport at the professional or Olympic level. There are over 500,000 student athletes, across 20,000 teams, participating across three divisions in the NCAA (2022). According to the NCAA in 2022, the likelihood of moving from an NCAA institution into a major professional sport league is listed at 2% in all sports, men's basketball at 1.2%, football at 1.6%, baseball at 9.9%, and men's hockey at 7.4%. The NCAA listed only one female sport, women's basketball, with a 0.8% of joining the professional league (NCAA, 2022). Although women's basketball is one of the more popular female college sports, the odds of playing pro in the WNBA (Women's National Basketball Association) are very slim. "You can be a great college player and not make a WNBA roster," said LaChina Robinson a WNBA analyst for ESPN (Feinberg, 2023) and "You're not only competing with players that are currently on roster, but also a ton of women's basketball players overseas that have been honing their skills and waiting for an

opportunity to break into the WNBA." There are only 12 WNBA teams and 144 roster spots, with most of those being filled by returning players" (Feinberg, 2023).

Additionally, to a 2019 NCAA survey of more than 22,000 student-athletes, a significant number of Division I (DI) players responded that they are at least "somewhat likely" to play professionally or compete in the Olympics. The largest disparity between reality and expectations existed among men's basketball and hockey players, with three out of four reporting that they are at least somewhat likely to play professionally (Feinberg, 2023). Approximately seven in 10 players surveyed within the DI Football Bowl Subdivision responded that they are at least somewhat likely to go pro. Despite efforts by the NCAA and colleges to curb students' expectations in recent years, this figure is actually 12 percent higher than the number of DI football players in a 2011 survey who said they were likely to go pro" (Cliburn, 2021). Furthermore, "Aspirations of having a career in sports are largely shaped by the media and can be extremely detrimental to those who do not make it into professional leagues, according to a 2018 study by Shaun Harper, a leading scholar on diversity, equity, and inclusion at the University of Southern California Marshall School of Business (Cliburn, 2021).

The ongoing research shows the majority of student athletes are not going into professional leagues; therefore, institutions push to focus more on academic and career driven opportunities including internships or mentorship relations with those in their related career field outside of sport. Recent research from the National Association of Colleges and Employers (NACE) shows that women student-athletes were 6 percent less likely and men student-athletes were 17 percent less likely to work as interns compared with college students overall. One in five student-athletes reported that their athletic

obligations prevented them from pursuing such opportunities (Cliburn, 2021). Yet NACE data shows that individuals who complete paid internships are more than twice as likely to have accepted a job by graduation than those who had unpaid internships or no intern experience. Graduates who have this experience are also more likely to start at higher tiers in the workplace and have significantly larger starting salaries than their peers (Cliburn, 2021).

The NCAA states, "In reality, most student-athletes depend on academics to prepare them for life after college. There are nearly half a million NCAA student-athletes, and most of them will go pro in something other than sports" (NCAA, 2022).

There are several female and male student athletes that chose to attend junior college institutions to mature athletically and academically, often to prepare them to compete at the NCAA level and enhance their chances to pursue a career in a sport. According to the article, "What to know about going juco," by Courtney Rickard (2022) states, "Do you know where professional athletes like Aaron Rogers, Cam Newton, Jimmy Butler, Shawn Marion, Sheryl Swoopes, Mike Piazza and Albert Pujols went after high school? They all got their start at a two-year college before making a name for themselves in professional sports years later" (Rickard, 2022, para. 1). Though there are former junior college student athletes that conquered their pursuit of becoming a professional athlete, the ongoing research shows the odds for "going pro" continue to be slim for all sports, across all divisions of college athletics.

College student athletes at any level of competition is a unique subpopulation of the college student body. These individuals often enter higher education with a thinking that they will become professional athletes and identify most strongly with feelings and

self-perceptions that they are first and foremost athletes, and this is true among community college athletes as well as those in NCAA Division I (Kissinger & Miller, 2007). The difficulty these college students face is when there is the realization that an athletic career must end, and primary identification must be placed with some alternative life-defining purpose (Miller, Nadler, Pflum, 2017). Motivation to have a career in a professional or Olympic sport is clearly an ongoing trait that most college student athletes possess; however, based on the data and ongoing research the odds of male or female student athletes "going pro" after their collegiate careers is very slim.

Theoretical Framework

The theoretical framework behind this study is blended with the Expectancy Value theory and the Threshold Model theory. As stated by Gayles (2005), in The Journal of College Student Development, the Expectancy Value theory is an achievement motivation theory used to construct the items on the SAMSAQ instrument and assumes that motivation toward a given task can be determined by an individual's choice of, persistence on, and amount of effort applied to a task (Weiner, 1984). Two major components of this theory are linked to the probability that an individual will successfully complete a task, and (b) the value associated with successful completion of the task (Spence & Helmreich, 1983). Expectancy, or the probability of success, is influenced by individuals' self- concept about their ability to successfully complete a task and the level of difficulty associated with completing the task (Eccles, 1983). Student athletes choose both to participate in their sport and attend college. However, the amount of effort or intensity they apply to academic and athletic tasks may vary (Gayles, 2005). This theory is appropriate for this study as it observes the level of motivation a student

athlete may apply to different tasks associated with academic, athletic, and career endeavors. One's effort applied to any task will likely be associated with the success of that task. Effort and intensity can vary amongst academic, athletic, and career driven motives to complete a specific task successfully.

The Threshold Model that was developed by Herbert Marsh and Sabina Kleitman in 2002 and proposes that time spent in a moderate amount of extracurricular activities (athletics) has a positive outcome, but that there is a point when the number or the extent of time spent on extracurricular school activities is too great and the positive outcome begins to diminish (Marsh & Kleitman, 2002). This model represents the middle ground between the benefits posited by the developmental and identification/commitment models and the negative outcomes of the zero-sum model suggesting that there are positive outcomes from participation in extracurricular activities but at some point the time, number of commitments, and identification with the extracurricular activities may take away from the identification that the student has with the school causing academics take a toll (Marsh & Kleitman, 2002). This theory is appropriate for this study as it observes the amount of time a student athlete may spend on athletic endeavors and daily training demands along with evaluating the outcomes related to academic, athletic, and career motivation.

After reviewing a variety of literature related to the nature of this study, the researcher provides detailed data related to NJCAA female athletes daily training demands, time management, academic, athletic, and career motivations as it pertains to race, sport, and academic year.

CHAPTER III

METHODOLOGY

The first portion of this chapter identifies the research questions and the research design. The second section addresses the participants and instruments used for the study. The third portion details the data collection for the quantitative and qualitative portions of the study along with the quantitative and qualitative data analysis. Lastly, the threats to validity and a chapter summary are provided.

Research Questions

This study's inquiries are guided by the following research questions:

RQ 1: Is there a significant difference between race by sport for female student athletes on the SAMSAQ academic motivation scale?

RQ 2: Is there a significant difference between race by sport for female student athletes on the SAMSAQ athletic motivation scale?

RQ 3: Is there a significant difference between race by sport for female student athletes on the SAMSAQ career athletic motivation scale?

RQ 4: Is there a significant difference between race by sport for female student athletes on the SAMSAQ total score scale?

RQ 5: Is there a significant difference by sport and academic year for female student athletes on the TMS total score scale?

RQ 6: How do the selected demographics, motivation scales, and total score scales in the SAMSAQ and TMS surveys explain the similarities or differences among female student athletes participating in sport at the NJCAA competition level?

Research Design

An explanatory sequential mixed methods research design (Creswell & Plano Clark, 2011) was chosen for this study. This design breaks down into three different phases. Each phase intends to build data in order to combine both quantitative and qualitative perspectives. During phase one, student athletes received an email with a digital informed consent form that was gathered from each participant and collected information related to player demographics (race, academic grade year, and sport specific participation). Next, surveys were administered, one questionnaire related to athletic, academic, and career motivation, and one survey was given related to daily training demands and time management. Each of these instruments fulfilled a purpose in examining factors related to athletic, academic, and career motivation along with the effects of daily training demands on time management for female student athletes.

Phase two involved collecting qualitative data through a series of player focus groups with purposefully selected female student athlete groups which ranged in size from 6 participants to 10 participants. Each focus group discussion took place online through a video conference platform. The length of the discussions was left open-ended for the student athletes to fully elaborate their thoughts and feelings towards the discussion topics. Participants were informed of and agreed to video recording and notetaking during the sessions to fully transcribe and convey the thoughts and feelings of the participants.

Phase three incorporated analyzing and triangulating the quantitative and qualitative data. In addition, the demographics and data from the questionnaires and the focus groups discussions was used to identify whether there was a significant difference

between race by sport on athletic, academic, and career motivation and if there was a significant difference by sport and academic year for female student athletes on the total score scale for time management.

Independent variables for this study included race, sport, and academic year of the female student athletes. Each of these independent variables are categorical variables measured on the nominal scale.

Dependent variables for this study included academic motivation, athletic motivation, career athletic motivation, time management, and daily training demands. Each of these dependent variables are measured on the interval scale.

Participants

The target population for this study was female student-athletes that are participating in the National Junior College Athletic Association (NJCAA). The accessible population was female student athletes drawn from 10 community colleges across the state of Georgia and 4 community colleges across the state of Florida that participate in NJCAA collegiate sports of women's basketball, women's softball, women's soccer, and women's cross-country. There was a total of 306 female student athletes, with a minimum goal of 208 female student athletes across four different sports. Each team roster was evaluated from the previous competition seasons in order to account for the total number of female student athletes. The average women's basketball team roster holds a total of 15 student athletes, the average women's soccer team roster holds a total 20 student athletes, and the average women's softball team roster holds a total 20 student athletes, and the average women's cross-country team holds 5 female student athletes. Each surveyed institution provided the following number of female

student-athletes on their available sports team roster: women's basketball (12-15 student athletes), women's softball (18-24 student athletes), women's soccer (18-24 student athletes), and women's cross-country (5-7 student athletes).

Instruments

There were three instruments used for collecting data in this study. For the quantitative portion of the study, the Student Athletes Motivation Towards Sports and Academics Questionnaire (SAMSAQ) and the Time Management Survey (TMS) were used. For the qualitative portion, the Focus Group Interview Guide was used.

SAMSAQ

The Student Athletes Motivation Towards Sports and Academics Questionnaire (SAMSAQ) was developed by Joy Gaston in 2002. The SAMSAQ questionnaire was designed to measure female student athletes' motivation to attend class, achieve high academic performance, and their motivation towards high sport performance. Within the questionnaire, there are 27 academic and career motivation questions and 27 sport related questions. These questions directly map to the research question variables of academic motivation, athletic motivation, and career motivation. The scale for the SAMSAQ was based on a Likert scale of 1-6 that included descriptors Very Strongly Disagree, Strongly Disagree, Disagree, Agree, Strongly Agree, and Very Strongly Agree.

Validity. There are three subscales on the SAMSAQ questionnaire, each addresses different factors of a student athlete's life. These factors are directly aligned to individual research questions in this study. The individual questions for each subscale were reviewed to ensure they had face validity, i.e., they asked questions appropriate for that subscale. The first SAMSAQ factor was Student Athlete Motivation scale (SAM),

which measures the extent participants are motivated to pursue their sport. The second factor was Career Athletic Motivation (CAM), which measures the extent participants are motivated to play sports at the professional or Olympic level. The third factor was Academic Motivation (AM), which measures the extent participants were motivated towards academic success.

Reliability. For the SAMSAQ to be deemed reliable the questionnaire must produce similar results over time. To determine the reliability of the questionnaire Cronbach's alpha coefficient was calculated to measure the internal consistency of the items on each subscale. The alpha value for the student athletic motivation subscale was .86, for the career athletic motivation subscale .84, and the academic motivation subscale, .79. The reliability estimates for each subscale were found acceptable.

TMS

The Time Management Survey (TMS) developed by Kristina Yu in 2012 measures the amount of time the student athletes were participating in academic endeavors and class attendance along with the amount of time spent pursuing daily training demands on their collegiate sport. There was a total of 48 survey questions broken down into five sections: Demographics, Academics, Sport, Social Activities, and Budgeting Time. There are 5 demographic questions, 21 questions related to academics, 12 questions related to sport, 6 questions related to social activities, and 4 questions related to budgeting time in general.

Validity. Four factors (Academics, Sport, Social Activities, and Budgeting Time) created the structure of the TMS questionnaire. Each of these sections of the TMS can be mapped back to the Threshold Model theory which discusses the amount of time spent on

extracurricular activities can generate a positive outcome, yet over a period of too much time the positive outcomes can diminish. The individual questions for each subscale were reviewed to ensure face validity, i.e., they questions appropriate for that factor.

The first factor on the TMS is academics which indicates whether the student athlete was recruited to attend the university based on academic merit or for athletic merit. The second factor is academic success during the competitive season vs. the non-competitive season. The third factor is the ability to budget time during the competitive season vs. the non-competitive season. Along with the time budgeted for leisure and sleep. The fourth factor is academic requirements as it pertains to attending study hall during the competitive season vs. the non-competitive season.

Reliability. The online survey was constructed of 47 questions revolving around how athletes budget their time between athletics, academics, and their social life. Many of the questions involved the student athletes being in season rather than out of season.

Unfortunately, no reliability metrics could be found in the literature. Therefore, in order to determine establish some level of reliability for the TMS, Cronbach's alpha calculations were run on the total score for the instrument and for the individual subscales. All findings were evaluated using the p-value and a .05 alpha level. The findings are as follows. For the total scale score from the TMS, Cronbach's alpha generated a reliability estimate of .74. Overall, the instrument generated a solid reliability score. However, the results for the subscales were not as good. The admissions alpha score was .17, the academic success alpha score was .51, the time management alpha was .66, and academic requirements alpha score was .13. Cronbach's alpha for the first three subscales are unacceptable for use as individual measures and the last subscale is considered minimally acceptable. Recognizing the limitations of the

subscales, only the total score for the instrument was utilized in the study's data analyses.

Focus Groups Interview Guide

The interview guide for the focus groups revolved around themes and findings from the quantitative findings about daily training demands, time management, academic, athletic, and career athletic motivation. Female student athletes were asked to join in a zoom call, on their home campus, for a focus group discussion. This protocol provided a recommended pattern for introducing the group discussion as follows: Welcome, an overview of the topic, ground rules, and the first question. Krueger (2002) states, "the first few moments in a focus group discussion are critical as the moderator must create a thoughtful, permissive atmosphere, provide ground rules, and set the tone of the discussion" (2002, p.4).

Validity. To reduce threats to the quality of the data, member checking and triangulation were two major components for each focus group discussion. Member checking was established by sharing preliminary findings with the focus group participants, allowing the participants of the focus groups the option to review the focus group discussion recording and notes. Triangulation was used by combining data across the multiple discussion groups to capture diverse perspectives and findings to not limit to a single group's experiences. The observer recorded a separate journal of one's own reflections from each focus group, and the observer recognized one's own bias and preferences. Strategies to enhance validity and reduce observer bias and observer effect, took place. Each focus group discussion was recorded, and structural corroboration was established in each focus group to avoid internal conflicts.

Procedures to Promote Qualitative Data Reliability.

To reduce threats to the quality of the data gathered during the focus groups and during data analysis work, standardized protocols, audio recordings and verbatim transcription, and consistent data collection were implemented. Standardized protocols were used to ensure each session followed a consistent procedure, including the same questions and similar timeline were followed to ensure all participants were treated equally. Video and audio recordings along with verbatim transcription were employed to accurately capture the discussions and to minimize the risk of data loss or misinterpretation. Consistent data collection was used to code the data and standardize the data collection protocol and develop reoccurring themes for each focus group discussion. The observer talked very little and listened, recorded observations, analyzed the interview transcripts, and started writing notes early in the discussion to gain feedback from the focus group participants to reflect their perspectives accurately. Additional steps to minimize threats to the study are provided later in this chapter.

Data Collection

Data collection began once approval of the Valdosta State University Institutional Review Board (IRB) was received. Data collection for this study occurred during the academic school year. The athletic directors for each institution were contacted to discuss the importance of this study, to obtain permission to contact the head coaches for each sport, received email addresses for each student athlete, and to ask for the ability to administer the player focus groups discussions. Data collection details for each phase of the study are provided below.

Quantitative

Links to the SAMSAQ and TMS online instruments were emailed to each individual female student athlete participating in the study. To ensure consistency with the original SAMSAQ and TMS instruments, no modifications or additions were made to the individual questions on the online surveys. The responses from the individual female student athletes were kept confidential.

The student athlete was contacted through email with the Qualtrics survey link. Provided the female student-athletes receive the digital survey link the students were asked to refrain from providing any personal information, except for what is asked on the demographic page at the end of the first survey. The first page of the survey served as the informed consent page. Once they agreed to participate in the study by clicking the "next" button they were guided to the first page of the SAMSAQ online survey. Upon completion of the SAMSAQ online survey, the participants then saw and completed the demographic and TMS questions. The student-athletes were given a two-week period to complete each of the surveys. There were three follow up emails sent every two weeks to increase completion of surveys. Some surveys were skewed due to the lack of completion of surveys in their entirety. For each subscale response the mean, standard deviation, median, and frequency scores based upon all participants' responses were reported. Data cleaning was performed and surveys that were less than a 75% completion rate were removed. For surveys that reached at least 75% completion but fell short of 100%, the median score of the overall item results was used. Checks were done to see if there were errant responses.

Qualitative

Once the surveys from the student-athletes were collected, the quantitative data was assessed and used as a guideline to build questions for the player focus group discussions. The focus group discussions were conducted during the academic school year once all surveys are completed. Six focus groups were held. Three sessions had 6 student-athlete participants, and three others had up to 10 participants. All sessions were conducted via online video conferences and were recorded to ensure data collection quality. The focus group discussions were left open ended as there was no time limit for the focus group discussions. No coaches were in attendance, only student-athletes.

Based on the Threshold Model theory, extracurricular activities and commitments to a physical sport can affect one's potential related to academic achievement and these commitments are related to the amount of time spent on these activities. Therefore, these female student athletes were asked to discuss their top three demands of being a female college athlete related to each of the following factors: physical demands, scheduling demands, and academic demands. Based on the use of the Expectancy Value theory, motivation is examined. They were asked to discuss their top motivational factors towards athletic, academic, and career success. The player focus group discussions allowed for a deeper understanding of the difference between race on athletic, academic and career motivation along with the time management needed to adhere to daily training demands for their sport. Each focus group was given an expected start and end time with extra time allotted for the extension of conversation. Notes were taken during the discussion and with permission from the student-athletes, a recording of the focus group discussion. All focus group discussion data from each participating female student athlete was recorded and coded.

Data Analysis

Quantitative

Data analysis procedures were conducted using Qualtrics and R to calculate and analyze the data. The following descriptive statistics were calculated for each research question: the mean, median, standard deviation, and the frequency percentage of each response. A factorial analysis of variance (ANOVA) test was used for each research question to determine whether there was significant difference of means between race by sport on athletic, academic, and career motivation on the SAMSAQ scale, and if there was a significant difference of means by sport and academic year for female student athletes on the TMS total score scale.

To answer each research question, the factorial ANOVA statistics that were reported are the means across two or more independent variables, the variance between groups, and the variance within groups of the SAMSAQ and TMS. Analysis such as post hoc statistics were reported if there was a significant difference. Eta squared and omega squared were tested for interaction effect, and effect size was tested for interaction on main effects. The statistical considerations for each research question are missing data and outliers. Data cleaning was performed to maintain the 75% completion rate threshold. Those surveys that failed to meet the threshold were removed from the data collection. For surveys that reached at least 75% completion but fell short of 100%, the median score of the overall item results was used. Checks were done to see if there were errant responses. The assumptions for each research question were conducted through normality tests such as Shapiro-wilks test and Jarque Bera test to measure skewness and kurtosis. Dependent variables were measured at the interval or ratio level. Homogeneity of variance was tested using Levene's test for equality of variance.

Qualitative

Once the focus group discussion concluded, the qualitative data collected from the focus group discussions was collected and assessed to allow for a deeper understanding of athletic, academic, and career motivation along with time management related to daily training demands encountered by NJCAA female student athletes. The qualitative data gathered for this study through the player focus group discussions was analyzed and transcribed based on the participant feedback. Upon reviewing the video recording and notes taken a manuscript was created. Descriptive coding was used to summarize in a word or short phrase the basic topics of a passage of the qualitative data. Throughout the transcription process, comparisons were evaluated of the recurring themes and variables the female athletes discussed related to athletic, academic, and career motivation. After transcribing and reviewing the information from the focus group discussions, the data was compared to the reoccurring variables from each of the focus groups based on physical demands, scheduling demands, and academic demands. The qualitative data from the focus group discussions along with the quantitative data from the administered surveys were reviewed to identify if the effects of daily training had an impact on academic performance and academic motivation.

Threats to Validity

Several different threats to validity were likely throughout the study. Internal threats to validity were related to a strong bias for participation as the researcher was an NJCAA college softball coach at a USG institution and former NJCAA female student athlete. This internal bias may cause several issues when collecting and analyzing the research data from the participants. The assumption is that all female student-athletes properly manage class attendance and maintain high standards of academic performance.

In addition, this bias may assume all female student-athletes gain a positive experience from participating in college athletics. In addition, existing relationships have been built between former colleagues coaching women's softball at the participating institutions. This threat may affect the quality of the interview discussions and interactions with the female student-athletes participating in the sport of softball.

External threats to the study were focused on the generalizability of the findings. This study aimed to generalize the findings for all NJCAA female student-athletes in Georgia and Florida. The top four NJCAA female sports of basketball, softball, soccer, and cross-country were studied and the data collected from this study may not provide enough participant feedback to generalize for all NJCAA female sports (volleyball, golf, tennis, bowling, lacrosse, swimming and diving, track and field, and half-marathons). The females of the studied sports may perceive their athletic participation and academic performance differently based on race, their sport, and their academic grade year. In addition, NJCAA female student athletes at these institutions are strictly female student-athletes in the state of Georgia and Florida. Certain sports, particularly basketball, softball, soccer, and cross-country are more popular in the southeast region of the country. The popularity of these sports throughout this region may have affected the participants' results related to the demands and expectations placed on female student-athletes in the southeast region of the NJCAA. Another internal threat may be related to the participating head coach who will be communicating the willingness to respond to the questionnaire, survey, and the player focus groups. There may be a limitation to this study as female student-athletes who are not having a positive experience with their sports team or who are academically struggling are not willing to provide that information.

Summary

In summary, the proposed study used an explanatory sequential research design with three different collection forms (SAMSAQ, TMS, Focus Groups). The target population included NJCAA female student athletes across 10 community colleges in the states of Georgia and Florida in the sports of basketball, softball, soccer, and cross country. Five research questions were used with three of the questions addressing the motivational scales of the SAMSAQ and two of the questions concerning the difference among total scores for the SAMSAQ and TMS. After answering the five research questions, focus group discussions took place to create a deeper understanding behind motivational and time management factors surrounding daily training demands for female student athletes. R was used to conduct factorial ANOVA testing for each research question and focus group discussions were recorded, analyzed, and transcribed. Internal threats to validity are likely due to the bias of being an NJCAA female student athlete and NJCAA head softball coach. External threats to validity were mainly focused on the generalizability of the questionnaire, survey, and focus group results. Difficulties may arise within the data collection and data analysis process allowing for discussion.

CHAPTER IV

RESULTS

This chapter presents the findings of the study. The first section of this chapter described the demographic characteristics of the SAMSAQ and TMS survey participants and the focus group discussion participants. The second section described the findings related to each research question with a final summary for all the findings.

The following questions were answered in this study:

RQ 1: Is there a significant difference between race by sport for female student athletes on the SAMSAQ academic motivation scale?

RQ 2: Is there a significant difference between race by sport for female student athletes on the SAMSAQ athletic motivation scale?

RQ 3: Is there a significant difference between race by sport for female student athletes on the SAMSAQ career athletic motivation scale?

RQ 4: Is there a significant difference between race by sport for female student athletes on the SAMSAQ total score scale?

RQ 5: Is there a significant difference by sport and academic year for female student athletes on the TMS total score scale?

RQ 6: How do the selected demographics, motivation scales, and total score scales in the SAMSAQ and TMS surveys explain the similarities or differences among female student athletes participating in sport at the NJCAA competition level?

Overview of Demographics

The population for this study includes 306 female student athletes from 16 junior college schools across the states of Georgia and Florida, see Table 1. Following the table is a review of the responding participants who contributed for this study beginning with race breakdown, followed by team sport, and finally class level.

Table 1

Breakdown of Sports by School

Location	Softball	Soccer	Basketball	Cross-Country
School A	17	21		9
School B	19			
School C	23			
School D	18			
School E	30			
School F	24	27		
School G	18	23		
School H	20			
School I	11			
School J	20			
School K		13		
School L			13	

With regard to race, the breakdown of the 306 female student athletes includes 236 White (77.1%), 41 African American (13.4%), and 29 Hispanic (9.5%). Based upon the participant responses, the breakdown completed by race includes 93 White (82.3%), 12 African American (13.3%), and 4 Hispanic (4.4%). The Chi Square test was run to observe the goodness of fit, $x^2(3, N = 306) = 3.02$, $p = .22$, and shows there is no significant difference between the accessible population and sample.

In terms of sports, the breakdown of the 306 female student athletes includes 200 softball athletes (65.4%), 84 women's soccer athletes (27.5%), 13 women's basketball athletes (4.2%), and 9 women's cross-country athletes (2.9%). Based upon the participant responses breakdown completed by sport include 86 softball (75.6%), 10

women's soccer (10%), 13 women's basketball (13.3%). The Chi Square test was run to observe the goodness of fit, $x^2(4, N = 306) = 21.21$, $p = .00$ and shows there is a significant difference between the accessible population and sample of participants responding. Four soccer teams were solicited for responses but did not respond. Two cross country teams were solicited for responses but did not respond. As a result, sport-related findings will be limited for these sports.

Finally, regarding class level, the breakdown of the 306 female student-athletes includes 160 Freshmen (52.3%) and 146 Sophomores (47.7%). Based on the participant responses, the breakdown completed by class level includes 49 Freshmen (44.5%) and 60 Sophomores (55.5 %). The Chi-Square test was run to observe the goodness of fit, x^2 (2, N = 306) = 1.60, p =.14, and shows there is no significant difference between the accessible population and sample of participants responding by academic year.

The focus group participants included female student athletes from the following institutions and sports: Institution A had representatives from women's soccer and softball for a total of 10 participants. Institution B had representatives from women's softball and women's soccer for a total of 9 participants. Institution C had participants from women's softball for a total of 5 participants, and Institution D had had representatives from women's softball for a total of 12 participants. Schools A-D were used because they had the broadest cross-section of athletes across all sports.

Findings

Findings for each of the research questions are presented below. To answer research questions 1-4, the SAMSAQ survey results were broken down based on the three different subscale scores and the total score. The three subscales are the AM

(academic motivation), SAM (student athlete motivation), and the CAM (career motivation). The AM subscale was used to answer Research Question 1. The SAM subscale was used for Research Question 2, and the CAM subscale was used for Research Question 3. The overall SAMSAQ total score was used for Research Question 4. The findings for each of these research questions are provided below. The findings for Research Question 5 incorporated the TMS survey and the results were broken down based on four factors and the total scale score. The four factors are academic process, academic success, academic requirements, and time management. For Research Question 6 the focus group discussion questions were developed based on the findings from Research Questions 1-5 to develop questions relative in nature to the findings from the SAMSAQ and TMS instruments.

Findings for Research Question 1

The academic motivation (AM) subscale was observed to identify if there were a significant difference between race by sport for female student athletes. A significant difference between the groups would indicate a difference between race by sport on the AM subscale. The AM subscale consisted of items 1, 3, 4, 5, 7, 10, 11, 16, 17, 18, 21, 23, 26, 28, 29, and item number 30. The entire SAMSAQ instrument is found in Appendix F. Table 2 below is used to list each question on the AM subscale along with its mean, standard deviation, and median scores based upon all participants' responses. A more detailed presentation of the data is provided at the end of Appendix F. There were two nominal level variables identified, race and sport, and one interval level variable identified, the AM subscale. For the AM subscale there was a range of 52 to 78 with a mean of 61.4 (SD = 4.4) and median of 61.

Procedures to check the normality assumptions by race and sport were completed by using the Shapiro-Wilk test and the Jarque Bera Test. The Shapiro-Wilk test indicated normality amongst the African American group ($W(103) = 0.97$, $p > .05$), normality amongst the Hispanic group ($W(103) = 0.91$, $p > .05$), and normality among the White group ($W(103) = 0.97$, $p > .05$). The assumption of normality was met within each group. The Shapiro-Wilk test indicated normality among the basketball group ($W(103) = 0.90$, $p > .05$), normality among the soccer group ($W(103) = 0.89$, $p > .05$), normality among the softball group ($W(103) = 0.96$, $p > .05$). The Jarque Bera Test indicates normality among the African American group (JB(2, n = 103, 2.05, $p > .05$), normality among the Hispanic group (JB(2, n = 103, 0.467, $p > .05$), and normality among the White group (JB(2, n = 103, 2.68, $p > .05$) meaning the assumption of normality was not violated. The Jarque Bera Test indicates normality among the basketball group (JB(2, n = 103, 0.61, $p > .05$), among soccer (JB(2, n = 103, 3.82, $p > .05$), and softball (JB(2, n = 103, 2.96, $p > .05$) meaning the assumption of normality was not violated.

The assumption of homogeneity of variance (HOV) was assessed using Levene's test for equality of variance by race $F(2, 87) = 0.71$, $p > .05$, $\omega^2 = 0.04$ and by sport $F(2, 87) = 0.19$, $p > .05$, $\omega^2 = 0.00$. The assumption of equal variances was met.

To answer research question #1, a factorial analysis of variance (ANOVA) was computed to determine whether there was a significant difference by race and sport. Statistical considerations and assumptions were checked before running the ANOVA. There was no missing data. The data was transformed to examine outliers, and after the transformation one outlier in soccer and three outliers in softball were removed. The main effect of race on the AM subscale by race was $F(2, 85 = 2.96$, $p > .05$, $\omega^2 = 0.04$.

The main effect of sport on the AM subscale by sport was $F(2, 85) = 0.40$, $p > .05$, $\omega^2 = 0.00$. The results found no significant difference by race and sport on the AM subscale. The small sample size restricts the ability to analyze interactions effectively.

Table 2

SAMSAQ AM Subscale – Median, Mean, and Standard Deviation by Item

Question	Mdn	M	SD
Q1 - I am confident that I can achieve a high grade-point average this year	6.0	5.24	1.04
Q3 - It is important for me to learn what is taught in my courses	5.5	5.24	0.82
Q4 - I am willing to put in the time to earn excellent grades in my courses	5.0	5.24	0.87
Q5 - The most important reason why I am in school is to play my sport	3.0	3.42	1.42
Q7 - I will be able to use what is taught in my courses in different aspects of my life outside of school	4.0	4.43	1.07
Q10 - I chose my major because it is something I am interested in as a career	6.0	5.20	0.96
Q11 - Earning a high grade-point average is not an important goal for me this year	1.0	1.86	1.28
Q17 - I get more satisfaction from earning an “A” in a course toward my major than winning a game in my sport	3.0	3.42	1.35
Q18 - During the years I compete in my sport, completing a college degree is not a goal for me	1.0	1.77	0.96
Q21 - I have some doubts about my ability to earn high grades in some of my courses	3.0	2.89	1.22
Q23 - I am confident that I can earn a college degree	6.0	5.59	0.70
Q26 - It is not important for me to perform better than other students in my courses	3.0	2.84	1.20
Q28 - The content of most of my courses is interesting to me	4.0	4.14	1.07
Q29 - The most important reason why I am in school is to earn a degree	5.5	5.13	1.05
Q30 – It is not worth the effort to earn excellent grades	2	1.97	1.05

Summary of Research Question 1 Findings

The findings in terms of answering research question are as follows; the overall factorial ANOVA test showed there was overall no significant difference between groups race and sport on the academic motivation scale.

In comparison to the literature, female student athletes did score higher on the academic motivation scale compared to the SAMSAQ subscales used in other studies. The findings from the minority group of female student athletes had the lowest scores on the academic motivation scale which is comparable to the literature stating, "non-White athletes exhibited the most unbalanced groups of student athletes in terms of academic motivation" (Gayles, 2005). Therefore, compared to the literature, there are no significant differences amongst groups.

Findings for Research Question #2

The student athlete motivation (SAM) subscale was observed to identify if there were a significant difference between race by sport for female student athletes. The SAM subscale consisted of items 2, 6, 12,13, 14, 15, 25, and item number 27. Two nominal level variables, race and sport, and one interval level variable, the SAM subscale, were identified. For the SAM subscale there was a range of 22 to 48 with a mean of 36.7 (SD = 4.9) and median of 37. Table 3 below is used to list each question on the SAM subscale along with its mean score, standard deviation, and median score based upon all participants' responses. A more detailed presentation of the data is provided at the end of Appendix F. The SAM mean score is somewhat moderate compared to the CAM and AM subscales meaning that all athletes were somewhat motivated by athletics.

Procedures to check the normality assumptions by race and sport were completed by using the Shapiro-Wilk test and the Jarque Bera Test. The Shapiro-Wilk test indicated normality among the African American group ($W(103) = .94, p > .05$), normality among the Hispanic group ($W(103) = 0.0, p > .05$) , and normality among the White group ($W(103) = 0.52, p > .05$). The assumption of normality was met within each group. The Shapiro Wilk test indicated normality among the sport group basketball ($W(103) = 0.96, p > .05$), among the soccer group ($W(103) = 0.93, p > .05$), among the softball group ($W(103) = 0.98, p > .05$) suggesting there is no significant difference among groups. The Jarque Bera Test indicates normality among the African American group (JB(2, n = 103, 0.72, $p > .05$), normality among the Hispanic group (JB(2, n = 103, 0.99, $p > .05$), and normality among the White group (JB(2, n = 103, 0.77, $p > .05$), meaning the assumption of normality was not violated. The Jarque Bera Test indicates normality among the sport group basketball (JB(2, n = 103, 0.30, $p > .05$), amongst soccer (JB(2, n = 103, 1.08, $p > .05$), and amongst softball (JB(2, n = 103, 0.94, $p > .05$) meaning the assumption of normality was met. The assumption of homogeneity of variance (HOV) was assessed using Levene's test for equality of variance by race, ($F(2, 87) = 0.98, p > .05$, and by sport, ($F(2, 87) = 0.38, p > .05$) meaning the assumption of equal variances was met. To answer research question #2, a factorial analysis of variance (ANOVA) was computed to determine whether there was a significant difference between race and sport. Statistical considerations and assumptions were checked before running the ANOVA.

There was no missing data for the question. The data was converted to examine outliers and after the transformation there were no identified outliers in the basketball group, soccer group, or softball group. The main effect of race by race on the SAM.

Table 3

SAMSAQ SAM Subscale – Median, Mean, and Standard Deviation by Item

Question	Mdn	M	SD
Q2 - Achieving a high level of performance in my sport is an important goal for me this year	6.0	5.54	0.69
Q12 - It is important to me to learn the skills and strategies taught by my coaches	5.0	5.21	0.80
Q13 - It is important for me to do better than other athletes in my sport	4.0	4.52	1.15
Q14 - The time I spend engaged in my sport is enjoyable to me	5.0	4.73	1.00
Q15 - It is worth the effort to be an exceptional athlete	5.0	5.04	0.92
Q25 - I get more satisfaction from winning a game in my sport than from getting an "A" in a course toward my major	3.0	3.36	1.24
Q27 - I am willing to put in the time to be outstanding in my sport	5.0	4.81	0.99

subscale, $F(2, 85) = 0.37$, $p > .05$, $\omega^2 = 0.00$. The main effect of sport by sport on the SAM subscale, $F(2, 85) = 1.42$, $p > .05$, $\omega^2 = 9.47$. The results of the factorial ANOVA found no significant difference between race and sport on the SAM subscale. The numbers were too small to generate generalizable findings related to interactions.

Summary of Research Question 2 Findings

The findings in terms of answering research question #2 are as follows; the ANOVA test showed there was overall no significant difference between groups race and sport on the student athletic motivation scale. However, it was noted for the sport groups, there appeared to be a difference based on the effect size.

In comparison to the literature, female student athletes had a lower score on the athletic motivation scale compared to the academic motivation scale, and non-White athletes had higher scores on the athletic and career athletic motivation scales. The findings from this study are consistent findings from others studies which show there are no significant differences amongst groups race and sport.

Findings for Research Question 3

For Research Question 3 the career athletic motivation (CAM) subscale was observed to identify if there were a significant difference between race and sport for female student athletes. The CAM subscale consisted of items 8, 9, 19, 20, 22, and item number 24. Two nominal level variables, race and sport, and one interval level variable, the CAM subscale, were identified. For the CAM subscale there was a range of 15 to 34 with a mean of 21.9 (SD = 4.1) and median of 21. Table 4 lists each question on the CAM subscale along with its mean score, standard deviation, and median score based upon all participants' responses. A more detailed presentation of the data is provided at the end of Appendix F. The CAM mean score is somewhat low compared to the SAM and AM subscales meaning that all athletes were only slightly motivated by a career in athletics.

Procedures to check the normality assumptions by race and sport were completed by using the Shapiro-Wilk test and the Jarque Bera Test. The Shapiro-Wilk test indicated normality among the African American group ($W(103) = .91, p > .05$), normality among the Hispanic group ($W(103) = 0.90, p > .05$), and non-normal among the White group $(W(103) = 0.95, p > .05) = 0.01$, the assumption of normality was not met within each group. The Shapiro Wilk test indicated normality among the sports group basketball

($W(103) = .30$, $p > .05$), among soccer ($W(103) = 1.08$, $p > .05$), and among softball ($W(103) = 0.98$, $p > .05$). The Jarque Bera Test indicates normality among the African American group (JB(2, n = 103, 0.36, $p > .05$), normality among the Hispanic group (JB(2, n = 103, 0.33, $p > .05$), and normality among the White group (JB(2, n = 103, 5.76, $p > .05$), meaning the assumption of normality was met within each group. The Jarque Bera test indicates normality among the sport basketball (JB(2, n = 103, 0.30, $p > .05$), normality among soccer (JB(2, n = 103, 1.08, $p > .05$), and normality among softball (JB(2, n = 103, 0.94, $p > .05$), meaning the assumption of normality was met.

Table 4

SAMSAQ CAM Subscale – Response, Median, Mean, and Standard Deviation by Item

Question	VSD (1)	SD (2)	D (3)	A (4)	SA (5)	VSA (6)	Mdn	M	SD
Q8 – I chose to play my sport because it is something that I am interested in as a career	9 9%	16 16%	39 39%	16 16%	9 9%	11 11%	3.0	3.33	1.39
Q9 – I have some doubt about my ability to be a star athlete on my team	9 9%	11 11%	31 31%	36 36%	9 9%	4 4%	3.0	3.36	1.19
Q19 – I am confident that I can be a star performer on my team this year	1 1%	0 0%	9 10%	43 46%	21 22%	20 21%	4.0	4.52	1.00
Q 20- My goal is to make it to the professional level or the Olympics in my sport	29 31%	14 15%	29 31%	8 9%	7 7%	7 7%	3.0	2.69	1.53
Q22 – I am confident that I can make it to an elite level in my sport (professional/Olympics)	25 28%	13 14%	27 30%	14 16%	4 4%	7 8%	3.0	2.78	1.50
Q24 – I will be able to use the skills I learn in my sport in other areas of life outside of sports	0 0%	1 1%	0 0%	25 28%	25 28%	39 43%	6.0	5.12	0.89

Based on the data, it was determined that the Jarque Bera test is more robust than the Shapiro-Wilk test and indicates the normality assumption for the group was met.

The assumption of homogeneity of variance (HOV) was assessed using Levene's test for equality of variance by race, ($F(2, 87) = 0.15$, $p > .05$), and by sport, ($F(2, 87) = 1.59$, $p > .05$). Based upon these results, the assumption of equal variances was met.

To answer research question #3, a factorial analysis of variance (ANOVA) was computed to determine whether there was a significant difference by race and sport on the CAM subscale. The data were divided into three race groups: White, African American, and Hispanic. Also, the data was divided into three sport groups: softball, basketball, and soccer. A factorial ANOVA indicates that conducted by race and sport, the main effect of race by the race groups on the CAM subscale $F(2, 85) = 0.01$, $p > .05$, $\omega^2 = 0.00$, was not significant. The main effect of sport by sport groups on the CAM subscale, $F(2, 85) = 4.54$, $p < .05$, $\omega^2 = 0.07$, was significant.

Post hoc Comparisons by Sport

Post hoc comparisons were conducted using the Tukey HSD of the sport groups. There was a significant difference in the CAM subscale means between sport groups softball and basketball, $MD = -3.86$, 95% CI, [7.21, -.51], $p = .02$. However, there was no significant difference between soccer and basketball, $MD = -2.06$, [-6.71, 2.60], $p = .54$ and there was no significant difference between softball and soccer, $MD = -1.80$, [-5.55, 1.95], $p = .49$. The effect size for the group race is small d = 0.00 95 % CI [0.00, 0.00]) there is no difference between race groups.

Summary of Research Question 3 Findings

The findings in terms of answering research question are as follows. The main effect by race between race groups showed no significant difference, but there was a

significant difference with the main effect by sports groups on the career athletic motivation scale. It was noted for the sport groups that there appeared to be a small difference between means on sports groups softball and basketball.

In comparison to the literature, female student athletes had the lowest score on the career athletic motivation scale compared to the academic motivation scale and athletic motivation scale. In the 2015 study, minority/ non-White athletes, had the highest scores on the career athletic motivation scales. Therefore, compared to the literature, there is a small significant difference amongst sport groups between softball and basketball athletes. Although their responses are statistically significantly different, as the response they gave are more "professional career focused," they aren't massively different. These female student athletes may have "high hopes" of playing basketball professionally due to the exposure of professional women's basketball and professional women's basketball overseas.

Findings for Research Question 4

For Research Question 4, the SAMSAQ Total Score scale was observed to identify if there were a significant difference between race and sport for female student athletes. The Total Score scale consisted of every item on the SAMSAQ instrument. Two nominal level variables, race and sport, and three interval level variables, the AM, SAM, and CAM subscale, were identified. For the SAMSAQ Total Score scale, there was a range of 98 to 148 with a mean of 120 (SD = 9.1) and a median of 119. Table 5 below lists the Total Mean score for race, sport, and overall median, mean, and standard deviation based upon all participants' responses. A more detailed presentation of the data is provided at the end of Appendix F.

Table 5

SAMSAQ Total Score Scale – Race and Sport by Subscale

Subscales	Race Mean	Sport Mean	Overall Mean (SD)
AM	2.958	0.403	61.4 (4.4)
SAM	11.35	43.64	36.7 (4.9)
CAM	0.26	97.60	21.9 (4.1)
Total Score	143	427.5	120 (9.1)

Procedures to check the normality assumptions by race and sport were completed by using the Shapiro-Wilk test and the Jarque Bera Test. The Shapiro-Wilk test indicated normality among the African American group ($W(103) = .95, p > .05$), normality among the Hispanic group ($W(103) = 0.96, p > .05$), and normality among the White group ($W(103) = 0.98, p > .05$). The assumption of normality was met within each group

Specifically, the Shapiro Wilk test indicated normality among the sport group basketball ($W(103) = 0.96, p > .05$), among soccer ($W(103) = 0.96, p > .05$) , and among softball ($W(103) = 0.99, p > .05$).

The assumption of normality was met within each group. The Jarque Bera Test indicates normality among the African American group (JB(2, n = 103, 0.55, $p > .05$), normality among the Hispanic group (JB(2, n = 103, 0.15, $p > .05$), and normality among the White group (JB(2, n = 103, 0.29, $p > .05$), meaning the assumption of normality was met within each group. The Jarque Bera test indicates normality among the sport basketball (JB(2, n = 103, 0.39, $p > .05$), normality among soccer (JB(2, n = 103, 0.41, $p > .05$), and normality among softball (JB(2, n = 103, 0.10, $p > .05$), meaning the assumption of normality was met within each group. The assumption of

homogeneity of variance (HOV) was assessed using Levene's test for equality of variance by race, ($F(0.94) = 0.86$, $p > .05$) and by sport, ($F(0.65) = 0.21$, $p > .05$) meaning the assumption of equal variances was met.

To answer research question #4, a factorial analysis of variance (ANOVA) was computed to determine whether there was a significant difference by race and sport. Statistical considerations and assumptions were checked before running the ANOVA. There was no missing data for the question. The data was converted to z-scores to examine outliers and after the transformation there were no identified outliers in the basketball group, soccer group, or softball group. The main effect of race on the Total Score scale $F(2, 85) = 0.96$, $p > .05$, $\omega^2 = 0.00$. The main effect of sport on the Total Score scale, $F(2, 85) = 2.87$, $p > .05$, $\omega^2 = 0.04$. The results of the factorial ANOVA found no significant difference by race and sport on the Total Score scale.

Summary of Research Question 4 Findings

The findings in terms of answering research question 4 are as follows; the overall factorial ANOVA test showed there was overall no significant difference in groups by race and sport on the Total Score scale.

In comparison to the literature, the student athlete SAMSAQ Total Score was not evaluated. Therefore, compared to the literature, there are no significant differences amongst groups although there were small measurable differences noted between sport groups. However, for the 2015 study, the three subscales were evaluated. Comparison in the SAMSAQ literature show, on average, female athletes had higher academic motivation (M = 4.72, SD = .566) scores than any other group. Additionally, female athletes had the lowest score on the career athletic motivation (M = 3.44, SD = 1.09) and student athletic motivation (M = 4.48, SD = .693) subscales than any other group.

Minority student athletes had one of the lowest academic motivation scores (M = 4.57, SD = .601).

Findings for Research Question 5

For Research Question 5 the TMS Total Score scale was observed to identify is there a significant difference by sport and academic year for female student athletes on the TMS total score scale. The Total Score scale consisted of all items on the TMS instrument. Two nominal level variables, sport and academic year, were identified, and one interval level variable, the Total Score scale, was identified.

Procedures to check the normality assumptions by race and sport were completed by using the Shapiro-Wilk test and the Jarque Bera Test. The Shapiro-Wilk test indicated normality among the basketball group ($W(110) = .97$, $p > .05$), normality among the soccer group ($W(110) = 0.97$, $p > .05$), and normality among the softball group ($W(110) = 0.99$, $p > .05$), the assumption of normality was met within each group. The Shapiro Wilk test indicated normality among the Freshman group ($W(110) = 0.99$, $p > .05$), and the Sophomore group ($W(110) = 0.98$, $p > .05$), the assumption of normality was met within each group. The Jarque Bera Test indicates normality among the basketball group (JB(2, n = 110, 0.39, $p > .05$), normality among the soccer group (JB(2, n = 110, 0.38, $p > .05$), and normality among the softball group (JB(2, n = 110, 0.20, $p > .05$) meaning the assumption of normality was met. The Jarque Bera test indicates normality amongst the Freshman year (JB(2, n = 110, 0.45, $p > .05$) and Sophomore year (JB(2, n = 110, 0.03, p .05), meaning the assumption of normality was met.

The assumption of homogeneity of variance (HOV) was assessed using Levene's test for equality of variance by sport, ($F(2, 106) = 0.76$, $p > .05$, and by year, ($F(1, 107)$ =0.05, $p > .05$). The assumption of equal variances was met.

Table 6

TMS Total Score by Sport and Academic Year – Median, Mean, Standard Deviation

Variables	Mdn	M	SD
Sport	3	2.64	0.67
Academic Year	2	1.55	0.50

A factorial analysis of variance (ANOVA) was computed to determine whether there was a significant difference between sport and year. Statistical considerations and assumptions were checked. The data was converted to z-scores to examine outliers and after the transformation there were no identified outliers in the basketball group, soccer group, or softball group. The main effect of sport on the Total Score scale by sport, F (2, 106) = 2.04, $p > .05$, $\omega^2 = 0.02$. The main effect of the academic year on the Total Score scale by year, F (1, 107) = 0.024, $p > .05$, $\omega^2 = 0.00$. The results of the factorial ANOVA found no significant difference between sport and year on the total scale score.

Summary of Research Question 5 Findings

The findings in terms of answering research question 5 are as follows; the ANOVA test showed there was overall no significant difference by groups sport and academic year on the time management scale.

In comparison to the literature, there were differences between males and females as females were more driven by study hall requirements than their male counterparts, however, there was no measurement was recorded based on the student-athlete academic year. Therefore, compared to the literature, there are no significant differences amongst groups sport and academic year.

Findings for Research Question 6

The focus group discussion focused on six questions related to the survey responses

received on the SAMSAQ and TMS instruments. The questions from each survey were selected for the focus group discussion in order to learn more about why respondents answered the way they did. Coding for the responses to each question were done manually based on reoccurring responses from the student-athletes and responses that evoked a strong response based on the participants tone of voice and length of content provided. The six core questions for the focus groups were:

1. For the student athlete motivation survey, question five asked you to answer true or false to the following statement, "The most important reason why I'm in college is to play a sport." Amongst the total responses, 54 athletes disagreed, and 33 athletes agreed with that statement. Give me examples as to why you would disagree with that statement. Give me examples to why you would agree with that statement. How do you feel about the responses to that statement?
2. For the student athlete motivation survey, question 16 asked, "Do you think participation in a college sport interfered with your progress towards a degree." Amongst the total responses, 69 athletes disagreed, and 28 athletes agreed. Give examples as to why you would agree with that statement. Why would you disagree with that statement? How do you feel about the responses to the statement?
3. For the student athlete motivation survey, question 29 asked, "Please state if you agree or disagree that the most important reason you are in school is to earn a degree," Amongst the total responses, 89 athletes agreed and 7 athletes disagreed. Give an example as to why you agree with this statement and/or why you disagree with this statement.
4. For the time management survey, question 13 asked, "How effective are you at managing your time when you are a student IN season for your sport?" Amongst

the total responses, the majority of you answered, “somewhat effectively”. Give an example of how you feel you are or can be effective with your time management while in season.

5. For the time management survey, question 27 states, “Playing my sport interferes with studying.” Amongst the total responses, 75 athletes reported that it often does. Give an example as to how it interferes? How do you feel about that?
6. The final question, 95 out of 103 athletes agreed that the coach is invested in your academic success. How do you feel about that response? Give an example of how your coach is invested in your academic success.

Themes from Focus Group Questions

The first question of the focus group discussions aligned to SAMSAQ question #5 states, “the most important reason why I'm in college is to play a sport.” For the SAMSQ participants, 54 athletes disagreed, and 33 athletes agreed.

Q1 - Theme 1: Ball Was a Means to an End (a Degree)

A female student athlete from the School A women’s soccer team quotes, “I would say I chose the school before I chose the sport, and it was just kind of like a nice thing so I could continue to play, but like my mom's always told me don't sink everything into a sport because you can get hurt and you always need a backup plan, so yeah I chose the college first.” A female student athlete from the School C softball team quotes, “um I would say that I disagree with that just because like obviously yes, I wanted to play softball in college but if it really came down to it I knew that I was still going to go to college to get a degree and to be able to support myself in life and not just to play.”

A female student athlete from the School B softball team quotes, “for us there's no MLB so we only get to go so far with ball, and most of us get scholarships to go to school to play softball and get our degree so it's not like we can make a true career out of it.” A female student athlete from the School A softball team quotes, “I grew up playing ball so I didn't want to like obviously waste it and I guess my goal was to get a scholarship so that I could graduate and not have a huge student loan debt so I mean just to help get a degree and really I guess, not wanting to hang up the cleats like from being like in love with it for so long it gave me a little bit more time before letting go of the game.”

Q1 - Theme 2: College Was a Side Benefit to Playing

A female student athlete from the School D softball team quotes, “I feel like the majority of the team is going to say that it's there's other reasons why like of course to get an education and like be successful and study and stuff, but um I don't know me personally I really like softball so I really like playing and I feel like it gave me motivation to go to college because it meant that I could still play softball but like if it was just me going into college like without playing softball I feel like I wouldn't be motivated to really do anything if that makes sense.” The second question of the focus group aligned to SAMSAQ question #16 which asked the participants to answer, “Has participation in a college sport interfered with their progress towards a degree.” For the SAMSAQ participants, 69 athletes disagreed, and 28 athletes agreed. In explaining these answers, the following themes emerged.

Q2 – Theme 1 – Playing a college sport motivated me to complete my degree

A female student athlete from School B softball quotes, “I don’t think so, I think it makes you get yourself done faster. I think because like we do grade checks and stuff and that kind of keeps us responsible to be on top of our grades and we don’t have practice at

eight o'clock at night, so right after class we do practice and then we do homework right after that, so I mean we have plenty of time to get our stuff done." A female student athlete from the School D softball team quotes, "I feel like for me, if I wasn't really involved in a sport I feel like I would have a harder time in school because I wouldn't be as focused on making sure I was academically eligible and other things. I would be more focused on the social aspect of things instead of focusing on my sport and my grades to be able to play the sport."

Two female student athletes from the School A softball team responded. Female student athlete A quotes, "I don't think it's like interfered, but it's definitely pushed some challenges like with having to juggle and figure out squeezing tests and stuff in the in a time when you don't really have the time, but you don't have another time to make up the test so that's the only time you get."

Q2 – Theme 2 – Playing a college sport made it more difficult to gain a degree

Female student athlete B quotes, "with me because I'm an agriculture major, like to get a job it's really hard to like make the connections when you have softball like I can't go have those jobs where I can get the network with people so like it kind of worries me that I'm not going to be able to find a job that I really want when I graduate college."

A female student athlete from the School A soccer team quotes, "I think the classes that I take, because I'm a wildlife major, are in the late afternoon and that's really hard trying to make the practice." A female student athlete from the School C softball team quotes, "it kind of interferes with practice like I have classes during practice, and like it interferes so I don't get to practice as much." A female student athlete from the School C softball team quotes, "I just feel like it takes up a lot of time, like yes sports

take up a lot of time, but like we study a lot too so just like multitasking both."

The third question of the focus group discussion aligned to SAMSAQ question #29 states, "state if you agree or disagree that the most important reason you are in school is to earn a degree." For the SAMSAQ participants, 89 athletes agreed, and 7 athletes disagreed. All of the focus group participants were in agreement on this question. The themes that emerged were more about the varying reasons why they agreed.

Q3 – Theme 1- Participation in a college sport impacted the decision to attend college

Female student athlete C from the softball team quotes, "softball helped me stay in a routine, having a sport to play in college helped to keep me on track and to like stay ahead of my studies and doing that helps." This response reinforced views shared in other focus group questions thus reinforcing its importance.

Q3– Theme 2- Gaining a degree is more important than playing a college sport

Three female student athletes from the School B softball team had quotes. Female student athlete A quotes "the reason I came to college was to get an actual degree and be successful in life, yeah and like I'm first like for me I'm a first-generation college student so softball was just a step to get where I want to go. "Female student athlete B from the softball team quotes, "I felt like softball was my way to keep me on track more so and it was just something I enjoyed doing but getting my degree was like the first thing that I actually like had in my mind and it wasn't really about softball, I just played because I wanted to and I love it but the degree is the most important thing." A female student athlete from the School A softball team quotes, "I had already planned on going to college to get a degree, but playing softball just set it in a little bit more I guess, like playing softball is just a plus or an add-on to get my education." A female student athlete

from the School C softball team quotes, “yes, I wanted to play softball in college but if it really came down to it I knew that I was still going to go to college to get a degree to be able to support myself in life and not just to play.” A female student athlete from the School D softball team quotes, “school is like the most important to me and softball for me was just like kind of icing on the cake so like I wanted to keep playing but I don’t plan to continue playing because nursing is my first priority.”

The fourth question of the focus group discussion aligned to TMS question #13 which states, “how effective are you at managing your time when you are a student IN season for your sport?” For the TMS participants, 21 responses said slightly effective, 40 responses said moderately effective, and 32 responses said very effective. In trying to understand why participants responded the way they did, the following themes emerged.

Q4 – Theme 1 – Time management is hard to manage during “in season”

A female student athlete from the School D softball team quotes, “for me, I'm taking like microbiology and anatomy two and like those type of classes like I feel like it’s different for everyone but being a nursing like major those classes are hard to juggle with softball in season so I like every waking moment if I'm not doing softball it’s going towards studying or looking at something with those type of classes.” A female student athlete from the School B softball team quotes, “at the beginning of the season it’s kind of easy because you’re trying to grind it out, you’re trying to do the work and then as the season goes on like right now it’s finals are coming up they got to start packing like a bunch of stuff and we got papers due and it's starting to just kind of like stack up so it's like it’s good to have time management but a lot of it can slip away from you when you have three games in a week and they're all double headers. When you’re in season it’s

much harder I feel like for me if I'm in season and I have work to do I have less time to do it so unless I can procrastinate it like if I have a bunch of time to do an assignment I'll probably end up using all the time just doing whatever I want to do and I end up procrastinating."

Q4 – Theme 2 – Team study hall is not an effective way to manage time "in season"

A female student athlete from the School C soccer team states, "I mean personally for me I found team study hall in season a little bit difficult because I'm really bad at like studying with other people or doing homework with other people so for me that was kind of bad because I'm very good about studying alone and I get distracted very easily by other people so I was like the only negative about study hall but it was really good about like forcing me to do homework when I maybe would have pushed it off."

Q4 – Theme 3 – Time management was easier to manage due to the structure of being "in season"

A female student athlete from the School A softball team quotes, "I'm definitely more good at my time management skills in the season because I know I'm going to miss class so if I can be a week or two weeks ahead on assignments and go ahead and have them done so I can focus on what I'm gonna miss or like have time to make up that stuff and I'm a big list to-do list mark off in season and like to a team know what I'm gonna do every hour every day." A female student athlete from the School A soccer team quotes, "for me it's better in season because it gives me a set schedule and it gives me like a routine versus when we're off season and we have nothing to do in the fall like I mean in the spring like in the fall I had class, soccer, eat, homework and then I can like goof off with my friends but now in the spring that we're since we're out and I have so much more

free time I'll go to class, maybe do homework at five, but maybe goof off all day so it's like the practice in between the middle of the day gave me the schedule that I needed."

The fifth question of the focus group discussion aligned to TMS question #27 states, "playing my sport interferes with studying." For the TMS participants 26 stated never, 24 stated often, and 55 stated occasionally does their sport interfere with studying. The following themes emerged to better understand participants' responses.

Q5 – Theme 1 – My sport never interferes with study time

Female student athlete B from School A quotes, "I still go to study hall because my room is very hectic because I'm living with somebody who's not a softball player and they I mean I don't blame them, they just don't quite understand so I have to make sure I'm in a place where I can actually focus but I like to study hall hours and I don't think that I mean if I am playing softball I'm gonna have to work around softball if I wasn't playing softball I'm going to feel that time with something else figuring out yeah something else to do anyway so I also on campus so like I don't have to worry about having the like she said she goes to study hard to escape like loudness and stuff so I guess I have that at home so I don't really feel the need to go to campus."

Q5 – Theme 2 – My sport can often get in the way of study time

A female student athlete from the School B softball team quotes, "um my roommate she is respiratory therapy and she has to do clinicals on some days and then like even on weekends she has clinicals and then one day she has a whole a whole day of class where she even has to be late to practice so that kind of interferes with hers because she has so much work to do just in one day and then she has to like she has clinicals from 7 A.M to 7 P.M so she does a lot of time in the places an hour away so it kind of takes away from her time of studying."

Two female student athletes from the School A softball team quote. “The fall was a lot more like we have morning workouts and running, and practice went long in the afternoons, like it was just you know how fall is falling back so we did have mandatory study hours and we all hated it but in the long run like it did help us out a lot like I know if there were voluntary study hours I'm not gonna go that’s just how I am, like unless I know that I absolutely have to get something like jammed into my head before an exam but the mandatory study hours did help a lot like being forced to go and having to get the hours in and like making ourselves study um but right now we don’t but I mean we have plenty of opportunities to study like when we go to away games and on the bus for so long and like however we get there for so long we could study if we wanted to.”

The sixth question of the focus group discussion aligned to TMS question #42 states, “my coach is invested in my academics.” For the TMS participants, 75 athletes strongly agree, 18 somewhat agree, 13 neither agree nor disagree, 1 somewhat disagree, and 2 strongly disagree.” The themes that emerged in response to this question are as follows.

Q6 – Theme 1 – My coach is invested in my academic success

The female student athletes a part of the School C softball team believe their coach is invested in their academic success. “Coach [name], she will sit down with us and if we’re struggling in class, she’s like, hey like what’s going on, is it maybe you and the professor just aren’t on the same page or you’re just not understanding the material, and then if you do like have a problem with the professor she will try to like get you in another class or be like just like give suggestions of how you can work through it, but I feel like she is invested because she wants us to do well in academically and in softball.”

The female student athletes a part of the School D softball team believe their

coach is invested in their academic success. “Coach [name], is more like you need to be in class, like she makes sure we go, she doesn't really like us to have online classes so I think she’s pretty invested compared to some coaches that care to like not care, she also makes us do study hall a lot like she makes sure that we are in study hall maybe twice a week, three times a week, so we really focus on our studies while we’re in season.” A female student athlete from the School A soccer team quotes, “ he in like midterm grades make sure that we’re on the right track because if it’s not working, then you have study hours, and when I committed here he told me um obviously I want you to play soccer and it is important but my priority for you is school first then soccer and then still for you to have free time so that you're not so stressed out with the school and soccer.”

Q6 – Theme 2 – My coach partially cares about my academic success because of my eligibility

The female student athletes a part of the School A women’s soccer team believe their coach is invested in their academic success. “I would say he is invested because before I committed here he told me um obviously I want you to play soccer and it is important and like it is a priority but my priority for you is school first then soccer and then still have free time so that you’re not so stressed.”

A female student athlete from School B states, “Coach [name]’s like, hey I need you out there, I feel like schools honestly always like never been like something I struggled with but like I feel like the reason I never struggle with it is because like throughout high school and throughout like college I always have like a coach like pushing me to keep my grades up so I could play.”

Q6 – Theme 3 – My coach does not care if I am successful in the classroom

A female student athlete from School D provides a counterview, “I have a different perspective because I came from another juco, which was [school name], and coming from there it was a joke, he didn’t really care like what we did like he gave us all online classes, and he was just like do whatever you can to pass like I don't care.” A female student athlete from the School C softball team provides a counter view about an experience at a former institution. The female student athlete at School C states, “I was at [school name] and the coach there, he did have like have a set amount of hours but he obviously didn't follow it and so there everything I just felt like overwhelmed with the amount of stuff that we had to do with school and softball and it was just from back to back to back and it was just a lot yeah.”

Summary Findings for Research Question 6

In summary, there are major themes that emerged from each focus group discussion. For question one the major theme centered around attending college to get a degree as the most important reason for being a student athlete. For question two, the major theme supported the “disagreement” survey response thereby indicating that participation in a college sport does not interferes with progress towards attaining a degree. In fact, many responses centered around how sports helped with daily structure and students’ motivation to gain a degree. For question three, the major theme supported the “agreed” survey responses indicating the most important reason why they are enrolled in college is to attain a degree. For question four the major themes supported the “moderately” to “very effective” survey responses related to managing their time during their sport competition season. Although a few disagreed, many of the responses share at study hall in season helps manage their time in season. For question five, the major theme

is “occasionally” playing a sport interferes with studying. Many responses share that practice occasionally interferes but having study hall requirements keep their study time on track. For question six, the major theme is “strongly agree” that their coach is invested in their academic success. Many of the responses shared they felt their coach was involved and invested in their academic success.

CHAPTER V

DISCUSSION

Introduction

In today's information surrounding college athletics, it would be safe to say most news and research surrounding student athlete motivations and time management skills are dedicated to NCAA Division I college student athletes, particularly male student athletes. This study was conducted to bring attention to the student athlete motivations and time management skills based on the daily training demands of NJCAA female student athletes. Student athletes, male or female, that participate in NJCAA sports rarely receive any attention in terms of news, publicity, or research in general. Review of the 2016 NCAAA GOALS study provided national trends amongst college athletes (male and female) based on time spent for academics and athletics. Additionally, the study provided feedback on the overall student athlete experience. This study provided similar variables that were observed amongst the NJCAA population for this study.

The focus of this study was conducted to identify how female student athletes at the NJCAA level balance their motivations along with balancing their time with significant daily training demands. Focusing on how female student athletes stay motivated and manage their daily lives is at the heart of the literature review. Bush, Castaneda, and Katsinas (2009) state, "Despite the low attention in book length studies and treatments of community colleges, it is clear that intercollegiate athletics represent a very important student activity for public community colleges in the United States,"

(p.110). Although there is a tie to junior college athletics and rural communities there still lacks a large gap of literature surrounding NJCAA female student athletes. The overall goal of the study was to bring awareness to the impact on NJCAA female student athlete motivations and time management of their daily training demands and academics.

To accomplish the goals of this study, a student athlete motivation survey (SAMSAQ instrument) and a time management survey (TMS instrument) was sent to 306 female student athletes who compete in the sports of softball, soccer, basketball, and cross country at the NJCAA. The student athlete motivation survey (SAMSAQ) examined the academic, athletic, and career athletic motivations of female student athletes. The time management survey (TMS) examined the time management skills of the female student athletes as it relates to their daily training demands and academics. Along with the survey instruments, focus group discussions took place to gaining a deeper meaning and understanding behind the motivations and time management skills of the female student athletes. The surveys and focus group discussions allowed for an in-depth review of daily training demands and evaluated the different factors that motivated the female student athletes to be successful in their academics and in competitive sports.

The study examined if there were differences by race, sport, and academic year amongst NJCAA female student-athletes as it relates to academic motivation, athletic motivation, career motivation, and the daily training demands on time management skills. The following research questions guided the study:

Research Questions

RQ 1: Is there a significant difference between race by sport for female student athletes on the SAMSAQ academic motivation scale?

RQ 2: Is there a significant difference between race by sport for female student athletes on the SAMSAQ athletic motivation scale?

RQ 3: Is there a significant difference between race by sport for female student athletes on the SAMSAQ career athletic motivation scale?

RQ 4: Is there a significant difference between race by sport for female student athletes on the SAMSAQ total score scale?

RQ 5: Is there a significant difference by sport and academic year for female student athletes on the TMS total score scale?

RQ 6: How do the selected demographics, motivation scales, and total score scales in the SAMSAQ and TMS surveys explain the similarities or differences among female student athletes participating in sport at the NJCAA competition level?

Literature Review

Based on the literature review for this study there were three portions of the review focused on examining observations across scholarly literature surrounding female student athletes, daily training demands, time management, academic, athletic, and career athletic motivations. The first portion reviewed training demands, tracking team and non- team activities, and regulated comparisons between the NCAA and NJCAA. The second portion reviewed academic, athletic, and career athletic motivation. The third and final portion reviewed the theoretical framework.

The first portion highlighted the significant demands on female student athletes and exposed how the NCAA tracks these demands based on the regulations for "team activities" and "non-team activities." The NCAA mandates hourly limits across sport competitive and non-competitive seasons to regulate the amount of time a student athlete

may have supervision from a coach at practice. Non – team activities are monitored based on mandated off days during the competitive and non-competitive seasons but there are still non- team activities like community service work, rehibition with athletic trainers, injury prevention, study hall, and tutoring sessions that can all take place during the day of a student athlete. Regulated comparisons between the NCAA and NJCAA vary as the NJCAA only has "recommendations" in place for tracking team and non-team activities across the academic school year. The NJCAA recommendations are not mandated therefore there are no time constraints on team related activities nor are there mandated required days off. Due to the lack of resources across many NJCAA intuitions there is no required staff position for a compliance director who specially manages a sports time spent on team and non-team activities.

The second portion of this literature review examined academic, athletic, and career athletic motivation factors. Academic motivation has been a heavily studied topic amongst the collegiate student athlete population. Based on this literature review surrounding academic motivation there were suggestions relating academic motivation to factors such as self-esteem, commitment, positive reinforcement, time management skills, and creativity. Along with these factors many studies showed the impact of internal and external motivation factors. Research has shown that athletics can make a positive or negative impact on academics. Even though there may be a positive link between academics and athletics there are resources that suggest athletic involvement may diminish academic performance. Resources suggest the imbalance of time management between academics and athletics has a negative effect on how student athletes divide their time and energy among academics and athletics.

Athletic motivation is another popular topic that has been studied over time. There are different factors that can affect athletic motivation such as personality needs, goals, and interests. These factors can dictate how some student athletes interact with teammates and coaches when determining motivations. Research suggests that coaches play a critical role in student athlete's motivations. Most coaches commonly use goal setting, performance goals, and process goals to motivation student athletes. Goal orientation is a popular technique to evaluate a student athletes' perceptions on whether they define success or failure. Reinforcement, feedback, and rewards are also methods used to motivate student athletes as some perform better with positive feedback while others perform better with negative feedback. Every time an athlete performs a desired behavior reinforcement is applied. Rewarding effort and newly attained skills argue that behaviors can be influenced and rewarding effort and emotional skills are great examples of positive reinforcement and feedback to motivate student athletes.

Career athletic motivation is the factor that involves the motivation and desire of a student athlete to continue to play their sport at the professional or Olympic level. Although many student athletes aspire to play professionally, the likelihood of moving into a professional league or at the Olympic level is very minimal. Continuing research on NCAA student athletes shows that student athletes are not likely to play in a professional league and are encouraged by the NCAA to focus more on their academic and career driven opportunities to pursue a career field outside of their sport. There are those student athletes that chose to attend NJCAA institutions to mature athletically and academically so they can compete at the NCAA level. However, the odds of those junior college athletes becoming a professional athlete continue to be slim across all sports.

Motivation to have a career in a professional or Olympic sport is often a trait shared by many NCAA and NJCAA student athletes but often the student athlete career comes to and end and the focus from being a professional athlete is often shifted to defining an alternative career in life.

The third portion of this literature review observes the theoretical framework for the study. The theoretical frame of the study is blended with the Expectancy Value theory and the Threshold Model theory. The Expectancy Value theory is an achievement motivation theory that was used to construct the questions on the SAMSAQ instrument. This theory observes the level of motivation in a student athlete as it may apply to different tasks associated with academics, athletics, and career driven aspirations. The Threshold Model theory observes the amount of time a student athlete may spend on athletic pursuits such as, daily training demands, and evaluates the outcomes as it relates to academic, athletic, and career athletic motivation.

Methods

Design

The research design for this study was based on an explanatory sequential mixed methods design that was broken down into three phases. Phase one included emails being sent to the 306 participants which included the survey links. Follow up emails were sent over a two-week period to those who did not complete the surveys that were administered. After the two-week time period concluded there were a total of 103 participants that completed the SAMSAQ survey and 103 participants that completed the TMS survey. Once the administered surveys were complete, phase two began with the six players focus group discussions. The focus group discussions were administrated through

an online video call platform. There were six different video calls across six different institutions. Each focus group was recorded and transcribed while the researcher took notes throughout each discussion to identify themes. Phase three involved connecting the quantitative data from the administrated surveys and the qualitative data from the focus group discussions to identify if there were any significant differences between race by sport on the SAMSAQ scales along with differences by sport and academic year on the TMS scale.

Data Collection

Quantitative data was collected through two online instruments, the SAMSAQ and TMS surveys. The student athletes were contacted via a Qualtrics survey link and were given a two-week period to complete each of the surveys. There were three follow up emails to help increase the completion of the surveys. All responses to the surveys were kept confidential. Data cleaning was performed and surveys that did not meet the 75% completion rate were removed.

Qualitative data was gathered using focus group discussions. Based on the responses from the survey instruments, the questions for the focus group discussions were built. Six focus group discussions were used with a maximum of 10 participants in each group. Each session was held online and recorded via a video conference call. Each group was given an expected start and stop time with extra time allotted, if needed. Notes were taken during the discussion and a transcription for the discussion was coded to identify major themes. The focus group discussions allowed for a deeper understanding of the SAMSAQ and TMS survey results.

Data Analysis

Quantitative data analysis procedures were done through the use of Qualtrics and R to calculate and analyze the data. Descriptive statistics were calculated for each research question and a factorial analysis of variance (ANOVA) test was used to determine if there was a significant difference of means between race by sport on the academic, athletic, and career athletic motivation on the SAMSAQ scale, and if there was a difference of means by sport and academic year on the TMS total score scale.

Qualitative data was collected, analyzed, and transcribed based on the participant feedback from the focus group discussions. Descriptive coding was used to summarize the basic topics of each passage of data. After reviewing the information from the focus group discussions, the data was compared to reoccurring variables as it related to daily training demands.

Findings

Key findings from the study tell us that for research question 1 female student athletes scored highest on the academic motivation scale, as compared to athletic and career motivation scales. Of the different racial groups, minority female student athletes had the lower scores. However, the lower scores were not low enough to be considered statistically significant. Research question 2 indicates female student athletes scored relatively high on the athletic motivation scale but still below the academic motivation scale scores. Minority student athletes scored higher on the athletic motivation scale in comparison to the academic motivation scale, but not high enough to be statistically significant. Research question 3 reveals that female student athletes scored lowest on the career athletic motivation scale as compared to the academic and athletic motivation scales. Also, there was a difference between scores with basketball and softball groups

showing the basketball group had higher scores on the career athletic motivation scale. The difference between the two groups basketball and softball was considered statistically significant. Research question 4 examined the total scale score of the SAMSAQ survey showing no differences in scores between sports and race groups.

Overall, amongst the SAMSAQ survey there were no significant differences between race by sport on the academic motivation, athletic motivation, or total score scales; however, there was a significant difference on the career athletic motivation scale as it pertains to a difference amongst sport groups, softball and basketball, which tells us there may be more career athletic motivation to be successful in the basketball group. In addition, research question 5 observed the differences between sport and academic year on the TMS survey and scores showed female student athletes were spending relatively the same amount of time on academics in season as opposed to out of season, indicating there was no significant difference found on the TMS total scale score between sport groups and academic year.

There were general reoccurring themes across the six focus group discussions. Each of the focus group discussions revealed similarities and were agreeable to the survey responses. The strongest and most similar responses to the surveys came from the following questions: “The most important reason I am in college is to earn a degree,” with both the surveys and the focus group discussions were in strong agreeance to this statement. “Playing a sport interferes with studying,” with both the surveys and the focus group discussions in strong agreeance to this statement. “My coach is invested in my academic success,” with both the surveys and the focus group discussions in strong agreeance to this statement. There were reoccurring themes and responses that were

agreeable to the survey responses but had a mixture of answers in relation to the focus group discussions. The focus group discussions with the most variety of responses came from the following questions: “The most important reason why I’m in school is to play my sport.” Over half of the survey participants responses disagreed that their sport was the main reason why they attend college, however, there was a small amount of female student athletes that specifically noted the reason they attended their school was strictly sport related. “Has playing a sport in college interfered with my ability to attain a degree.” Over more than half of the survey participants responses agreed that playing their sport has interfered with their ability to attain a degree, however, there was a small amount of female student athletes that specifically noted that their participant in sport had no impact on their ability to attain their degree.

Conclusions

Based on the findings from Chapter 4 conclusions were drawn based on the research questions for the study. Overall, the results from the observed research questions conclude the following major take aways. First, female student athletes for this study, regardless of race, sport, and academic year, are comparatively motivated to be successful in the classroom. Over 49% of the female student athletes very strongly agreed that the most important reason they were in college was to attain a degree. A supporting quote from a softball female student athlete states, “I felt like softball was my way to keep me on track more so and it was just something I enjoyed doing but getting my degree was like the first thing that I actually like had in my mind and it wasn't really about softball, I just played because I wanted to and I love it but the degree is the most important thing.” Speculation around these results is since female student athletes have a

very small chance at competing in professional leagues which influences female student athletes to be successful in the classroom so they can gain a degree in a professional career they are passion about. Second, based on the female student athletes for this study they prioritize their time spent on academics regardless of their daily training demands or if they are in season or out of season. Based on the survey results 92% of female student athletes felt they were moderately effective in managing their academic work while in season. A female soccer student athlete from School A quotes, "for me it's better in season because it gives me a set schedule and it gives me like a routine versus when we're off season and we have nothing to do in the fall like I mean in the spring like in the fall I had class, soccer, eat, homework and then I can like goof off with my friends but now in the spring that we're since we're out and I have so much more free time I'll go to class, maybe do homework at five, but maybe goof off all day so it's like the practice in between the middle of the day gave me the schedule that I needed." Speculation around these results is related to having a routine and structure around their daily training demands provides structure to stay on task for their academics.

Third, female student athletes for this study in the sport of basketball tend to have higher career aspirations to play a professional sport. A softball female student athlete from School D quotes, "I feel like the majority of the team is going to say that it's there's other reasons why like of course to get an education and like be successful and study and stuff, but um I don't know me personally I really like softball so I really like playing and I feel like it gave me motivation to go to college because it meant that I could still play softball but like if it was just me going into college like without playing softball I feel like I wouldn't be motivated to really do anything if that makes sense." Of the survey

results there were 16% of female student athletes that agreed they were interested in playing their sport as a career. Speculation of these results is related to the small percentage of female student athletes that need their college sport to stay focused to attain a degree even though they still have hopes to make a professional career out of their sport. Also, there are international leagues for women's basketball athletes that have become more popular over time which may be factor as to why female basketball athletes have higher career aspirations to play their sport.

Recommendations & Limitations for Practitioners

This study provides recommendations and limitations on the differences amongst NCAA and NJCAA student athletes and the lack of information regarding NJCAA female student athletes. The following bulleted list is recommendations based on the information gathered from this study.

Athletic directors, conference commissioners, and coaches need to advocate for the following:

- Provide more academic resources such as team specific tutoring services to primarily minority rostered teams to increase academic success and academic motivation.
- Provide more career services resources such as a career specialist focused student athletes transitioning from their athletic teams to a professional career with hopes to increase and educate the minority population of teams on career aspirations.
- Strive to provide holistic health education resources on the necessity of time management as it relates to academic balance and daily training demands for all student athletes.

- Strive to provide coaching staffs that prioritize academics and are involved with the student athletes' academic pursuits.

The following bulleted list is limitations based on the information gathered from this study.

- Research bias due to former collegiate playing and coaching experiences
- Generalizability for entire NJCAA population (constricted to states of Georgia and Florida)
- Generalizability for entire NJCAA population (constricted to primarily female softball and women's soccer athletes based on survey responses)

Athletic directors, conference commissioners, and coaches need to advocate for all NJCAA student athletes in order to provide regulations and mandates to protect the student athlete population from the corrupt coaches and administrators that abuse the lack of regulations, mandates, and overall structure of the NJCAA.

Recommendations for Future Research

This study sparks questions on the daily training demands and the lack of regulated time management across all sports for student athletes at the NJCAA level. Based on the literature review provided in this study and the survey data provided on the number of hours student athletes are committing to their academic and athletic endeavors, the lack of hour regulations at the NJCAA level is alarming as there are no mandates, only recommendations, and there are no required compliance staff members at these institutions to hold coaches accountable and validate the amount of time student athletes are participating in team activities vs. non-team activities. Student athletes at the NJCAA level need to be surveyed in order to truly find out the amount of time they are spending

on a daily and weekly basis for team and non-team activities and how that impacts commitments to their academics.

Additionally, further research is needed to assess the amount of sleep and recovery for NJCAA student athletes. The NCAA provides mandates and regulations on daily and weekly hours for student athlete activities at practice and competitions, along with mandating at least one day of rest during the competitive season and two days of rest during the non-competitive season. The NJCAA level simply recommends a day of rest each week and provides no regulations or mandates to monitor the amount of time NJCAA student athletes can experience a day of rest and recovery for their bodies and their minds. Lastly, career athletic motivation needs to be further studied amongst female and male student athletes across different sports at the NJCAA level. The delusion of finishing a college playing career and pursuing a professional or Olympic career at the NJCAA level is noteworthy. Although, there are NJCAA athletes that have made it the professional league, this delusion of having a professional or Olympic career can hinder academic progress towards a lifelong career.

REFERENCES

Adler, P. & Adler, P. A. (1985). From idealism to pragmatic detachment: The academic performance of college athletes. *Sociology of Education, 58,* 241-250.

Beron, J. K. & Piquero, R. A. (2016). Studying the determinants of student-athlete grade point average: The roles of identity, context, and academic interests. *Social Science Quarterly*, *97*(2), 142-160.

Big Future, (2024). *The Types of Colleges*. https://bigfuture.collegeboard.org/plan-for-college/find-your-fit/types-of-colleges/types-of-colleges-the-basics - :~:text=Two-year colleges offer certificate,technical colleges, and career colleges.

Blum, D. & Sanford, G. A. (August, 2015). *The books or the ballgame: Investigating student athletes' experiences of athletics and academia.* Paper presented at the annual meeting of the American Sociological Association, Chicago, IL.

Bowen, W. G., & Levin, S. A. (2003). *Reclaiming the game: College sports and educational values.* Princeton University Press.

Brown, S. A., Sullivan, Y. W., & Venkatesh, V. (2016). Guidelines for conducting methods research: An extension and illustration. *Journal of the Association for Information Systems*, *17*(7), 435-495.

Bush, V. B.,Castaneda, C.., & Katsinas, S.G. (2009). Athletics in community colleges. *College Student-Athletes: Challenges, Opportunities, and Policy Implications*, 109-121.

Campus Explorer. (n.d.). *Four-year colleges and universities*. https://www.campusexplorer.com/colleges/ - :~:text=A four-year college or,programs and four-year programs.

Cliburn, E. (2021). *The Equity Debate in college sports goes beyond financial compensation*. https://www.insightintodiversity.com/the-equity- debate-in-college-sports-goes-beyond-financial-compensation/

Creswell, J. W., & Plano Clark, V. (2011). *Designing and conducting mixed methods research.* Sage Publications.

Creswell, J.W., Ivankova, N.V., & Stick, S. L. (2006). Using mixed methods sequential explanatory design. *From Theory to Practice*, *18*(3), 3-20. doi:10.1177/1525822X05282260

Dawson, D., Gravelle, F., Karlis, G., & Rothschild-Checroure, E., (2012). Balancing academic and athletic time management: A qualitative exploration of first year student athlete's university football experiences. *Journal of Society and Leisure,* 10-18.

Drew, C. (2023). *Expectancy Value Theory*. https://helpfulprofessor.com/expectancy-value-theory/

Eccels, J. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), *Achievement and Sociological Approaches* (pp. 76-138). W. H. Freeman.

Education USA, (2024). *Community college*. https://educationusa.state.gov/your-5-steps-us-study/research-your-options/community-college

Feinberg, D. (2023). *After college basketball ends women have limited pro options*. https://www.timesfreepress.com/news/2023/apr/03/after-college-basketball-ends-women-have-slim-pro/

Fredricks, A. J., & Eccles, S. J. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology, 42*(4), 698-713.

Free Dictionary, (2024). *Technical College.* Available online at: https://www.thefreedictionary.com/technical+school

Gayles, J. G., (2005). The factor structure and reliability of student athletes' motivation toward sports and academics questionnaire. *Journal of College Student Development, 46*(3), 317-327.

Gilson, T. A., & Paule, A.L. (2010). Current collegiate experiences of big-time, non-revenue, NCAA athletes. *Journal of Intercollegiate Sport, 3,* 333-347.

Google. (n.d.). *Time Management*. In *Google Dictionary*. https://www.google.com/search?q=time+management+definition

Hesla, R., & Pellegrini, J. (2018). Academic performance and time allocation of athletes at a NCAA division III women's university. *Journal of Human Anatomy and Physiology Society, 22* (3), 242-248. doi: 10.21692/haps.2018.026

Hinkle, Shelby L. (2015). Athletics and Academics. *Research Starters: Education*, 3-5. http://library.valdosta.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ers&AN=89164081&site=eds live&scope=site

Jacobs, P. (2015). *Here's the insane amount of time student-athletes spend on practice*. https://businessinsider.com/college-student-athletes-spend-40-hours-a-week-practicing-2015-1

Jelenc, L. R. (2015). *The correlation between athletic intrinsic motivation and academic intrinsic motivation of student athletes at secondary level*, (Doctoral dissertation).

Kissinger, D.K., & Miller, M.T. (2007). Profile of community college athletes in select sports. *Community College Enterprise*, 13, 51-60.

Krueger, A. R. (2002). *Designing and conducting focus group interviews*. https://www.eiu.edu/ihec/Krueger-FocusGroupInterviews.pdf

Marsh, H., & Kleitman, S. (2002). Extracurricular school activities: The good, the bad, and the nonlinear. *Harvard Educational Review, 72*(4), 464-515.

Marx, J., Huffman, S., & Doyle, A. (2008). The student-athlete model and soczialization of intercollegiate athletes. *Athletic Insight: The Online Journal of Sport Psychology.* http://www.athleticinsight.com/Vol10Iss1/Student-AthleteModel.htm

Merriam-Webster, (2024). *Junior College*. In Merriam-Webster dictionary. Retrieved December 3, 2024, from https://www.merriam-webster.com/dictionary/junior college

Miller, M. (2012). The NCAA and the student-athlete: reform is on the horizon. *University of Richmond Law Review, 46*(4), 1141-1174.

Miller, M., & Nadler, D., & Pflum, H. (2017). Community College Student Athletes: Regular students or pro athletes in training? *College Student Journal,* 531-538.

NCAA, (2006). *Growth, Opportunities, Aspirations, Learning of Students in College*. https://doi.org/10.3886/ICPSR35031.v1

NCAA, (2019). *APR averages and trends*. ncaa.org/about/resources/research/apr-averages-and-trends

NCAA, (2016). *Goals study of the student-athlete experience initial summary of findings*. ncaa.org/sites/default/files/goals_2015_summary_jan2016_final_20160627.pdf

NCAA, (2020a). *Staying on Track to Graduate*. http://www.ncaa.org/student-athletes/current/staying-track-graduate

NCAA, (2020b). *D2 Cara Quick Tips.* http://ncaaorg.s3.amazonaws.com/about/d2/ed_res/D2_CARAQuickTips.pdf

NCAA, (2020c). *20 Hour Rule Document*. http://www.ncaa.org/sites/default/files/20-Hour-Rule-Doucment

NCAA, (2022). *NCAA Recruiting Facts*. https://www.ncaa.org/sports/2021/2/10/recruiting-calendars-faq.aspx

NCAA, (2024). *NCAA Academic Progress Rates*. https://www.ncaa.org/sports/2013/11/20/division-i-academic-progress-rate-apr.aspx

NJCAA, (2018). *NJCAA Handbook & Casebook*. https://www.njcaa.org/member_colleges/handbook

NJCAA, (2024). *NJCAA Mission Statement*. https://www.njcaa.org/about/mission/Mission_statement - :~:text=The NJCAA's mission is to,for two-year college athletics.

Parson, J., (2013). Student athlete perceptions of academic success and athlete stereotypes on campus. *Journal of Sport Behavior, 36* (4), 400-416.

Rickard, C. (2022). *What to know about going to JUCO*. https://honestgame.com/blog/what-to-know-about-juco/#:~:text=A%20student%2Dathlete%20must%20be,and%20enrolled%20as%20a%20student

Rossman, G. B., & Wilson, B.L., (1985). Number and words: Combining quantitative and qualitative methods in a single large-scale evaluation study. *Evaluation Review* 9 (5): 627-43.

Spence, J. T., & Helmreich, R. L. (1983) Achievement-related motives and behaviors. In J. T. Spence (Ed.) *Achievement and Sociological Approaches* (pp. 7-68). W. H. Freeman.

Tashakkori, A., & Teddlie, C., (1998). *Mixed methodology: Combining qualitative and quantitative approaches. Applied Social Research Methods Series*, 46. Thousand, Oaks: Sage.

Weinberg, R. S., & Gould, D. (2023). *Foundations of sport and exercise psychology*. Human kinetics (pp. 7-17).

Weiner, B. (1984). *Human Motivation: Metaphors, theories, and research*. Sage.

Whitner, P. A. & Myers, C. R. (1986). Academics and an athlete: A case study. *The Journal of Higher Education, 57*, 659-672.

Yu, K. (2011). *Trinity college student-athletes and time management*, (Doctoral dissertation). https://digitalrepository.trincoll.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1095&context=theses

Appendix A

IRB Protocol Exemption

APPENDIX A

Institutional Review Board (IRB)
For the Protection of Human Research Participants

PROTOCOL EXEMPTION REPORT

Protocol Number: 04276-2022 **Responsible Researcher(s):** Nicole Levering

Supervising Faculty: Dr. Steve Downey

Project Title: *The Effects of Daily Training on Time Management, Athletic, Academic, and Career Athletic Motivation for Collegiate Female Student Athletes: A Mixed-Methods Study.*

INSTITUTIONAL REVIEW BOARD DETERMINATION:

This research protocol is **exempt** from Institutional Review Board (IRB) oversight under 45 CFR 46.101(b) of the federal regulations **category 2**. If the nature of the research changes such that exemption criteria no longer apply, please consult with the IRB Administrator (irb@valdosta.edu) before continuing your research study.

ADDITIONAL COMMENTS:

- *Upon completion of the research study, all collected data (e.g. data, name lists, email addresses, research related correspondence, etc.) must be securely maintained and accessible only by the researcher(s) for a minimum of 3 years. At the end of the required time, all collected data and information must be permanently destroyed.*
- *If applicable, pseudonym lists and corresponding name lists must be kept in separate, secure files.*
- *Qualtrics platform settings must allow participants to skip questions and/or not provide answers. The settings must prohibit the collection of IP addresses.*
- *Exempt guidelines **permit** recording interviews for the purpose of creating an accurate transcript. Recordings must be deleted immediately upon creation of the transcript. Participant recorded testimonies, must be deleted upon creation of the transcript. Exempt guidelines **prohibit** the collection, storage, and/or sharing of recordings.*
- *The research consent statement must be read aloud to participants at the start of each focus group and/or interview session, and documented in the final transcript.*

☒ ***If this box is checked, please submit any documents you revise to the IRB Administrator at irb@valdosta.edu to ensure an updated record of your exemption.***

Elizabeth Ann Olphie 04.28.2022

Elizabeth Ann Olphie, IRB Administrator

Thank you for submitting an IRB application.

Please direct questions to irb@valdosta.edu or 229-253-2947.

Revised: 06.02.16

Appendix B

Email to Athletic Directors for Consent of Student Athlete Emails

Email to Athletic Directors for Consent of Student Athlete Emails

Good afternoon,

I want to thank those of you who have taken the time to complete the two surveys on NJCAA female student athletes in the state of Georgia, if you have not completed the two surveys, please see below.

My name is Nicki Levering and I'm a Doctoral student at Valdosta State University and Head Softball Coach at Georgia Southwestern State University. I am reaching out to NJCAA female student-athletes in the state of Georgia to participate in two online surveys. Both surveys are easy to take on a mobile device and have passed protocol with the International Review Board (IRB). Each are focused on collecting data about NJCAA female student-athletes time management and different motivations to be successful on and off the field/court of play. Will you please consider taking the two surveys below? You will have two weeks to complete the survey. Other than the student-athlete email address no personal information will be collected, and all survey responses will be anonymous. I greatly appreciate your participation.

Questions regarding the purpose or procedures of the research should be directed to Nicole Levering at njlevering@valdosta.edu. This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

Time Management Survey Link
https://valdosta.co1.qualtrics.com/jfe/form/SV_2i6bqJd34nEQsWq

Student Athletes Motivation Towards Sports and Academics Questionnaire
https://valdosta.co1.qualtrics.com/jfe/form/SV_2gwt1L3ZhV0hNlA

Nicole Levering
Georgia Southwestern State University
Head Softball Coach
615-417-7426 (cell)
njlevering@valdosta.edu
nicole.levering@gsw.edu

APPENDIX C

Email to Student Athletes with SAMSAQ Survey Link

Email to Student Athletes with SAMSAQ Survey Link

Good afternoon,

My name is Nicki Levering and I'm a Doctoral student at Valdosta State University and Head Softball Coach at Georgia Southwestern State University. I am reaching out to NJCAA female student-athletes in the state of Georgia and Florida to participate in an online survey about Student Athletes Motivations Towards Sports and Academics. The survey is easy to take on a mobile device and has passed protocol with the International Review Board (IRB). This survey is focused on collecting data about NJCAA female student-athletes' different motivations to be successful on and off the field/court of play. Will you please take the survey below? You will have two weeks to complete the survey. Other than the student-athlete email address no personal information will be collected, and all survey responses will be anonymous. I greatly appreciate your participation, thank you.

Follow this link to the SAMSAQ Survey:

${l://SurveyLink?d=Take the Survey}

Questions regarding the purpose or procedures of the research should be directed to Nicole Levering at njlevering@valdosta.edu. This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

APPENDIX D

Email to Student Athletes with TMS Survey Link

Email to Student Athletes with TMS Survey Link

Good afternoon,

My name is Nicki Levering and I'm a Doctoral student at Valdosta State University and Head Softball Coach at Georgia Southwestern State University. I am reaching out to NJCAA female student-athletes in the state of Georgia and Florida to participate in an online survey about Time Management (TMS). The survey is easy to take on a mobile device and has passed protocol with the International Review Board (IRB). This survey is focused on collecting data about NJCAA female student-athletes' time management. Will you please take the survey below? You will have two weeks to complete the survey. Other than the student-athlete email address no personal information will be collected, and all survey responses will be anonymous. I greatly appreciate your participation, thank you.

Follow this link to the Time Management Survey:

${l://SurveyLink?d=Take the Survey}

Questions regarding the purpose or procedures of the research should be directed to Nicole Levering at njlevering@valdosta.edu. This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

APPENDIX E

Focus Group Discussion Questions

Focus Group Discussion Questions

1. For the student athlete motivation survey, question five asked you to answer true or false to the following statement, “The most important reason why I’m in college is to play a sport.” Amongst the total responses, 54 of you disagreed and 33 of you agreed with that statement. Give me examples as to why you would disagree with that statement. Give me examples to why you would agree with that statement. How do you feel about the responses to that statement?

2. For the student athlete motivation survey, question 16 asked, “Do you think participation in a college sport interfered with your progress towards a degree.” Amongst the total responses, 69 of you disagreed and 28 of you agreed. Give examples as to why you would agree with that statement. Why would you disagree with that statement? How do you feel about the responses to the statement?

3. For the student athlete motivation survey, question 29 asked, “Please state if you agree or disagree that the most important reason you are in school is to earn a degree,” Amongst the total responses, 89 of you agreed and 7 of you disagreed. Give an example as to why you agree with this statement and/or why you disagree with this statement.

4. For the time management survey, question 13 asked, “How effective are you at managing your time when you are a student IN season for your sport?” Amongst the total responses, the majority of you answered, “somewhat effectively”. Give an example of how you feel you are or can be effective with your time management while in season.

5. For the time management survey, question 27 states, “Playing my sport interferes with studying.” Amongst the total responses, 75 of you reported that it often does. Give an example as to how it interferes? How do you feel about that?

6. The final question, 95 out of 103 of you agreed that your coach is invested in your academic success. How do you feel about that response? Give an example of how your coach is invested in your academic success.

APPENDIX F

SAMSAQ Instrument

SAMSAQ Instrument

The purpose of the survey is to understand the motivations for female student athletes in regards to academics, athletics, and career motivations

Your participation in this survey is completely voluntary and you may drop out at any time. All of your responses will remain completely confidential.

I have read and understand the terms and conditions.

Please initial:

If you have any questions, please contact njlevering@valdosta.edu

Code all options starting at 1

Q1 - I am confident that I can achieve a high-grade point average this year (3.0 or above).

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q2 - Achieving a high level of performance in my sport is an important goal for me this year.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q3 - It is important for me to learn what is taught in my courses.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree

5 Strongly agree
6 Very Strongly Agree

Q4 - I am willing to put in the time to earn excellent grades in my courses.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q5 - The most important reason why I am in school is to play my sport.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q6 - The amount of work required in my courses interferes with my athletic goals.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q7 - I will be able to use what is taught in my courses in different aspects of my life outside of school.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q8 - I chose to play my sport because it is something that I am interested in as a career.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree

5 Strongly agree
6 Very Strongly Agree

Q9 - I have some doubt about my ability to be a star athlete on my team.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q10 - I chose (or will chose) my major because it is something I am interested in as a career.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q11 - Earning a high grade point average (3.0 or above) is not an important goal for me this year.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q12 - It is important to me to learn the skills and strategies taught by my coaches.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q13 - It is important for me to do better than other athletes in my sport.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree

4 Agree
5 Strongly agree
6 Very Strongly Agree

Q14 - The time I spend engaged in my sport is enjoyable to me.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q15 - It is worth the effort to be an exceptional athlete in my sport.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q16 - Participation in my sport interferes with my progress towards earning a college degree.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q17 - I get more satisfaction from earning an “A” in a course toward my major than winning a game in my sport.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q18 - During the years I compete in my sport, completing a college degree is not a goal for me.

1 Very Strongly disagree

2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q19 - I am confident that I can be a star performer on my team this year.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q20 - My goal is to make it to the professional level or the Olympics in my sport.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q21 - I have some doubt about my ability to earn high grades in some of my courses

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q22 - I am confident that I can make it to an elite level in my sport (Professional/Olympics).

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q23 - I am confident that I can earn a college degree.

1 Very Strongly disagree

2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q24 - I will be able to use the skills I learn in my sport in other areas of my life outside of sports.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q25 - I get more satisfaction from winning a game in my sport than from getting an "A" in a course toward my major.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q26 - It is not important for me to perform better than other students in my courses.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q27 - I am willing to put in the time to be outstanding in my sport.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q28 - The content of most of my courses is interesting to me.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q29 - The most important reason why I am in school is to earn a degree.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

Q30 - It is not worth the effort to earn excellent grades in my courses.

1 Very Strongly disagree
2 Strongly disagree
3 Disagree
4 Agree
5 Strongly agree
6 Very Strongly Agree

APPENDIX G

TMS Survey Instrument

TMS Survey Instrument

1. What sport do you play?

    Women's Basketball

    Women's Soccer

    Women's Softball

    Women's Cross Country

2. What year are you?

    Freshman

    Sophomore

    Junior

    Senior

    Other

3. Were you recruited?

    Yes

    No

    I don't know

4. When do you receive the best grades?

    In Season

Out of Season

Equal Grades

5. During a typical week IN season, approximately how many hours do you spend on your academic work outside of class time?

0 hours

1-5 hours

6-10 hours

11-15 hours

16-20 hours

21-25 hours

26-30 hours

30+ hours

6. During a typical week OUT of season approximately how many hours do you spend on your academic work outside of class time?

0 hours

1-5 hours

6-10 hours

11-15 hours

16-20 hours

21-25 hours

26-30 hours

30+ hours

N/A I'm always in season

7. During a typical week IN season approximately how many hours do you dedicate to your sport? (practice, games, conditioning etc.)

0 hours

1-5 hours

6-10 hours

11-15 hours

16-20 hours

21-25 hours

26-30 hours

30+ hours

8. During a typical week OUT of season approximately how many hours do you dedicate to your sport? (practice, games, conditioning etc.)

0 hours

1-5 hours

6-10 hours

11-15 hours

16-20 hours

21-25 hours

26-30 hours

30+ hours

N/A I'm always in season

9. During a typical week IN season approximately how many hours do you dedicate to social activities?

0 hours

1-5 hours

6-10 hours

11-15 hours

16-20 hours

21-25 hours

26-30 hours

30+ hours

10. During a typical week OUT of season approximately how many hours do you dedicate to social activities?

0 hours

1-5 hours

6-10 hours

11-15 hours

16-20 hours

21-25 hours

26-30 hours

30+ hours

Can you tell us more about your experiences balancing your academic work outside of class time?

Please rate from 1-5.

11. How efficient are you when doing your academic work outside of class time OUT of season?

Not efficient 1 2 3 4 5 Extremely efficient

12. How efficient are you when doing your academic work outside of class time IN season?

Not efficient 1 2 3 4 5 Extremely efficient

13. How good are you at budgeting your time IN season?

Bad 1 2 3 4 5 Very good

14. How good are you at budgeting your time OUT of season?

Bad 1 2 3 4 5 Very good

Please answer questions 16-21 if your team does have study hall requirements?

15. Is your team required to go to study hall IN season?

16. Is your team required to go to study hall OUT of season?

17. Is study hall optional IN season?

18. Is study hall optional OUT of season?

19. Is study hall only required for certain classes (ex. only Freshman)?

20. Is study hall only required for team members that do not meet a certain GPA requirement?

21. Does your team have another other academic requirements (ex. must attend tutor sessions, meeting with teachers, sit in front of class)?

22. If your team has any other academic requirements will you please explain what they are?

Please rate from 1-5.

23. How helpful do you see academic requirements imposed by your team to be?

Not helpful 1 2 3 4 5 Extremely helpful N/A

Can you tell us how much the following things happen?

24. Playing my sport interferes with scheduling my classes

Never Occasionally Often Always

25. Playing my sport interferes with attending my scheduled classes

Never Occasionally Often Always

26. Playing my sport interferes with attending extra tutor sessions

Never Occasionally Often Always

27. Playing my sport interferes with studying

Never Occasionally Often Always

28. Playing my sport interferes with hanging out with my friends

Never Occasionally Often Always

29. Playing my sport interferes with going out

Never Occasionally Often Always

30. Academics interfere with hanging out with friends

Never Occasionally Often Always

31. Academics interfere with going out

Never Occasionally Often Always

32. Academics interfere with sports practices

Never Occasionally Often Always

33. Academics interfere with athletic games/matches/meets

Never Occasionally Often Always

Please tell us how you feel about the following statements?

34. I believe I am not taken seriously by my professors if I am an athlete

Strongly disagree 1 2 3 4 5 Strongly agree

35. I do not think I would have gotten into college if it wasn't for my sport

Strongly disagree 1 2 3 4 5 Strongly agree

36. I chose my college because of athletics

Strongly disagree 1 2 3 4 5 Strongly agree

37. I chose my college because of social life

Strongly disagree 1 2 3 4 5 Strongly agree

38. I chose my college because of academics

Strongly disagree 1 2 3 4 5 Strongly agree

39. I spend time with people that are not on my team

Strongly disagree 1 2 3 4 5 Strongly agree

40. I get more sleep out of season than I do in season

Strongly disagree 1 2 3 4 5 Strongly agree

41. I procrastinate more out of season that in season

Strongly disagree 1 2 3 4 5 Strongly agree

42. My coach is invested in my academic success

Strongly disagree 1 2 3 4 5 Strongly agree

Please tell us how important the following are to you. Rate from 1-5.

43. Sports practices

Not at all important 1 2 3 4 5 Extremely important

44. Sports events (games, meets, matches)

Not at all important 1 2 3 4 5 Extremely important

45. Studying/doing homework

Not at all important 1 2 3 4 5 Extremely important

46. Hanging out with my friends

Not at all important 1 2 3 4 5 Extremely important

47. Going out

Not at all important 1 2 3 4 5 Extremely important

48. Going to class

Not at all important 1 2 3 4 5 Extremely important

APPENDIX H

SAMSAQ IRB Statement

SAMSAQ IRB Statement

You are being asked to participate in a survey entitled "Student Athletes Motivation Towards Sports and Academics Questionnaire (SAMSAQ)," which is being conducted by Nicole Levering, a doctoral student at Valdosta State University. The purpose of the study is to develop an instrument to measure female student athletes' motivation toward sports and academics. There are 10 questions per page. You will receive no direct benefits from participating in this research study. However, your responses may help us learn more about how female athletes are motivated towards sports and academics. There are no foreseeable risks involved in participating in this study other than those encountered in day-to-day life. Participation should take approximately 10 minutes to complete. This survey and your participation are confidential. No one, including the researcher, will be able to associate your responses with your identity. Your participation is voluntary. You may choose not to take the survey, to stop responding at any time, or to skip any questions that you do not want to answer. Participants must be at least 18 years of age to participate in this study. Your completion of the survey serves as your voluntary agreement to participate in this research project and your certification that you are 18 or older. You may print a copy of this statement for your records. Questions regarding the purpose or procedures of the research should be directed to Nicole Levering at njlevering@valdosta.edu. This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is

responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

APPENDIX I

TMS IRB Statement

TMS IRB Statement

You are being asked to participate in a survey entitled "Time Management Survey (TMS)," which is being conducted by Nicole Levering, a doctoral student at Valdosta State University. The purpose of the study is to understand how female student-athletes budget their time. There are 10 questions per page, with only 3 questions on the last page. You will receive no direct benefits from participating in this research study. However, your responses may help us learn more about how female athletes budget their time.

There are no foreseeable risks involved in participating in this study other than those encountered in day-to-day life. Participation should take approximately 10 minutes to complete. This survey and your participation are confidential. No one, including the researcher, will be able to associate your responses with your identity. Your participation is voluntary. You may choose not to take the survey, to stop responding at any time, or to skip any questions that you do not want to answer. Participants must be at least 18 years of age to participate in this study. Your completion of the survey serves as your voluntary agreement to participate in this research project and your certification that you are 18 or older. You may print a copy of this statement for your records. Questions regarding the purpose or procedures of the research should be directed to Nicole Levering at njlevering@valdosta.edu. This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.

Table 7

SAMSAQ Questionnaire – Response %, Median, Mean, and Standard Deviation by Item

Question	VSD (1)	SD (2)	D (3)	A (4)	SA (5)	VSA (6)	Mdn	M	SD
Q1 - I am confident that I can achieve a high grade-point average this year	1 1%	1 1%	3 3%	19 19%	19 19%	57 57%	6.0	5.24	1.04
Q2 – Achieving a high level of performance in my sport is an important goal for me this year.	0 0%	0 0%	1 1%	8 8%	27 27%	64 64%	6.0	5.54	0.69
Q3 - It is important for me to learn what is taught in my courses	0 0%	0 0%	1 1%	21 21%	30 30%	48 48%	5.5	5.24	0.82
Q4 - I am willing to put in the time to earn excellent grades in my courses	0 0%	1 1%	1 1%	19 19%	30 30%	49 49%	5.0	5.24	0.87
Q5 - The most important reason why I am in school is to play my sport	10 10%	16 16%	29 29%	21 21%	15 15%	9 9%	3.0	3.42	1.42
Q6 – The amount of work required in my courses interferes with my athletic goals.	7 7%	9 9%	44 44%	28 28%	9 9%	3 3%		3.32	1.09
Q7 - I will be able to use what is taught in my courses in different aspects of my life outside of school	1 1%	3 3%	10 10%	43 43%	24 24%	19 19%	4.0	4.43	1.07
Q8 – I chose to play my sport because it is something that I am interested in as a career	9 9%	16 16%	39 39%	16 16%	9 9%	11 11%	3.0	3.33	1.39

Q9 – I have some doubt about my ability to be a star athlete on my team	9 9%	11 11%	31 31%	36 36%	9 9%	4 4%	3.0	3.36	1.19
Q10 - I chose my major because it is something I am interested in as a career	0 0%	0 0%	7 7%	17 17%	24 24%	52 52%	6.0	5.20	0.96
Q11 - Earning a high grade-point average is not an important goal for me this year	53 57%	17 18%	16 17%	1 1%	2 2%	4 5%	1.0	1.86	1.28
Q12 – It is important to me to learn the skills and strategies taught by my coaches	0 0%	0 0%	7 7%	17 17%	24 24%	52 52%	5.0	5.21	0.80
Q13 – It is important for me to do better than other athletes in my sport	1 1%	3 3%	11 12%	34 36%	21 22%	24 26%	4.0	4.52	1.15
Q14 – The time I spend engaged in my sport is enjoyable to me	0 0%	2 2%	7 7%	30 32%	30 32%	25 27%	5.0	4.73	1.00
Q15 – It is worth the effort to be an exceptional athlete in my sport	0 0%	0 0%	3 3%	29 31%	23 25%	39 41%	5.0	5.04	0.92
Q16 – Participation in my sport interferes with my progress towards earning a college degree	13 14%	11 12%	42 45%	14 15%	10 10%	4 4%		3.10	1.27
Q17 - I get more satisfaction from earning an “A” in a course toward my major than winning a game in my sport	11 12%	8 9%	29 32%	24 26%	13 14%	6 7%	3.0	3.42	1.35

Q18 - During the years I compete in my sport, completing a college degree is not a goal for me	50 53%	21 22%	20 22%	1 1%	2 2%	0 0%	1.0	1.77	0.96
Q19 – I am confident that I can be a star performer on my team this year	1 1%	0 0%	9 10%	43 46%	21 22%	20 21%	4.0	4.52	1.00
Q 20- My goal is to make it to the professional level or Olympics in my sport	29 31%	14 15%	29 31%	8 9%	7 7%	7 7%	3.0	2.69	1.53
Q21 - I have some doubts about my ability to earn high grades in some of my courses	15 17%	18 20%	28 31%	21 23%	7 8%	1 1%	3.0	2.89	1.22
Q22 – I am confident that I can make it to an elite level in my sport (pro/Olympics)	25 28%	13 14%	27 30%	14 16%	4 4%	7 8%	3.0	2.78	1.50
Q23 - I am confident that I can earn a college degree	0 0%	0 0%	0 0%	11 12%	15 17%	64 71%	6.0	5.59	0.70
Q24 – I will be able to use the skills I learn in my sport in other areas of my life	0 0%	1 1%	0 0%	25 28%	25 28%	39 43%	6.0	5.12	0.89
Q25 – I get more satisfaction from winning a game in my sport than from getting an "A" in a course towards my major	7 8%	6 6%	48 53%	17 19%	3 3%	10 11%	3.0	3.36	1.24
Q26 - It is not important for me to perform better than other students in my courses	16 18%	15 16%	37 41%	16 17%	5 6%	2 2%	3.0	2.84	1.20
Q27 – I am willing to put in the time to be outstanding in my sport	0 0%	2 2%	3 3%	34 38%	23 25%	29 32%	5.0	4.81	0.99

Q28 - The content of most of my courses is interesting to me	0 0%	4 4%	19 21%	42 47%	10 11%	15 17%	4.0	4.14	1.07
Q29 - The most important reason why I am in school is to earn a degree	1 1%	0 0%	6 7%	17 19%	22 24%	45 49%	5.5	5.13	1.05
Q30 – It is not worth the effort to earn excellent grades	40 44%	22 24%	24 27%	3 3%	1 1%	1 1%	2.0	1.97	1.05

Table 8

SAMSAQ AM Subscale – Response %, Median, Mean, and Standard Deviation by Item

Question	VSD (1)	SD (2)	D (3)	A (4)	SA (5)	VSA (6)	Mdn	M	SD
Q1 - I am confident that I can achieve a high grade-point average this year	1 1%	1 1%	3 3%	19 19%	19 19%	57 57%	6.0	5.24	1.04
Q3 - It is important for me to learn what is taught in my courses	0 0%	0 0%	1 1%	21 21%	30 30%	48 48%	5.5	5.24	0.82
Q4 - I am willing to put in the time to earn excellent grades in my courses	0 0%	1 1%	1 1%	19 19%	30 30%	49 49%	5.0	5.24	0.87
Q5 - The most important reason why I am in school is to play my sport	10 10%	16 16%	29 29%	21 21%	15 15%	9 9%	3.0	3.42	1.42
Q7 - I will be able to use what is taught in my courses in different aspects of my life outside of school	1 1%	3 3%	10 10%	43 43%	24 24%	19 19%	4.0	4.43	1.07
Q10 - I chose my major because it is something I am interested in as a career	0 0%	0 0%	7 7%	17 17%	24 24%	52 52%	6.0	5.20	0.96
Q11 - Earning a high grade-point average is not an important goal for me this year	53 57%	17 18%	16 17%	1 1%	2 2%	4 5%	1.0	1.86	1.28
Q17 - I get more satisfaction from earning an “A” in a course toward my major than winning a game in my sport	11 12%	8 9%	29 32%	24 26%	13 14%	6 7%	3.0	3.42	1.35

Q18 - During the years I compete in my sport, completing a college degree is not a goal for me	50 53%	21 22%	20 22%	1 1%	2 2%	0 0%	1.0	1.77	0.96
Q21 - I have some doubts about my ability to earn high grades in some of my courses	15 17%	18 20%	28 31%	21 23%	7 8%	1 1%	3.0	2.89	1.22
Q23 - I am confident that I can earn a college degree	0 0%	0 0%	0 0%	11 12%	15 17%	64 71%	6.0	5.59	0.70
Q26 - It is not important for me to perform better than other students in my courses	16 18%	15 16%	37 41%	16 17%	5 6%	2 2%	3.0	2.84	1.20
Q28 - The content of most of my courses is interesting to me	0 0%	4 4%	19 21%	42 47%	10 11%	15 17%	4.0	4.14	1.07
Q29 - The most important reason why I am in school is to earn a degree	1 1%	0 0%	6 7%	17 19%	22 24%	45 49%	5.5	5.13	1.05
Q30 – It is not worth the effort to earn excellent grades	40 44%	22 24%	24 27%	3 3%	1 1%	1 1%	2.0	1.97	1.05

Table 9

SAMSAQ SAM Subscale – Response %, Median, Mean, and Standard Deviation by Item

Question	VSD (1)	SD (2)	D (3)	A (4)	SA (5)	VSA (6)	Mdn	M	SD
Q2 – Achieving a high level of performance in my sport is an important goal for me this year.	0 0%	0 0%	1 1%	8 8%	27 27%	64 64%	6.0	5.54	0.69
Q12 – It is important to me to learn the skills and strategies taught by my coaches	0 0%	0 0%	7 7%	17 17%	24 24%	52 52%	5.0	5.21	0.80
Q13 – It is important for me to do better than other athletes in my sport	1 1%	3 3%	11 12%	34 36%	21 22%	24 26%	4.0	4.52	1.15
Q14 – The time I spend engaged in my sport is enjoyable to me	0 0%	2 2%	7 7%	30 32%	30 32%	25 27%	5.0	4.73	1.00
Q15 – It is worth the effort to be an exceptional athlete in my sport	0 0%	0 0%	3 3%	29 31%	23 25%	39 41%	5.0	5.04	0.92
Q25 – I get more satisfaction from winning a game in my sport than from getting an "A" in a course towards my major	7 8%	6 6%	48 53%	17 19%	3 3%	10 11%	3.0	3.36	1.24
Q27 – I am willing to put in the time to be outstanding in my sport	0 0%	2 2%	3 3%	34 38%	23 25%	29 32%	5.0	4.81	0.99

Table 10

SAMSAQ CAM Subscale – Response, Median, Mean, and Standard Deviation by Item

Question	VSD (1)	SD (2)	D (3)	A (4)	SA (5)	VSA (6)	Mdn	M	SD
Q8 – I chose to play my sport because it is something that I am interested in as a career	9 9%	16 16%	39 39%	16 16%	9 9%	11 11%	3.0	3.33	1.39
Q9 – I have some doubt about my ability to be a star athlete on my team	9 9%	11 11%	31 31%	36 36%	9 9%	4 4%	3.0	3.36	1.19
Q19 – I am confident that I can be a star performer on my team this year	1 1%	0 0%	9 10%	43 46%	21 22%	20 21%	4.0	4.52	1.00
Q 20- My goal is to make it to the professional level or the Olympics in my sport	29 31%	14 15%	29 31%	8 9%	7 7%	7 7%	3.0	2.69	1.53
Q22 – I am confident that I can make it to an elite level in my sport (professional/Olympics)	25 28%	13 14%	27 30%	14 16%	4 4%	7 8%	3.0	2.78	1.50
Q24 – I will be able to use the skills I learn in my sport in other areas of my life outside of sports	0 0%	1 1%	0 0%	25 28%	25 28%	39 43%	6.0	5.12	0.89

Table 11

TMS Questionnaire – Response %, Mean, and Standard Deviation by Item

Question									M	SD
Q1 – What sport do you play?	Sball	Wbball	WSoc						2.65	0.68
	80	12	15							
	86%	80%	78%							
Q2 – What year are you classified?	FR	SO							1.68	0.69
	49	61								
	90%	78%								
Q3 – Were you recruited?	Yes	No	Maybe						1.14	0.42
	97	9	3							
	86%	75%	100%							
Q4 – When do you receive best grades?	In Se	Out Se	Eql Gr						2.57	0.65
	10	27	72							
	76%	87%	85%							
Q5 – During a typical week IN season, approximately how many hours do you spend on your academic work outside of class time?	0 hrs	1-5 hrs	6-10 hrs	11-15 hrs	16-20 hrs	21-25 hrs	26-30 hrs	30+ hrs	3.04	1.15
	0	43	36	19	8%	1	1	1		
	0%	86%	87%	82%	80%	50%	100%	100%		
Q6 – During a typical week OUT of season approximately how many hours do you spend on your academic work outside of class time?	0 hrs	1-5 hrs	6-10 hrs	11-15 hrs	16-20 hrs	21-25 hrs	26-30 hrs	30+ hrs	3.67	1.32
	0	18	41	25	18	4	1	3		
	0%	90%	89%	78%	85%	66%	100%	100%		

Q7 – During a typical week IN season approximately how many hours do you dedicate to your sport? (practice, games conditioning, etc.)	0 hrs 0 0%	1-5 hrs 3 75%	6-10 hrs 12 86%	11-15 hrs 17 89%	16-20 hrs 23 85%	21-25 hrs 18 85%	26-30 hrs 12 85%	30+ hrs 24 82%	5.59	1.76
Q8 – During a typical week OUT of season approximately how many hours do you dedicate to your sport? (practice, games, conditioning, etc.)	0 hrs 2 100%	1-5 hrs 20 83%	6-10 hrs 24 88%	11-15 hrs 23 88%	16-20 hrs 22 88%	21-25 hrs 12 70%	26-30 hrs 4 100%	30+ hrs 3 75%	4	1.58
Q9 – During a typical week IN season approximately how many hours do you dedicate to social activities?	0 hrs 3 75%	1-5 hrs 79 89%	6-10 hrs 21 80%	11-15 hrs 3 50%	16-20 hrs 3 100%	21-25 hrs 0 0%	26-30 hrs 0 0%	30+ hrs 0 0%	2.3	0.7
Q10 – During a typical week OUT of season approximately how many hours do you dedicate to social activities?	0 hrs 0 0%	1-5 hrs 27 81%	6-10 hrs 46 90%	11-15 hrs 22 88%	16-20 hrs 10 71%	21-25 hrs 1 50%	26-30 hrs 2 100%	30+ hrs 1 100%	3.28	1.16

Question	NE (1)	SE (2)	ME (3)	VE (4)	EE (5)	M	SD
Q12 – How effective are you when doing your academic work outside of class time when you are IN season?	0 0%	21 91%	46 92%	29 85%	13 92%	3.31	0.92
Q13 – How effective are you at budgeting your time IN season?	0 0%	21 87%	40 90%	32 89%	13 92%	3.28	1
Q14 – How effective are you at budgeting your time OUT season?	5 100%	13 92%	34 89%	43 86%	15 100%	3.45	1.01

Question	SD (1)	SWD (2)	NA (3)	SWA (4)	SA (5)	M	SD
Q23 – How helpful do you see academic requirements imposed by your team to be?	2 100%	4 100%	19 95%	50 100%	34 91%	4.01	0.89

Question	Nvr (1)	Occ (2)	Often (3)	Alwys (4)	M	SD
Q24 – Playing my sport interferes with scheduling my classes.	35 92%	51 98%	13 100%	10 100%	1.98	0.9
Q25 – Playing my sport interferes with attending my scheduled classes	47 94%	50 100%	11 91%	1 100%	1.69	0.69
Q26 – Playing my sport interferes with attending extra tutor sessions	44 91%	45 100%	16 100%	3 100%	1.08	0.79
Q27 – Playing my sport interferes with studying	26 89%	55 98%	24 100%	4 100%	2.06	0.78
Q28 – Playing my sport interferes with hanging out with my friends	15 83%	44 97%	34 34%	17 17%	2.48	0.92
Q29 – Playing my sport interferes with going out to socialize with friends	13 81%	43 97%	36 100%	18 100%	2.54	0.9
Q30 – Academics interfere with hanging out with friends	20 86%	52 98%	31 100%	6 100%	2.21	0.8

Q31 – Academics interfere with sports practices.	57 100%	40 100%	10 100%	1 100%		2.06	0.71
Q32 – Academics interfere with going out to socialize with friends.	22 100%	60 100%	25 100%	2 100%		2.06	0.71
Q33 – Academics interfere with athletic games/matches/meets.	46 100%	51 100%	12 100%	0 0%		3.04	1.15
Question	SD (1)	SWD (2)	NA (3)	SWA (4)	SA (5)	M	SD
Q34 – I believe I am not taken seriously by my professors if I am an athlete.	49 100%	20 100%	20 100%	17 100%	3 100%	2.13	1.22
Q35 – I do not think I would have gotten into college if it wasn't for my sport.	74 100%	11 100%	8 100%	8 100%	9 100%	1.79	1.31
Q36 – I chose my college because of athletics	6 100%	5 100%	18 100%	38 100%	42 100%	3.96	1.11
Q37 – I chose my college because of academics	31 100%	20 100%	34 100%	17 100%	6 100%	2.51	1.21
Q38 – I chose my college because of social life	56 100%	22 100%	22 100%	10 100%	0 0%	1.87	1.03
Question	SD (1)	SWD (2)	NA (3)	SWA (4)	SA (5)	M	SD

Q39 – I spend time with people that are not on my team	25 100%	21 100%	9 100%	34 100%	20 100%	3.03	1.47
Q40 – I get more sleep OUT of season than I do IN season	8 100%	9 100%	18 100%	29 100%	45 100%	3.86	1.24
Q41 – I procrastinate more OUT of season than I do IN season	19 100%	19 100%	27 100%	32 100%	9 100%	2.93	1.24
Q42 – My coach is invested in my academic success	2 100%	1 100%	13 100%	18 100%	75 100%	4.5	0.87

Question	NI (1)	SI (2)	MI (3)	VI (4)	EI (5)	M	SD
Q43 – Please tell us how important the following are to you.							
Sport Practices	0 100%	1 100%	3 100%	23 100%	83 100%	4.46	0.71
Sport Events	0 100%	1 100%	3 100%	23 100%	83 100%	4.71	0.56
Studying/Doing Homework	0 100%	1 100%	18 100%	36 100%	55 100%	4.32	0.77
Hanging out with friends	1 100%	22 100%	43 100%	34 100%	9 100%	3.26	0.9
Going out to socialize	3 100%	28 100%	44 100%	28 100%	7 100%	3.07	0.93
Going to class	0 100%	1 100%	9 100%	30 100%	70 100%	4.54	0.68