Investigating academic motivation among NCAA division I football players within their competition and non-competition semesters.

Ian R. Potter
Georgia Southern University

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INVESTIGATING ACADEMIC MOTIVATION AMONG NCAA DIVISION I FOOTBALL PLAYERS WITHIN THEIR COMPETITION AND NON-COMPETITION SEMESTERS.

by

IAN R. POTTER

(Under the Direction of Devon Jensen)

ABSTRACT

Recent data indicates that college student athletes are graduating at higher rates than their non-student athlete peers; however, among student athletes in general, revenue sport student athletes are well below other college sport student athletes in terms of academic performance. One variable that has shown to have a connection with academic performance among college student athletes is academic motivation. An area within academic motivational research that has not been investigated is how a revenue sport student athlete’s time commitment to their sport (competition and non-competition semester) influences their academic motivation. Additionally, the large majority of research assessing academic motivation among college student athletes analyzed academic motivation at one point in time rather than throughout a time period. Conversely, this study examined academic motivation several times within an academic year, rather than at a single point in time. The study also aimed to determine if academic motivation among NCAA Division I football players is significantly different during their competition semester compared to their non-competition semester and if academic motivation changed from month to month within each semester.
The researcher created a survey entitled the College Student-Athlete Academic Motivation Survey (CSAAM-S) which examined academic motivation among 75 NCAA Division I football players during three months within a given semester. Using a repeated measures ANOVA, it was discovered that the football players had higher levels of academic motivation within their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012). Also, differences were found in academic motivation for each month within the competition semester and the non-competition semester. Additionally, race/ethnicity, athletic standing, and scholarship type were also found to yield different levels of academic motivation among the football players.

From a practical standpoint, investigating academic motivation through moments of time rather than a single moment of time can lead to a better understanding of the concept of academic motivation. Results from the study will be noteworthy in providing more information to campus leaders and athletic department administrators in order to develop, implement, and better time academic motivational programs for NCAA Division I football players.

INDEX WORDS: Academic motivation, Academic performance, Competition semester, Non-competition semester, Student athletes, Revenue-producing sports, Football players
INVESTIGATING ACADEMIC MOTIVATION AMONG NCAA DIVISION I FOOTBALL PLAYERS WITHIN THEIR COMPETITION AND NON-COMPETITION SEMESTERS.

by

IAN POTTER

B.A., Clemson University, 2002
M.Ed., Clemson University, 2004
Ed.S, Georgia Southern University, 2010

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INVESTIGATING ACADEMIC MOTIVATION AMONG NCAA DIVISION I FOOTBALL PLAYERS WITHIN THEIR COMPETITION AND NON-COMPETITION SEMESTERS.

by

IAN POTTER

Major Professor:  Devon Jensen
Committee:        Dan Calhoun
                 Jason LaFrance
                 Steven Platek

Electronic Version Approved:
Fall 2013
DEDICATION

This dissertation is dedicated to my wife and best friend, Brittany Jones Potter. It is because of your support, encouragement, and most of all your love that empowered me to accomplish this goal. I hope that one day I can give you what you have given me!
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Given that this dissertation is about motivation, it seems fitting to acknowledge those who have given me the motivation to continue in my pursuit of higher education. First, I want to acknowledge God for not only creating the motivation in me to earn my doctorate but also surrounding me with people who love and support all that I do. I want to thank my parents, Bill and Teri Potter, for all the sacrifices they made for me, for believing in me, and for blessing me with the opportunity to attend Clemson University. I want to thank my brothers, Will and Derek, for the love and experiences we shared that have made me who I am today. I want to thank my loving wife, Brittany Potter, and her family (Dan and Lucy Jones, Josh and Abbi Jones, Paw Paw and Grandma) who have given me the constant love and reassurance that I needed.

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CHAPTER I
INTRODUCTION

“In an ideal world, all Division I student-athletes would want to earn a meaningful college degree in order to go on and become productive members of society. In reality, while many student-athletes strive to earn a college degree, others are not motivated to attend college to obtain an education. This is especially true of those student-athletes in high profile sports with the opportunity to pursue a career in professional athletics” (Carter, 2012, p.12).

Due to poor graduation rates among specific populations of National Collegiate Athletics Association (NCAA) college student athletes; particularly, Division I football players, researchers began investigating variables that may have an effect on their academic performances. In their attempt, researchers discovered cognitive variables such as SAT scores, ACT scores, and high school GPA to have an influence on the academic performances of college student athletes (Ervin, Gillis, & Hogrebre, 1985; Hood & Ferguson, 1992; Petrie & Stover, 1997). In conjunction with this research, the NCAA points to their academic reform efforts as the reason behind the rise in graduation rates; however, Carter (2012) explained that “the NCAA academic requirements focus on external motivators and academic measurements; they do not internally motivate student-athletes to achieve academically” (p. 27). Coincidently, academic motivation along with other non-cognitive variables such as a student athlete’s sport season was found to influence a college student athletes’ academic performance. The challenge for educators is that literature on these two variables is relatively new and has produced varying results in terms of college student athletes (Adler & Adler, 1987; Gaston, 2002; Simons,
Rheenen, & Covington, 1999). As a result, it is important to continue to research these variables to understand if and how they affect academic performance among college student athletes.

Looking specifically at the non-cognitive variable motivation, Astin (1993) discovered that sport participation in general has the ability to increase motivation to earn a degree; therefore, one could assume that college student athletes graduate at higher levels than non-college student athletes because they are more motivated to earn a degree. Furthermore, using this same logic, the intensity or level of sport participation among certain populations of college student athletes may have an effect on their academic motivation that in turn may influence their academic performance. Morgan (2005) contended that sport participation can be an important variable when investigating academic motivation among college student athletes because the type of sport can determine how much time the student athlete spends on sport related activities which has shown to have an impact on their academic performance. Research does support that college student athletes’ academic motivation directly influences their academic performance (Adler & Adler, 1987; Gaston, 2002; Gaston-Gayles, 2004); therefore, understanding what variables influence academic motivation may help to understand why some student athletes perform better academically.

Research has specified several variables that influence academic motivation among college student athletes. For example, in 1987, Adler and Adler found that a college student athletes’ athletic identity was directly related to their level of academic motivation. Athletic identity can be defined as the degree to which a student athlete identifies with his or her athletic role (Brewer, Van Raalt, & Linder, 1993; Ryska, 2002).
Throughout their study, the researchers discovered that student athletes in the sport of basketball who entered the institution as freshman were optimistic about obtaining a degree; however, as their basketball environment became more intense, they began to gravitate more toward their athletic identity. This in turn caused their academic motivation to decrease which ultimately affected their academic performances. The NCAA basketball student athletes that Adler and Adler analyzed in their study are one of the groups of college student athletes that have consistently graduated at lower levels compared to other college student athletes (Knight Foundation, 2001; NCAA Research Staff, 2009, 2011). Gaston (2002) continued research on NCAA student athletes’ academic motivation by testing it along with other cognitive variables to predict academic performance. Her study found academic motivation to be a significant predictor of academic performance (grade point averages) for college student athletes. Although her study expected to find lower academic motivation levels among high profile student athletes (sports highly associated with a national professional sports organization such as football or basketball) compared to low profile student athletes (sports not associated with a national professional sports organization such as lacrosse or water polo), this was not found to be the case. Instead, her findings revealed that low profile student athletes had the lowest academic motivation scores of all the groups.

Research demonstrates why Gaston hypothesized to find lower academic motivation levels among high profile student athletes, specifically due to the fact that academic motivation has been linked to academic performance (Adler & Adler, 1991; Gaston, 2002; Gaston-Gayles, 2004; Shuman, 2009) and the fact high profile student athletes consistently have some of the worst graduation rates and GPAs among all student
athletes (Adler & Adler, 1991; Bailey & Littleton, 1991; Knight Foundation, 2001; Lapchick, 1996, 1997; NCAA Research Staff, 2009, 2011; Reyes, 1997; Ryan & Deci, 2000b; Sellers, 1992; Suggs, 2003). In addition, high profile sports contain a large population of African American and male student athletes that have shown to struggle academically compared to other college student athletes, and tend to have the lowest graduation rates among all student athletes (Knight Foundation, 2001; NCAA, 2009; NCAA Research Staff, 2009, 2011). Lastly, research has shown female student athletes to not only graduate at higher rates than male student athletes but also have higher levels of academic motivation (Gaston, 2002; Meyer, 1990; Ryan, 1989). Female student athletes also tend to participate in non-revenue or low profile sports since their professional sport opportunities are limited. The discrepancies in Gaston’s findings suggest a deeper investigation into academic motivation as it relates to college student athletes. Understanding the context in which academic motivation is being studied may shed light on the incongruities of Gaston’s findings with existing research on academic motivation.

The majority of existing research analyzing academic motivation among college student athletes has traditionally collected data during a single point in time, rather than over several points (Althouse, 2007; Gaston-Gayles, 2004; Pedescleaux, 2010; Rasmussen, 2009; Shuman, 2009). Gaston-Gayles (2004) indicated that student levels of academic motivation and performance may fluctuate throughout their college career; thus, raising the question as to whether or not a single point of time can truly indicate a student athlete’s academic motivation. For example, Gaston’s 2004 study surveyed student athletes during the fall semester only. This method raises questions because for
some student athletes, the fall semester may have been their competition semester that requires much more time practicing, traveling, and competing. Conversely, the fall semester for others may have been during their non-competition semester, which requires much less time devoted toward their sport and may have a different affect on their academic motivation. Therefore, by analyzing student athletes’ academic motivation during one semester rather than both semesters may not have given an accurate account of which population of student athletes or teams actually have higher or lower levels of academic motivation throughout the academic year. Adler and Adler’s (1987) study which assessed academic motivation among college student athletes over multiple time periods indicated that it does change throughout a student athlete’s athletic college career.

Adler and Adler’s (1987) longitudinal study discovered that as the student athletes progressed through college, their academic motivation decreased which caused a decline in their academic performance. The results from Adler and Adler’s study indicated a need to analyze academic motivation over multiple periods in time, rather than a single period of time, because academic motivation can change within a student athlete. This is important because understanding the fluctuating nature of academic motivation can help athletic directors, coaches, and educational administrators better design support services to help student athletes in their schooling. Although research has not yet analyzed academic motivation among college student athletes during their competition and non-competition semesters, past research has produced conflicting results when analyzing academic performance during these two time periods. While some research has shown academic performances to be better during the college student athletes’ competition semester (Maloney & McCormick, 1993; Scott et al., 2008), others
have shown it to be better during their non-competition semester (Frost, 2001; Wempe, 2001). The conflicting results demonstrate a need to further investigate variables that may influence academic performance among college student athletes. Considering research has shown academic motivation to change throughout a college student athletes’ athletic career (Adler & Adler, 1987) and affect academic performance (Gaston, 2004; Sedlacek & Adams-Gaston, 2002; Shuman, 2009), studying academic motivation during these two time periods (competition and non-competition semesters) seems appropriate. Therefore, this research investigated academic motivation during a student athlete’s competition and non-competition semester in order to identify times when academic motivation levels are high and/or low. Moreover, this study will specifically analyze high revenue student athletes since they tend to have the lowest academic performance levels (Adler & Adler, 1991; Bailey & Littleton, 1991; Knight Foundation, 2001; Lapchick, 1996, 1997, 2006; NCAA Research Staff, 2009, 201; Reyes, 1997; Ryan & Deci, 2000b; Sellers, 1992; Suggs, 2003).

Although this research examined academic motivation during a student athlete’s competition and non-competition semester, a discussion needs to take place in regards to academic performance because academic motivation has an impact on academic performance. For this study, academic performance was defined by the student-athlete’s success in their college courses and ultimately whether or not they graduate.

**Statement of the Problem**

Recent data indicates that college student athletes are graduating at higher rates than their non-student athlete peers (NCAA Research Staff, 2009, 2011), especially for minority and female student athletes. This statement indicates that athletic participation
may have an influence on academics; however, the fact that graduation rates for student athletes who participate in revenue or high profile sports are well below other college student athletes indicates the presence of another variable. One variable that has shown to have a connection with academic performance among college student athletes is academic motivation; thus, more research in this area might shed light on the problem. Existing research has found several variables that impact or influence academic motivation such as athletic identity, gender, race, and sport. An area within academic motivational research that has not been investigated is how a revenue sport student athlete’s time commitment to their sport (competition and non-competition semester) influences their academic motivation. Although, researchers have investigated connections between college student athletes’ academic performances in relation to their sport semester (competition and non-competition semesters) and their academic performances in relation to their academic motivation, current research does not raise awareness on the connection between their sport semester (competition and non-competition semesters) and their academic motivation. A logical way to research academic motivation among college student athletes is to examine if it changes over a period of time; specifically, within their competition or non-competition semesters. Furthermore, the design of this study is significantly different than other research on academic motivation because this study assessed college student athlete’s academic motivation within (beginning, middle, and end) each semester rather than assessing it at one moment in time (Althouse, 2007; Gaston-Gayles, 2004; Pedescleaux, 2010; Rasmussen, 2009; Shuman, 2009). This design element is important to note because as seen in Adler and Adler’s (1987) study, a college student athlete’s academic motivation
can change throughout their college career; therefore, analyzing it over a time period as opposed to a single moment in time may help to discover additional findings.

Due to the fact that research has not been conducted on how a college student athletes’ academic motivation changes throughout their competition and non-competition semesters, assumptions have been formed. Consequently, assumptions concerning academic motivation have been based off existing research regarding how sport participation affects the college student athletes’ academic performances. This is due to the fact that academic performance and academic motivation are debatably intertwined. When analyzing research regarding the effects that sport participation has on student athletes, it is apparent that there are inconsistencies in the findings. For example, many scholars propose that sport participation has a negative influence on college student athletes (Adler & Adler, 1985; Cogan & Petrie, 1996; Shulman & Bowen, 2001), whereas others have found it to have a positive effect on their academic performance, college adjustment, and their overall college experience (Astin, 1999; Smedley, Myers, & Harrell, 1993; Young, Ekeler, Sawyer, & Prichard, 1994). Based on research that considers sport participation to have a positive effect on the student athlete, two assumptions can be formed as it relates to academic motivation and sport season. The first assumption that can be formed while student athletes are in their competition semester is that academic motivation will be high due to their increased participation in their sport. Subsequently, when student athletes are in their non-competition semester their academic motivation will be low due to a lack of involvement with their sport. In contrast, there are also assumptions based on research declaring sport participation to be a hindrance to student athletes. For example, the first assumption proposes that a college
student athlete’s academic motivation will be low during their competition semester due to the fact that there are more time demands in regards to sport activities such as practicing, watching game film, traveling and competing in competitions, and receiving treatment. For the same reasons, we can also assume that during the student athletes’ non-competition semester more time will be devoted towards academics, causing higher academic motivation.

Other assumptions that can be made are based on the initial level of college student athletes’ academic motivation prior to their beginning a semester. For example, student athletes’ academic motivation may be high at the beginning of their competition semester and then decrease as the semester progresses because the students get increasingly tired having to meet both academic and sport requirements. Conversely, their academic motivation could increase because the structure and regimen of both school and their sport keep them focused and on task. Another example assumes that a student athlete’s academic motivation is low at the beginning of their non-competition semester and then increases because they are able to commit more time to their schooling and experience this academic benefit. On the other hand, academic motivation could decrease throughout the semester because they do not perform as well without the daily structure their sport requires of them. Since this gap in the literature exists and assumptions have been made based on conflicting ideas and a lack of research, athletic administrators and practitioners do not truly know how academic motivation is affected during the college student athletes’ competition and non-competition semester. Accordingly, conducting this research will help to clarify assumptions that are made about academic motivational changes throughout a college student athletes’ competition
and non-competition semester and provide more concrete evidence to support what really occurs.

**Purpose of Study**

The purposes of this study were threefold: (1) to develop a better understanding of NCAA Division I football player’s academic motivation within their competition and non-competition semesters, (2) to examine if one of the semesters yields a greater overall academic motivation among the NCAA Division I football players, and (3) to discover if changes occur (i.e. directional pattern) in the academic motivation of NCAA Division I football players within their competition and non-competition semesters.

**Research Questions**

The following research questions guided the study.

(RQ1) How does NCAA Division I football players’ academic motivation within their *competition semester (Fall 2012)* differ from their academic motivation within their *non-competition semester (Spring 2013)* based on their responses to the College Student Athlete Academic Motivation Survey (CSAAM-S)?

(RQ2) How does NCAA Division I football players’ academic motivation change each month within their *competition semester (Fall 2012)* based on the student athletes’ responses to the College Student Athlete Academic Motivation Survey (CSAAM-S)?

(RQ3) How does NCAA Division I football players’ academic motivation change each month within their *non-competition semester (Spring 2013)* based on
the student athletes’ responses to the College Student Athlete Academic Motivation Survey (CSAAM-S)?

**Hypotheses**

The hypotheses for this study referred specifically to the sample of student athletes surveyed in this study. The following hypotheses guided the study.

(H1) It is hypothesized that the overall academic motivation within the NCAA Division I football player’s competition semester (Fall 2012) will be lower than the overall academic motivation within the NCAA Division I football player’s non-competition semester (Spring 2013).

(H2) It is hypothesized that academic motivation levels will be significantly different for each month indicating a decreasing directional pattern within the NCAA Division I football players’ competition semester (Fall 2012).

(H3) It is hypothesized that academic motivation levels will be significantly different for each month indicating an increasing directional pattern within the NCAA Division I football players’ non-competition semester (Spring 2013).

**Definitions of Terms**

The following definitions are outlined to understand their meaning as used in this study:

- **Academic motivation** - academic motivation is defined as the underlying causes of students’ behaviors and desires to excel in academic activities (Vallerand, et al, 1992).

- **Academic performance** - the student athlete’s success in their college courses and ultimately whether or not they graduate.
• **Athletic identity** - is the level at which a student athlete identifies with their athletic role (Brewer, Van Raalt, & Linder, 1993).

• **Non-cognitive variables** - factors that affect academic success, such as, athletic identity, motivation, demographic variables, culture, and personality variables.

• **Non-student athlete** - an enrolled college student who does not participate in intercollegiate athletics for their institution.

• **Non-revenue sport** - sports which do not generate money for the athletic program because of limited spectator appeal, general lack of media interest, and/or no opponent financial guarantee potential (Morgan, 2005).

• **Revenue sport** - sports are those whose gate receipts cover the total costs for the sport and produce additional revenue for the athletic department or institution. “Basketball and football serve as the two primary sports that generate revenue for the university. These sports, also called high-revenue sports, are capable of selling out stadiums and receive frequent media attention” (Anderson, 2010, p. 3).

• **College student athlete** - is a member of a varsity athletic team at any intercollegiate institution. The college student athletes who will serve as participants in this study must be considered to be an active member on the team and be part of each team’s roster.

• **Competition semester** - Per NCAA Bylaw 17.1.6.1, competition semester refers to when a college student athlete’s sport is in its playing season (championship segment); student-athletes are permitted to participate in no
more than 20 hours weekly and four hours a day of CARAs (NCAA Division I Manual, 2011). During this week, student-athletes are required to have at least one day off.

- **Non-competition semester** - Per NCAA Bylaw 17.1.6.2, non-competition semester refers to when the college student athlete is outside of their teams playing season (non-championship segment); student athletes are permitted to practice a maximum of eight hours per week with no more than two hours per week spent on skill-related workouts (NCAA Division I Manual, 2011). Additionally, during this week, student-athletes are required to have at least two days off.

**Significance**

Analyzing academic motivation among NCAA Division I football players within their competition and non-competition semester will provide a comparative indicator for if and when academic motivation changes within each semester. Furthermore, observing academic motivational changes throughout multiple moments in time is an important step to building on the theoretical development of academic motivation. Currently, the research on academic motivation among college student athletes predominantly focuses on academic motivation at a single moment in time. The design of this study allows for the NCAA Division I football players’ academic motivation to be captured at several different instances by asking them to reflect back over three different months within each semester (competition and non-competition). Comparing the reported academic motivational scores by NCAA Division I football players will provide researchers an
additional means to quantifiably assess the levels and changes of academic motivation within the competition and non-competition semesters.

From a practical standpoint, investigating academic motivation through moments of time rather than a single moment of time can lead to a better understanding of the concept of academic motivation and add a new dimension to the way academic motivation is be studied in the future. Additionally, the results from this study will add to the existing body of literature on NCAA Division I football players’ academic motivation, competition and non-competition semester affects on academic motivation, and ultimately allow for inferences on the academic performance of all college student athletes.

Results from the study will provide more information to campus leaders and athletic department administrators in order to develop, implement, and better time motivational programs for NCAA Division I football players. Examining academic motivation in this way will allow athletic administrators to provide motivational performance techniques throughout the applicable semester which in some cases may help to curb academic performances (Althouse, 2007; Gaston-Gayles, 2004; Pedescleaux, 2010; Rasmussen, 2009; Shuman, 2009; Simons, Reheenen, & Covington, 1999). These motivational programs could aim to increase academic motivation and help prevent poor academic performances among college student athletes.

Limitations, Delimitations, and Assumptions

Inferences from this study are limited to institutions similar in size and scope to Clemson University. Any inference to institutions without NCAA Division I FBS football such as NCAA Division II, Division III and National Association for Intercollegiate
Athletics (NAIA) might not be appropriate. Additionally, the applicability of these results should be carefully evaluated before generalizing to other college student athletes. Similarly, all of the participants surveyed in this quantitative study are males who participated in football, a revenue producing sport. Thus, readers should be cautious of making generalizations beyond the scope and context of this study.

Subsequently, this study only analyzed the selected variables of race/ethnicity, athletic standing, and scholarship type. Additionally, the inclusion of a dependent variable (academic motivation) and two independent variables (college student-athlete’s competition semester and non-competition semester) were utilized as predictor variables to determine student-athletes’ academic performance. All other variables and/or subjects not specified were considered beyond the scope of this study.

A major assumption in this study is that academic motivation is a valid determinant of a college student athlete’s academic performance. Therefore, it can be inferred that a college student athlete’s academic motivational level can predict their academic performance at a given point in time. This study however, will not provide descriptive data on whether college student-athletes have higher levels of academic motivation or perform at the same level academically as non-student athletes, nor will it determine for statistical inferences between the two groups. Although there may be a relationship between academic motivation and college student-athletes’/non-student athletes’ comparisons, this study makes no attempt to address this specific question. Finally, for the purpose of this study, the college student-athlete sample were limited to NCAA Division I football players who were full-time undergraduates during the Fall 2012 and Spring 2013 semesters at Clemson University.
**Organization of the Study**

Chapter 1 has presented the introduction, statement of the problem, research questions, hypotheses, significance of the study, definition of terms, and limitations of the study. Chapter 2 contains the review of related literature and research related to the problem being investigated. The methodology and procedures used to gather data for the study are presented in Chapter 3. The results of analyses and findings to emerge from the study are contained in Chapter 4. Chapter 5 contains a summary of the study and findings, conclusions drawn from the findings, a discussion, and recommendations for further study.
CHAPTER II

REVIEW OF SELECTED LITERATURE AND RESEARCH

The purpose of this literature review is to provide support for the rationale and purpose of the study which is to gain a better understanding of how a college student athletes’ academic motivation is affected by their sport season. Initially, the literature review will provide a clear understanding of the life of a student athlete which is complex and depending on the sport can produce additional challenges that can influence both academic motivation and academic performance. This study has been developed to address academic motivation rather than academic performance, but the two are debatably intertwined (Althouse, 2007); therefore, literature pertaining to academic performances such as graduation rates of college student athletes must be addressed. Moreover, statistics on graduation rates for student athletes as well as NCAA academic requirements and reforms will be discussed. Additionally, research analyzing the effects of a college student athlete’s competition and non-competition semester on their academic performance and academic motivation will be presented. Finally, the concept of academic motivation and the theories that make up academic motivation will be reviewed along with current studies using various theoretical lenses to analyze academic motivation. Ultimately, a “gap” in the literature will be explored which indicates a need for more research in the field of academic motivation as it relates to college student athletes’ competition and non-competition semester.

The Life of a College Student Athlete

The life of a college student athlete is unique and filled with demanding athletic responsibilities while also having to maintain academic requirements to remain eligible
for practice and competition. For someone who has never been a collegiate student athlete, the differences between college student athletes and college students who do not participate in intercollegiate athletics might seem subtle; however, participating in intercollegiate athletics adds a surprisingly complex layer to student life (Watt & Moore, 2001). Student-athletes have pressures to not only make good grades but also pressures from the coach, the team, and the rules and regulations of the NCAA (Chu, 1989). Non-student athletes generally manage their own academic and social lives by selecting courses and choosing times to study, workout, or eat, whereas such activities are often scheduled by others for student-athletes (Lanning, 1982). Although, there are many factors that distinguish an athlete from another athlete whether it is through membership (i.e. NCAA, NAIA, JUCO, etc.), divisional classification (NCAA DI, DII, or DIII), sport, gender, race, socioeconomic background, or athletic ability, these distinguishing factors, in many ways define the experience and the life of a student athlete (Street, 1999).

All student athletes have sport participation time demands and for football players in particular, time spent on their sport is determined by the semester. For example, a football student athlete has two sport semesters, a competition semester and a non-competition semester. The competition semester, sometimes referred to as the championship segment, consists of an increased time commitment to practice and competition. When a sport is in its competition semester (championship segment), student-athletes are permitted to participate in no more than 20 hours per week and four hours a day of Countable Athletic Related Activities (CARA) per NCAA Bylaw 17.1.6.1 (NCAA Manual, 2011). The NCAA Bylaw 17.02.1 defines CARA as:
Any required activity with an athletics purpose involving student-athletes and at the direction of, or supervised by one or more of an institution's coaching staff (including strength and conditioning coaches) and must be counted within the weekly and daily limitations. (NCAA Manual, 2011)

Examples of required countable activities per NCAA bylaw 17.02.1 include practice, competition, athletic meetings, reviewing game tape, weight training, and conditioning. Some examples of non-countable activities are compliance and Champs/Life Skills meetings or presentations, training room visits, and anything at the request of the student-athlete including voluntary activities (NCAA Manual, 2011). Additionally, during a given week, student-athletes are required to have at least one day off of all countable athletically related activities. The non-competition semester or sometimes referred to as the non-championship segment, consists of a lower time commitment to practice (8 hours per week) and little to no competition. Student-athletes are required to have at least two days off per week of all countable athletically related activities during the non-competition semester. Depending on the sport, the NCAA also specifies when a team or individual may begin their competition semester and their non-competition semester.

In addition to sport participation time demands, the life of the college student athlete is also impacted by factors such as an inequality in terms of team budgets and the popularity of the sport they play. For example, in the fall season, football has become the main entertainment for universities and their communities, particularly for NCAA Division I institutions (Anderson, 2010). In light of this, although researchers assume that college student athletes share common issues and experiences, the fact of the matter
is revenue producing sport student athletes have a different set of challenges that they face and choose institutions for different reasons.

College student athletes select institutions for a variety of reasons, whether it is due to scholarship offers, the location and size of the institution, or parental guidance, the motivations for attending college varies among college student athletes. A number of student athletes are motivated to participate in college athletics as a vehicle to obtain a degree, whereas, others participate in college athletics as a means to make it to the professional level in their sport. Some student athletes, particularly football players say that if not for being recruited they would not have attended college (Hyatt, 2003). Ideally, some student athletes share equal motivations to perform well academically and make it professional in their sport (Gaston, 2002). It is in this motivation to perform well academically that actually can predict their academic performance while in college (Adler & Adler, 1991; Brewer, 1999; Gaston, 2002; Simons, Rheenen, & Covington, 1997, 1999; Watt & Moore, 2001). Therefore, understanding what variables effect academic motivation may be influential to increasing academic performance among student athletes. At the root of the issue is the basic premise of how sport participation itself influences the academic performance of college student athletes; thus, analyzing literature on the disadvantages and advantages of sport participation is important to the context of this study. Existing research on the benefits of sport participation is debatable as some scholars suggest that sport participation has a negative influence on college student athletes (Adler & Adler, 1985; Cogan & Petrie, 1996; Shulman & Bowen, 2001), whereas others have found it to have a positive influence (Astin, 1999; Smedley, Myers, & Harrell, 1993; Young, Ekeler, Sawyer, & Prichard, 1994).
Sport Participation Advantages

Being a college student athlete has many advantages aside from the monetary benefit of receiving an athletic scholarship. For example, Harris (1993) and Chu (1989) discovered that sport participation helps student athletes develop a positive identity and a stronger character throughout their sport careers. Melendez (2006) stated that “through their involvement with sport, athletes are provided with opportunities to exhibit leadership characteristics, which can help promote feelings of optimism, self-assurance, confidence in achieving long and short-term goals, and confidence in internal stress-coping abilities” (p. 41).

Additionally, athletic participation has shown to produce high levels of self-esteem, motivation, and discipline as well as developing leadership and teamwork skills (Chu, 1989). Astin (1993) found that participating in college athletics positively influenced the student athlete’s college experience and increased their motivation to earn a degree. Astin’s (1999) beliefs are centered on the Student Involvement theory which according to the theory, proposes that the more the student is involved in college, the more the student learning will learn. For student athletes, particularly during their competition semester, their involvement representing their institution in athletic related activities is at its height. Interestingly enough, Shulman and Bowen (2001) performed a study comparing student-athletes and non-student-athletes in relation to their time commitments in extracurricular activities. They examined non-student-athletes who were involved in theatre, government, and other activities in hopes to explain the performance gap. It was discovered that these heavily invested non student-athletes finished higher in class rank than their counter parts. Shulman and Bowen’s (2001) study supports Astin’s
Additionally, participating in sports creates an opportunity for student athletes to demonstrate leadership characteristics, which have been found to promote feelings of optimism, self-assurance, confidence in goal setting and achievement, and stress coping abilities (Melendez, 2006). Being able to cope with stress is very important, especially for minority student athletes whose transition to college is often times very stressful (Young, Ekeler, Sawyer, & Prichard, 1994). Smedley, Myers, and Harrell (1993) contended that athletic participation also helps in the development of institutional pride and a sense of belonging to the institution that many minority non-student athletes lack when they attend predominantly mainstream institutions. Peters (2000) study consisted of 1,530 student-athletes from Division III institutions. The purpose of his study was to analyze the relationship between athletic participation and student success. Findings revealed that participation in athletics had no relationship with academic performance in all sports except for football. Despite these scholars’ findings, other scholars suggest that participation in intercollegiate athletic programs as a whole, especially in high profile sports such as football, diminishes their academic performance (Adler & Adler, 1985, 1987; Maloney & McCormick, 1993; Shulman & Bowen, 2001;).

**Sport Participation Disadvantages**

Some researchers contend that if college student athletes did not participate in sports but were afforded the advantages of comparable academic support, their grades would be increasingly higher than the student body (Maloney & McCormick, 1993). Scholars have distinguished many factors that may hinder the academic performance of student-athletes. For example, scholars propose that participation in sports can lead to
less time and opportunity for social interactions with the general student body and excessive focusing on the athletic role, both resulting in academic negligence (Cogan & Petrie, 1996). Similarly, scholars point to the rigorous and demanding schedules that student-athletes must endure that causes them to underperform academically. For instance, in addition to the normal student rigors such as attending classes and studying, college student athletes also have to balance the demands of their sport which include numerous hours of practice, treating injuries, and team travel (Watt & Moore, 2001). Duderstadt (2003) suggested that the academic and athletic demands that are placed on the student athlete are virtually impossible to maintain. Student-athletes’ athletic schedules can sometimes consist of almost eight hours per day of weight training, conditioning activities, training room activities, practice, and competition not leaving much time for studying. Many student athletes become disengaged with their academic ideals because more often than not, the athletic goals are overly reinforced compared to their academic goals (Adler & Adler, 1985). It is for this reason that college student athletes have to consistently balance the roles of being a student and being an athlete, which has a direct effect on their academic performance (Street, 1999). In fact, studies have found revenue producing student athletes to be more focused on athletics than on academics (Adler & Adler, 1985, 1987, 1991; Miller & Kerr, 2002). Researchers have found that increased athletic time commitments can lead to an academic experience defined by the athletic culture and isolated from the academic culture of the institution (Hyatt, 2003).

Due to the nature and the popularity of the sport, Division I football student athletes have more external demands particularly due to the media exposure and financial
implications. Sperber (2000) offered that “the media exposure and financial implications associated with high profile college athletics place significant pressures on leaders in higher education to develop successful athletic programs, often at the expense of academic integrity” (Young, 2010, p. 18). It is in these pressures that often times shape an athletic culture (Young, 2010). On many campuses and specifically for major football institutions, an athletic culture can lead to a culture of academic underperformance and a reduced likelihood of earning an advanced degree (Ryska, 2003; Shulman & Bowen, 2001). In fact, intercollegiate athletics diminishes academic performance among student athletes, especially in high profile sports such as football (Shulman & Bowen, 2001). Given the fact that division I football student athletes spend more time on their sport and less time on their academics, we can assume that they are also less academically motivated. Bailey and Littleton (1991) researched athletics and academics in the college setting and its effects on student-athletes. Findings revealed that the participants who played basketball and football were found to be more motivated towards athletics than they were towards academics. These findings may help to better understand why revenue producing sport student athletes have the lowest federal graduation rates among all NCAA college student athletes (NCAA Research Staff, 2011). Nevertheless, even with this research and other scholars pointing to various cognitive and non-cognitive variables for being a reason for the abysmal graduate and retention rates among this population of student athletes, the NCAA initiated several academic reforms in order to curtail the ongoing dilemma.

NCAA Academic Reform
The NCAA reformations known as proposition 48, proposition 42, proposition 16, and most recently the Academic Progress Rates (APR) created initial and continuing eligibility standards for college student athletes that determined whether or not they can participate in college athletics and receive athletics financial aid (Watt & Moore, 2001). In the fall of 1986, the NCAA implemented Proposition 48 that required student-athletes to obtain a benchmark high school grade point average (GPA), a minimum SAT/ACT score, and a minimum number of core curriculum courses to be eligible to participate in athletics during their first year (Sellers, Chavous & Brown, 2001). Although proposition 48 still exists, the benchmarks have increased for incoming student-athletes. Three years later in 1989, the NCAA passed Proposition 42 that mandated that all student-athletes must meet both the SAT requirement and the grade point average in order to receive athletic financial aid and not lose a year of athletic eligibility (Sellers, Chavous & Brown, 2001). Some years later, the NCAA introduced Proposition 16 which increased the initial eligibility core course requirements to 13 and raised the SAT and ACT test score requirements needed to be eligible for practice and competition during their first year of school. This reform was followed by a regulation on academics among current student-athletes while competing in intercollegiate athletics known as continuing eligibility (Hildenbrand, 2005). Part of this reform consisted of legislation that would require student-athletes to pass a minimum number of hours toward a degree each semester known in the business as the “40/60/80 rule”, achieve a required GPA after each academic year, and declare a major after two years of enrollment in order to be eligible to compete in the subsequent semester. The progress-toward-degree requirement (40/60/80), mandates a student athlete to have completed 40% of their degree-program
requirements going into their third year, 60% going into their fourth year, and 80% going into their fifth year, thus, according to the NCAA, moving student-athletes to graduation in five years (Meyer, 2005). Next, would be one of the biggest academic reform efforts to ever be put in place that is known as the Academic Progress Rate (APR). The APR was initiated in 1989 when a survey by the Knight Foundation found that certain populations of student athletes were graduating at extremely low rates (Knight Foundation, 2001). Their survey was an eye opener and inevitably gave the NCAA no choice but to place academic reform at the top of the priority list. Thus in 2003, the APR was formally introduced which instead of placing all the blame on student-athletes, the NCAA started holding the athletic department and coaches accountable for poor academic performance among student-athletes.

The Academic Progress Rate (APR) measures semester-by-semester academic progress that is more of a “real-time” assessment rather than just examining graduation rates. The APR mandates institutions to track student-athletes eligibility and retention each semester and imposes penalties to teams who do not meet the requirements authorized. The NCAA explains eligibility as maintaining a GPA required for graduation, maintaining full-time enrollment, and passing a minimum number of courses towards a degree program each semester. The APR academic reform aimed to hold athletic departments and coaches accountable for their student-athletes academic achievement and success. Every NCAA Division I team calculates its APR each academic year, based on the eligibility, retention, and graduation of each scholarship student-athlete. Eligibility and retention are both part of a point system that helps to form an equation that the NCAA uses to determine the APR of each individual sports team.
within the athletic department. A team’s APR is determined by dividing the maximum number of points possible by the number that is actually earned by each student-athlete and entire team. A NCAA Division I scholarship student-athlete can earn a maximum of two points per semester.

The first point can be earned for being eligible. In order to receive the eligibility point, the student-athlete must be considered eligible for competition for the upcoming semester. Passing a minimum of six hours in the first semester and then passing a minimum of 24 hours for the entire year determine eligibility. The NCAA also says that a student-athlete must pass at least 75% of his or her hours within the fall and spring terms (called the 18 hour rule); consequently, only six hours in the summer may count towards the 24 hour requirement. For example, student “A” passes six hours in the fall and nine hours in the spring for a total of 15 hours in the fall/spring terms. Student “A” attends summer school and passes nine hours to make the total for the year 24 hours passed. Since student “A” only passed 15 hours within the fall and spring he or she would be ineligible for the upcoming year due to the 18 hour rule. The second point may be earned by being retained for the following semester. In order to receive the retention point, the student-athlete must be enrolled full-time at the same institution the following semester. Retention is not based on remaining on the team but staying enrolled at the same institution as a degree-seeking student. The NCAA has created an adjustment directive for teams who have students transfer to other institutions so that the student does not lose the retention point. If the student turned pro and made a profession roster or signed a contract and he or she was eligible at the time of leaving, the retention point may be relieved. According to the NCAA, if a student-athlete desires to transfer because
of reasons other than turning professional, he or she must meet the following requirements in order for the team to not lose the retention point.

1) The student-athlete earned the eligibility point in the last term of enrollment prior to transfer.

2) The student-athlete was enrolled at the institution for at least one academic year prior to transfer.

3) The student-athlete immediately transferred to another four-year institution. This requires full-time enrollment at the new institution at the next available regular academic term.

4) The student-athlete presents a cumulative grade-point average at the original institution of at least 2.6.

A student who earns both the eligibility point and the retention point would be considered a “2 for 2” and thus would not hurt the teams APR. If the same student athlete earned both points again next semester, he or she would be considered a “4 for 4” and would have earned all possible points. If a student athlete only earns one point for each semester, then he or she would be considered a “1-for-2” (per semester) or a “2 for 4” for the entire year. At the end of each academic year, the NCAA calculates the team’s total points for each athlete and divides that by the number of scholarship athletes on the team. Once the fraction is calculated, the number is multiplied by 1000 giving the team’s single year APR. The NCAA set a benchmark APR score at .925 or 92.5% of all student-athletes on the team has met the APR requirements. A team with a point below this number would receive penalties or restrictions.

According to the NCAA, immediate penalties that are called contemporaneous
penalties occur when a team with an APR score below .925 loses a student-athlete who would not have been academically eligible had he or she returned (a "0-for-2" student-athlete). An immediate penalty means that the team cannot re-award the same scholarship amount for a year to another player. This penalty is not automatically applied when teams fall below the APR benchmark of .925 but only when teams below that line do not retain an academically ineligible player (0-for-2). Along with contemporaneous penalties are historical penalties that can be more detrimental to a team and are initiated only when a team does not show any or little improvement within a four-year span. The penalties will be incremental in nature; beginning with a warning once teams fall below a .900 multi-year APR cut score. Historical penalties progress to practice and financial aid restrictions, postseason bans, and ultimately restricted membership in NCAA Division I. Teams scoring below .900 are subject to further examination to determine if historical penalties are warranted (Academic Progress Rate, 2013; NCAA, 2009).

Consequently, in order to ensure academic success among student-athletes, athletic departments across America expanded academic support services for student-athletes to achieve the NCAA’s academic requirements. Some of the academic support services provided to college student athletes include academic advising, tutorial services, writing centers, study halls, and academic mentors. Obviously, the NCAA and universities alike see the importance of providing academic support programs to help increase academic motivation among college student athletes (Rasmussen, 2009); however, researchers are suggesting that the academic support programs do very little to improve GPA’s or graduation rates of college student athletes (Bell, 2005). Some scholars believe that it is actually because student athletes have less difficult majors
overall when compared to non-student athlete majors, which causes the difference in graduation rates. In contrast, the NCAA firmly believes the reason that federal graduation rates are higher among student-athletes than the general student body is because the inception of the NCAA’s initial eligibility rules and several academic reform propositions. The NCAA’s case is hard to argue given the trajectory of graduation rates among college student athletes compared to non-student athletes; however, upon closer examination, graduation rates still reveal a continual problem among revenue producing sport student athletes. These problems may be present due to other variables existing among this population effecting academic performance.

**Academic Performance of College Student Athletes**

The United States Department of Education gathered six year graduation data on students who entered college in 2000-2001 and found that NCAA Division I student athletes graduated at a higher percentage than the general student body (Sander, 2008). The student-athletes who entered college in 2002 graduated at a rate of 64%, while the general student body graduated at a rate of 62% (NCAA Research Staff, 2009).
Likewise, the latest graduation rates for the 2004 entering class shows all student athletes regardless of their sport, race, or gender graduate at higher percentages than their non-student athlete peers (NCAA Research Staff, 2011). For example, African American student-athletes graduated at a 53% rate, compared to African American students who graduated at 44%. When strictly looking at African American males, student-athletes graduated at a rate of 49% while the non-student athlete African American males graduated at a rate of 38% (NCAA Research Staff, 2009).
“The latest data show that Division I student-athletes who entered college in 2005 equaled their highest federal graduation rate of 65 percent - 2 percentage points higher than the general student body at Division I institutions” (Christianson, 2012, p.1).

Christianson (2012) found that:

- African-American male student-athletes increased their federal rate 16 points to 49 percent, which is 10 points higher than African-American males in the student body. African-American female student-athletes increased their federal rate 19 points to 64 percent, outpacing their student body counterparts by 16 points (p.1).

There have been several concepts that have been explored when trying to account for the overwhelming success of African American student athletes compared to non-student athletes, one of which is the early socialization for males to become athletes (Beamon & Bell, 2006). Due to the early socialization of African American males which encourages them to become athletes (Beamon & Bell, 2006), it can be inferred that academics takes a secondary role while in elementary, middle, and high school. This type of socialization could be the cause of low graduation rates among African American non student-athletes compared to African American student-athletes. For instance, if an African American student does not receive the proper academic upbringing and does not have the opportunity to compete in intercollegiate athletics, he or she is at a disadvantage when compared to a student-athlete who receives the advantages of being a student athlete such as academic support services, a mentor, and advisement.

Although African American student athletes are graduating at higher levels than their same race non-student athlete peers, graduation rates published by the NCAA shows that African American college student athlete’s graduate at lower rates than Caucasian
college student athletes. In 2009, the graduation rate numbers indicated that African-American student athletes graduate at a rate of 58% compared to a rate of 77% for Caucasian student athletes. For the most recent class (2005 cohort), the graduation rate statistics shows a 20 percentage point gap between the graduation rates of Caucasian student athletes compared to African-American student athletes, 82% and 62% respectively (Christianson, 2012). When looking directly at revenue producing sports, graduation rates and GPA’s still remain low compared to other sports, especially for football college student athletes (Lapchick, 2006). Football student athletes traditionally have posted the lowest graduation rates among all sports; however, their graduation rates as a whole have climbed seven points and among African-American football student athletes specifically have climbed nine percentage points (Christianson, 2012). The increased graduation rates among this population have been the trend as “both of the revenue generating sports of football and men’s basketball increased their graduation rates from 1984 to 2002” (Carter, 2012, p. 52). However, despite the increase, the fact of the matter is that they still remain low compared to other sports and student athletes (Cullen, Latessa, & Byrne, 1990; Edwards, 1984 in Gaston, 2002; NCAA Research Staff, 2009, 2011) and thus continue to be a major concern for athletic departments and institution administrators. Carter (2012) suggested that “although the NCAA points to improved graduation rates as evidence of the success of the academic reform movement, many questions still remain in regards to student-athletes’ academic performance” (p. 26); particularly, as it relates to revenue producing sport student athletes. Thus, researchers began to further investigate variables that may be influencing the academic performance of this population of student athletes. An important piece in discovering
these variables is to first understand how the student athletes’ sport season affects academic performance, particularly for the reason that the time demands are drastically different. Nevertheless, up to this point, there has been very little research analyzing the effects of a student athlete’s competition and non-competition semester on their academic performance. Consequently, the small amount of research that has been completed has produced conflicting results.

**Academic Performance and Competition Semester**

There is a common belief that college student athletes tend to perform better academically during their competition semester because of the structured environment that their athletic schedules affords such as structured practice times and study halls (Scott et al., 2008). Frost’s (2001) study supported this belief and found that NCAA Division III college student athletes had higher grade point averages during their competition semester; however, the population used was not indicative of all college student athletes because NCAA Division III college student athletes do not receive athletic scholarships and did not look at high profile sports such as basketball and football. Wempe (2001) also analyzed the academic achievement of student athletes during their competition and non-competition semesters. Collecting data from 232 student athletes from a north western university, Wempe found that student athletes ended with a higher GPA and completed more credit hours in their competition semester compared to their non-competition semester. From the findings, Wempe concluded that student athletes made better academic progress in their competition semester compared to their non-competition semester.
Both Frost and Wempe’s study were contradictory to findings from other researchers, in particular, Adler and Adler (1987, 1991) who discovered that academic success among male basketball student-athletes was inhibited due to athletic participation. Additionally, Adler and Adler (1987, 1991) included academic standing that found that freshmen and sophomores were more academically motivated while juniors and seniors were more athletically motivated. These findings are consistent with Maloney and McCormick’s (1993) study that investigated the underperformance of revenue producing college student athletes. They found that football players and men’s basketball players received a letter grade lower than their non-student athlete counterparts when they were in their competition semester. Moreover, during their non-competition semester, their grades were better than non-college student athletes (Maloney & McCormick, 1993). To validate their study, they also indicated that revenue producing college student athletes carried lighter course loads during their competition semester with heavier course loads during their non-competition semester, verifying that the seasonal grade effect is not due to course load but rather to a different cause (Maloney & McCormick, 1993). Additionally, the findings determined that there were no differences in the difficulty of classes taken during the two semesters (Maloney & McCormick, 1993).

**Academic Performance and Non-Competition Semester**

Recent research found academic performance to be better during the student athlete’s non-competition semester for college student athletes. For example, Scott et al. (2008) examined data for 3,000 NCAA Division III student-athletes, 12,000 Division II college student athletes, and NCAA Division I college student athletes at over 325
universities and colleges to test the effect of their competition semester on their GPAs. Additionally, their study assessed whether other student-level variables were related to the effects of being in their competition or non-competition semesters. Findings revealed that academic deficiencies while in their competition semester were not just present among NCAA Division I college student athletes but existed in all college student athletes across the divisions even though NCAA Division I college student athletes tend to require more time commitments to athletics (Scott et al., 2008).

Contrary to most research on this topic, Evans (2000) found that a student athlete’s sport semester had no effect on their academic performance. Specifically, Evans (2000) analyzed Division I student athletes’ academic achievement and found that there was no significant change in GPA’s during their competition and non-competition semesters for all sports analyzed, except women’s soccer. Student athletes from the following sports were analyzed: football, volleyball, women’s soccer, baseball, and softball. There was a significant change in the amount of credits taken from semester to semester; however, the varying results in terms of when or if college student athletes actually perform better academically during their competition or non-competition semester show an obvious need for more research on this topic. As research continued analyzing academic performances among college student athletes, researchers found cognitive variables that influenced and predicted academic motivation among college student athletes such as SAT scores, high school GPA’s, and high school rank (Ervin et al., 1985; Hood et al., 1992; Petrie & Stover, 1997).

**Cognitive Variables and Academic Performance**
Ervin et al., (1985) discovered that students who entered college with lower than average standardized test scores, achieved lower grade point averages. Their study evaluated the relationship between academic performance and academic entrance criteria among 49 male college student athletes. The sample included 25 African American college student athletes and 24 Caucasian college student athletes in developmental study programs from 1981-1982 and 1982-1983. Results indicated that the lower the SAT scores, the less likely it was for the college student athletes to successfully perform academically. Their findings were supported by Petrie and Stover’s (1997) study examining academic and non-academic predictors among female college student athletes’ academic performances. Their research used 171 female and volleyball soccer college student athletes selected from 12 NCAA Division I institutions. After some exclusion, the final sample consisted in 152 female college student athletes with 45 of them being freshman. The findings resulted in SAT and ACT being the major predictors of academic performance. Although, the landscape of college athletics has changed since this study, a more recent study yielded similar results. Reynolds (2007) studied 206 basketball players from 10 universities located in the southeast. Their study found high school grade point averages, number of academic credits, and ACT scores had a significant relationship to the academic performance of college student athletes.

Using and a mixed methods approach, Morgan (2005) investigated which predictor variables of academic achievement would account for the majority of the variance in cumulative college grade point averages among 469 college student-athletes attending Louisiana State University, a Division I University from 2003-2004. The first sampling technique involved a quantitative approach of stratified sampling and the
second sampling technique involved a qualitative approach of purposeful sampling. Results of this study indicated that high school GPA, ACT composite score, gender, and academic classification level accounted the highest levels of the variance in student-athletes’ cumulative college GPA (Morgan, 2005). The most effective single variable to predict the college student athletes’ cumulative college GPA was their high school GPA. It is obvious that cognitive variables such as SAT scores, ACT scores, and high school GPA’s can predict academic performance among college student athletes and as a result, many researchers equate poor academic performances among student athletes, particularly, revenue producing sport student athletes to the cognitive variables and a lack of unpreparedness. In fact, Gurney and Stuart (1987) found that revenue producing student athletes’ exhibit weaker academic preparation than other student athletes in non-revenue producing sports.

Coincidently, researchers also discovered that black college student athletes, particularly in revenue producing sports are not as academically prepared as their white student athlete counterparts when transitioning from high school to college (Horn et al., 2001; Hrabowski, 2002; Sellers, 1992). Morgan (2005) contended that among college student-athletes, the literature shows that black student athletes appear to be less prepared for college and as such achieve academically lower than white student athletes at Division I institutions. Football and men’s basketball players are lower, on the average, in academic preparation than any other athletic group admitted to Division I institutions. (p. 51)

Similarly, other researchers propose that lower admission standards is the reason that revenue producing sport student athletes struggle academically since they are at an
immediate disadvantage in the classroom and underprepared for college academics (Lapchick, 1996, 1997; Lucas & Lovaglia, 2002). Reasons for the unpreparedness could be due to the fact that revenue producing college student athletes usually enter college with poor high school grades and low-test scores (Maloney & McCormick, 1993; Willis, 2005). After much research analyzing cognitive variables, researchers started to apply non-cognitive variables such as role identity and human motivation to the field of college student athletes (Adler & Adler, 1987; Gaston, 1992; Simons, Rheenen, & Covington, 1999). For example, the NCAA proposed that one reason for low academic performance among college student athletes was that “too many student-athletes place too much emphasis on athletics and not enough emphasis on academics (Sellers, Chavous & Brown, 2001, p. 4). This concept is known as role identity.

Non-Cognitive Variables and Academic Performance

**Role Identity.**

For many student-athletes, the pressures of being an athlete outweigh the pressures being a student, causing the academic element to decline. Although there are many student athletes who are able to adequately manage both the academic and athletic roles (Sack & Thiel, 1985), some student-athletes struggle balancing these roles and are forced to place more emphasis on either their academic or athletic role (Chartrand & Lent, 1987; Coakley, 1982). Emphasizing the athletic role can perpetuate negative stereotypes that portray athletes as academically unqualified, unintelligent, and socially inept and may also lead to isolation from the general student body (Chu, 1989). Many student-athletes live, eat, study, and spend most of their social interactions with other student-athletes thus causing difficulty in establishing relationships with non-student-
athletes. Isolation can encourage student-athletes to neglect the student aspect, which can cause them to avoid responsibility for their own actions and decisions, and to neglect important learning and developmental tasks (Chu, 1989). Potuto and O’Hanlon (2007) surveyed college student athletes from 18 Division I universities to better understand their college experiences. The authors discovered that some college student athletes viewed themselves more as athletes than as students (Comeaux & Harrison, 2011). Researchers coined this concept as the level of “athletic identity” a student athlete possesses (Brewer, Van Raalt, & Linder, 1993). They defined athletic identity as the level at which a student athlete identifies with their athletic role (Brewer, Van Raalt, & Linder, 1993). When student athletes identify more with their athletic identity rather than their student identity, they begin to neglect activities and responsibilities necessary to be a successful student (Watt & Moore, 2001). Moreover, scholars have suggested that students who are more committed to their athletic role rather than their academic role will have lower grade point averages (Simons, Rheenen, & Covington, 1999). Both of Ryska’s studies (2002, 2003) which studied 258 and 235 high school college student athletes respectively, found that exclusively identifying with the role of an athlete (high athletic identity) correlated to having a lower academic competence. Looking exclusively at college level student athletes, Simons and Van Rheenen (2000) revealed that college student athletes have trouble finding the appropriate balance between academic and athletic demands. Their study measured athletic commitment, exploitation, academic self-worth, and self-handicapping excuses among 126 male and 72 female college student athletes attending the University of California at Berkley. The results found that academic identity and self-worth were critical to academic success.
When looking specifically at academic identity, male college student athletes were found to produce lower levels of academic identity and higher levels of athletic identity than any other student athlete population (Brewer, Van Raalte, & Linder, 1993; Ryska, 2002). Additionally, race and ethnicity were found to influence athletic identity among male college student athletes. Hyatt (2001) qualitatively examined academic and athletic commitment of NCAA Division I African American basketball and football student athletes, revealing a strong commitment toward continuing their athletic careers and a low commitment to attaining a degree. Willis (2005) proposed that African American student-athletes are more athletically motivated because of the many opportunities that exist to compete professionally. Hyatt (2001) and Snyder (1996) also discovered that African American student-athletes were more athletically motivated than other ethnicity groups. These findings do not suggest that African American student athletes are not academically motivated but past research has contended that the more motivated one is athletically the less motivated one is academically (Adler & Adler, 1987, 1991; Gaston, 2002; Willis, 2005).

**Role Identity and Motivation.**

In a seminal study, Adler and Adler’s (1987) qualitative study followed a basketball team around to study the roles and identities of the college student athletes. Their goal was to analyze the participants’ athletic, academic, and social experiences to see their effect on academic performance. The study’s sample consisted of 40 NCAA Division I men’s basketball college student athletes and analyzed data over a four-year period. Results showed that upon entry into college and during the college student athlete’s freshman and sophomore years, they were more academically motivated and
optimistic about obtaining a degree; however, during their junior and seniors years, their athletic role became their primary means for identity, decreasing their academic motivation. Their athletic role would soon take over and diminish their academic identity and as their athletic tenure progressed, they became more engulfed in their athletic achievements and less academically motivated. A few years later, Bailey and Littleton (1991) completed a study analyzing academics in a college setting and its effects on college student athletes. Their findings suggested that college student athletes in revenue producing sports were more motivated toward athletics than they were to academics. Although, some research shows a correlation between high athletic identity and low academic motivation, some researchers believe there to be no relationship to athletic identity (Willis, 2005) and some who believe there to be a positive relationship between athletic identity and academic motivation (Sellers, Chavous & Brown, 2001). Willis (2005) investigated differences in academic motivation, collegiate athletic motivation, and career athletic motivation when academic standing and ethnicity was analyzed. For her study, she collected data from female basketball student athletes at a Division I NCAA University. The researcher discovered that there were no significant differences between female basketball student-athletes’ valence towards academic, collegiate athletic and career athletic motivation when analyzing academic standing and ethnicity (Willis, 2005). Accordingly, student athletes can have both high athletic motivation and high academic motivation. For example, a study by Ryska and Vestal (2004) found that high school student athletes who had high athletic motivation had carryover into the academic realm. Student athletes with higher athletic motivation spent a greater amount of time and energy on their academic preparation (Ryska & Vestal, 2004). Provided the fact that
this study was examining high school students and given that their athletic experiences
differ greatly with college student athletes, more research is needed to support this claim
as it relates to college student athletes. Researchers would later discover however, that
poor academic performance is related to a student athlete’s level of motivation in the

**Academic Motivation Predicting Academic Performance.**

As researchers continued investigating motivation as it relates to college student
athletes, one of the most influential studies tested the influence of academic motivation
on academic performance among college student athletes. Sedlacek and Adams-Gaston
(1992) used the Non-Cognitive Questionnaire (NCQ) scale on incoming freshman college
student athletes at a large eastern university. They used the results of the NCQ and the
SAT scores to predict academic success of college student athletes. The findings
indicated that non-cognitive variables were better predictors of grades than the SAT
scores were for college student athletes. Years later, Gaston-Gayles (2004) conducted a
quantitative study to measure college student athletes’ motivation toward sports and
academic using the SAMSQA. After controlling for background characteristics, high
ACT scores and academic motivation were found to be the highest predictors of GPA.

Yielding similar results was Shuman’s (2009) study assessing 275 college student
athletes’ academic, athletic, and career athletic motivation as a non-cognitive predictor of
academic performance. From the results, a hierarchical linear regression was conducted
to determine if motivation scores were predictors of academic performance, as measured
by cumulative GPA, for the total sample of college student athletes. The findings
suggested that academic motivation could serve as a predictor of academic performance
in college student athletes. In fact, motivation scores showed a higher impact than all of the other 48 background variables, which included SAT scores (Shuman, 2009). The results of this study also indicated that female college student athletes were more likely to be more academically motivated and have higher grade point averages than male athletes. The results are reinforced by several other studies that have found female college student athletes to be more academically motivated than male college student athletes (Gaston, 2002; Hood, Craig, & Ferguson, 1992; Miller & Kerr, 2002). One reason for this may be due to the fact the female college student athletes are less likely to attend college purely for athletic reasons (Simons, Rheenen, & Covington, 1999). Given that female college student athletes do not have as much of an opportunity as male athletes to pursue professional sports, it is likely that females place a greater importance on academics (Althouse, 2007).

Although most research shows a connection between academic motivation and academic performance, some early research did not always show motivation as being a significant predictor of student-athletes' academic performance (Sellers, 1992). Sellers (1992) study surveyed 409 male basketball players and 917 football players at 42 different Division I institution focusing on predictors of academic performance among various races. Even though Seller’s study found that academic motivation was not an accurate predictor of academic success, Gaston-Gayles (2004) believes that “academic motivation is useful when predicting academic performance for college student athletes” (p. 76). Additionally, past research investigating student athlete motivation and academic achievement suggest that significant differences exist between revenue and non-revenue sport student athletes (Astin, 1993; Howard-Hamilton & Sina, 2001). The contradictory
results provide a glimpse of why more research is needed on academic motivation among college student athletes. Following this line of inquiry, research is beginning to reveal that academic motivation can have both positive and negative impacts on academic performance among college student athletes (Althouse, 2007; Gaston-Gayles, 2004; Pedescleaux, 2010; Rasmussen, 2009; Shuman, 2009; Simons, Reheenen, & Covington, 1999). Research in motivation has the potential to shed light on college student athletes’ academic performance and has the ability to help researchers understand why some student athletes perform better or worse academically throughout their college career (Gaston, 2002).

A new dimension to the discussion is looking into how academic motivation changes throughout a time period, particularly within a college student athletes’ competition and non-competition semesters. Gaston-Gayles (2004) suggested that assessing student’s motivation over a period of time could provide a better understanding on academic performance among college student athletes. One of the limitations in much of the existing research examining academic motivation among college student athletes is that it’s analyzed at a single point in time rather over a time period. Due to this limitation, perhaps previous studies are limited to the interpretation of the results because the survey represented only one single point in time (Gaston-Gayles, 2004). Pascarella and Terenzini (2005) suggested it is necessary to examine the time requirements of high profile sports “to understand just why football players are not deriving the same knowledge acquisition and academic skill benefits from college as other men” (p. 128 as cited in Young, 2010). As discussed above, there is traditionally a difference in the amount of time spent on sport related activities during their competition semester
compared to their non-competition semester. Exploring academic motivational changes among college student athletes within these two periods brings a new dynamic to the discussion. What is also important to this current study is creating an understanding of the concept of academic motivation in terms of interrelated motivational theories and models of motivational research.

**Theoretical Framework**

**Motivation.**

Before beginning the discussion on academic motivation, however, it is important to conceptualize motivation and the theoretical foundation that forms academic motivation. There are two basic theories of motivation: cognitive theories of motivation and behavior theories of motivation (Pedescleaux, 2010). The most significant early cognitive theorists were Lewin (1938) and Tolman (1932). Both believed that the actions of individuals were determined by the rewards that could be attained and the outcome that one is looking to have (Pedescleaux, 2010). Two of the most esteemed behavioral theorists were Hull (1943) and Skinner (1953). They both believed that actions were conditioned through reinforcement; however, Hull’s theory ignored intrinsic motivation and Skinner’s theory ignored motivational factors (Deci, 1980). “The key to motivation is choice. Behavioral theories ignore motivational factors, and cognitive theories ignore human needs and emotions that establish the foundation for the choice process” (Pedescleaux, 2010, p. 6). In this sense, college student athletes have a choice to not only attend college and participate in sport but also choose to be academically successful. The choice to be academically successful can be greatly influenced by their level of motivation to academically succeed. Analyzing motivational theories and research on
motivation can identify factors that may contribute to college student athlete’s academic performance (Pedescleaux, 2010). Furthermore, analyzing academic motivation among college student athletes in particular may shine a light on reasons why some student athletes academically outperform and graduate at higher rates than other college student athlete populations. There have been several definitions of academic motivation used by researchers over the years. Althouse (2007) defined it as “the degree to which college student athletes devote energy toward attending their academic tasks and roles” (p. 9). Gaston (2002) defined academic motivation as “the degree to which a student athlete is energized toward excelling in academic tasks” (p. 11). Other researchers have defined it a continuous dependent variable that relates to the college student athletes desires to achieve academically (Rasmussen, 2009). For the present study, academic motivation is defined as the underlying causes of students’ behaviors and desires to excel in academic activities (Vallerand, et al, 1992). Researchers have started to explore academic motivation through various theoretical lenses to explain the connection it has with academic performance. The following section provides a brief overview of the available literature related to academic motivation and college student athletes.

**Expectancy Value Theory.**

Gaston-Gayles (2005) used two theories to analyze the influence of a college student athlete’s academic and athletic motivation on their academic achievement which were the Expectancy–value theory and the Self-Efficacy Theory. The Expectancy-value theory, developed by Fishbein in 1963, explained and predicted individuals’ attitudes toward objects and actions. This theory is expressed through an analysis of three assessments that help individuals develop attitudes towards actions or objects. First, the
individual develops a belief about an action or an object. Then, based on that belief, he or she sets a value to each characteristic. From this value, the individual creates an expectation based on their belief and values (Fishbein & Ajzen, 1975). In 1964, Vroom elaborated on the theory through the study of motivations through decision making. This theory seeks to explain why individuals make choices. Motivation is not accounted for in the choice, but rather how they make decisions to achieve the results they want (Porter & Lawler, 1968; Vroom, 1964). This theory was later used to assess how expectancies and values contribute to the motivation to academically achieve (Eccles, 1983; Wigfield, 1994). Using the Expectancy Value theory in particular, “student athletes can determine the value of the award, like obtaining a degree, and then decide whether or not to approach the task depending on their perceived skills and the efforts needed to fulfill the task” (Shuman, 2009, p. 19). If a college student athlete believes that they can accomplish a task and understand the value of academic performance, he or she is more likely to be motivated to do perform better. Contrariwise, if the student athlete does not believe that he or she can accomplish the task and does not understand the value of excelling academically, they are more than likely not going to be academically motivated.

In summary, expectancy value theory integrates two elements of motivation, expectancy and value (Clow, 2000, cited in Shuman, 2009). If a student athlete expects and values making good grades while in college, their motivation will be higher to do so.

**Self-Efficacy.**

Self-efficacy and its utility can be discussed in relationship to academic motivation. When speaking of this, Bandura (1977) proposed that individuals make judgments about their ability to successfully complete tasks. Based on the individuals’
judgment, he or she decides which task to approach and how much effort needs to be applied to complete the task. Simply put “when approaching a task, self-efficacy is the way one views their capability to accomplish that task” (Carter, 2012, p. 114).

Individuals tend to avoid tasks that they do not think they can complete successfully and conversely, they approach tasks that they believe they can complete (Bandura, 1977). Bandura (1982) proposed that people with lower self-efficacy tend to decrease their level of effort if the task is difficult. An example describes the student athlete who believes they can pass a particular course is more likely to put in the effort to succeed; however, a student athlete who does not believe that he or she could pass the course is likely to avoid the task and not put in the effort to succeed (Gaston, 2002). The Self-efficacy theory and its concepts can be directly related to student athlete’s motivation to succeed or fail in the classroom. Simply put, if a student athlete does not believe that they can pass a test, it is unlikely that they will be motivated to study. Conversely, if he or she believes that they can pass the test, they are more likely to be motivated to study and prepare accordingly.

**Expectancy Value Theory and Self Efficacy Theory and Student Athletes.**

Using these two theories, Gaston-Gayles (2005) created the Student Athlete Motivation towards Sports and Academics (SAMSAQ). Gaston-Gayles used Comprehensive Exploratory Factor Analysis (CEFA) to determine the validity and reliability of the SAMSAQ. Exploratory factor analysis revealed low factor loadings for three items causing Gaston to eliminate the items from the SAMSAQ (Althouse, 2007). Additional research found four more items that needed to be removed due to low factor loadings (Althouse, 2007). After the items were eliminated, the academic motivation subscale of the SAMSAQ consisted of 16 items with factor loadings ranging from .38 to
The SAMSAQ uses a six-point Likert scale ranging from a score of “very strongly disagree” (1) to a score of “very strongly agree” (6). In addition to the 16 items measuring academic motivation, the SAMSAQ also measures athletic motivation and career motivation. Total scores for the academic motivation subscale of the SAMSAQ are calculated by adding the total score of each item. A raw score of 16 indicates the lowest level of academic motivation and a raw score of 96 represents the highest level of academic motivation. The SAMSAQ does not indicate cutoff scores to indicate high or low academic motivation.

Using 236 college student athletes at a Division I institution in the Midwest, Gaston examined academic and athletic motivation as a key non-cognitive variable along with other variables in predicting academic performance. Other variables that were included were highest level of mother’s education (MEDU), highest level of father’s education (FEDU), career athletic motivation (CAM), academic motivation (AM), and student athlete motivation (SAM). The results from her study indicated that academic motivation was significant predictor of academic achievement. Digging deeper in the results revealed that non-White student athletes’ academic motivational scores were lower than their career and athletic motivational scores. Additionally, revenue producing student athletes, such as football players had higher athletic motivation scores compared to their academic motivation. Gaston’s findings suggest that non-White and high revenue student athletes expect and value the success of their sport more than their academic achievement (Anderson, 2010).

**Self-worth Theory.**
An additional model that has been used to analyze academic motivation among college student athletes, in particular, revenue and non-revenue student athletes is the Self-worth theory. Self-worth theory was derived from two separate motivational theories, the theory of approach and avoidance (Atkinson, 1964) and the attribution theory (Weiner, 1974). The theory of approach and avoidance stems from the concept that the motivation to achieve is created by either approaching success or by avoiding failure (Atkinson, 1964). Approaching success is driven by hope and pride and avoiding failure is driven by shame and humiliation. Weiner (1974) altered this theory by stating that people motivated to approach success attribute failure to lack of effort and success to ability and effort (Anderson, 2010). Weiner’s (1974) attribution theory is based on the underlying assumption that individuals seek explanations for causes of behavioral outcomes (Wiener, 1992). Moreover, when the outcome is negative in nature, the more the individual seeks an explanation for the cause (Graham, 1997). When an individual values a goal, they have two choices: one is to choose to strive for success and the other is to avoid failure to achieve it (Wiener, 1979). Being a student athlete also brings success and failures in and out of the classroom. Student athletes can be motivated in different ways whether it is to avoid failure or to achieve success. Either way, the attribution theory contends that people assign different assumptions as to why they may fail or achieve a specific task or goal.

**Self-Worth Theory and Student Athletes.**

Using the Self-worth theory, Simons, Rheenen, and Covington (1999) created and used a median split method to create motivational profiles among college student athletes based on four motivational domains (success-oriented, over striders, failure-avoiders, and
failure acceptors) in order to measure the relationship between cognitive variables, motivation, and academics among college student athletes. Success oriented students have a strong sense of self-worth and are highly motivated to achieve and approach success (Anderson, 2010). Overstriders tend to strive very hard to succeed because of their high fear of failure. “Overstriders have a high but delicate sense of self-worth and avoid failure by approaching success at all costs (Anderson, 2010, p. 6). Failure-avoiders have a low sense of self-worth, a low motivation to approach success and a high motivation to avoid failure. Failure-acceptors also have a low sense of self-worth and are neither attracted to success or avoiding failure. They have very low motivational levels. The researchers used the survey to analyze the relationship of motivational orientation to academic performance among 361 university college student athletes. It was found that in all participants, the more committed to the athletic role than the academic role, the lower the university GPA. Also, found within the study was that 85% of the underclassman felt that commitment played a significant role in how well they did academically and athletically. Additionally, the college student athletes who were deemed success-oriented or over striders were found to be more academically motivated than students who were in failure-avoiders and failure acceptors domains. Additional findings suggested that the fear of academic failure and commitment to their sport played important roles in academic motivation for both revenue and non-revenue student athletes. Simons, Rheenen, and Covington (1999) postulated that “because most high-revenue athletes are recruited to a university for athletic ability, their commitment to sport is often already strongly developed” (as cited in Anderson, 2010, p. 6). Consequently, revenue producing sport student athletes choose athletic commitments
over their academic commitments because of the demand and pressures to perform (Anderson, 2010). According to Simons, Rheenen, and Covington (1999), the high revenue sport student athletes who were deemed to be failure-acceptors simply wanted to conceal their overall lack of interest in academics due to them having a high motivation to avoid failure. Moreover, the high revenue sport student athletes who were deemed failure-avoidant do so to preserve their self-worth.

**Achievement Goal Theory.**

The Achievement goal theory created a theoretical framework that focuses on the students’ reasons for completing achievement related tasks. According to Dweck and Leggett (1988) achievement goal theory represents an individual’s purpose for engaging in behavior in order to achieve a goal. Dweck and Leggett (1988) and Nicholls (1984) suggested that learning goals and performance goals motivates students. Dweck (1988) noted that “learning goals are goals in which individuals seek to increase their competence or to understand something new, whereas, performance goals are goals in which individuals seek to gain favorable judgments of their competence or avoid negative judgments of their competence” (p. 104). By combining these two perspectives provides a better understanding of motivation (Anderson, 2010). In 2001, Elliot and McGregor invented a 2 x 2 goal achievement model focusing on Mastery goals using an approach-avoidance perspective and performance goals using a mastery-performance perspective. Their 2 x 2 achievement goal framework consisted of four subscales that address the four motivational profiles within the achievement-goal framework that are mastery-approach, mastery-avoidance, performance-approach, and performance avoidance goals. Master approach goals focus on a person learning for the sake of personal growth and
understanding. Mastery avoidance goals focus on avoiding failure on achievement related tasks. Performance approach focuses on the students’ attempts to outperform their peers on achievement related tasks. Performance avoidance goals focus on avoiding situations that demonstrate ones’ low ability or incompetence. Achievement Goal Theory has been used as a theoretical lens to understand academic motivation in sport environments and Anderson (2010) suggested that examining motivation through the lens of goal theory offers another way to understand academic motivation among college student athletes.

Achievement Goal Theory and Student Athletes.

Greene, Dillon, and Miller (2010) examined sport and academic motivation using achievement goal theory, self-efficacy, and perceived instrumentality. They defined perceived instrumentality as the recognition of the future benefits in the activity. The researchers also analyzed difference in motivation between sport and gender. Greene, Dillon, and Miller (2010) sampled 271 college student athletes representing 9 male sports, 10 female sports, 4 being revenue-producing sports. Using a survey developed from six motivational constructs (academic and athletic motivation, mastery-approach and mastery-avoidance goal orientation, performance-approach and performance avoidance, goal orientation, self-efficacy and perceived instrumentality, the researchers found that student-athletes in high profile sports were significantly more focused on avoidance motivation than students in low profile sports.

In a recent study using achievement goal theory, Anderson (2010) examined the relationship between school belonging, academic motivation, and academic achievement. In particular, the differences between revenue and non-revenue student athletes were
assessed. Using Elliot and McGregor (2001) 2 x 2 goal achievement framework, Anderson collected data from 143 college student athletes at a large public university. The findings indicate that:

revenue athletes felt significantly less supported by their peers within the academic community than non-revenue athletes. These students perceived themselves to be less connected to their peers in the classroom and feel less valued as a member of their peer groups. Revenue athletes also felt significantly less supported in the classroom than non-revenue athletes. Non-revenue athletes reported feeling higher levels of instructor support and respect and also reported feeling more comfortable in their learning environment. Lastly, revenue athletes reported significantly less relatedness than non-revenue athletes, suggesting that revenue athletes feel less connected to the academic community and the school as a whole. Results also indicate that revenue athletes had significantly lower college GPAs than non-revenue athletes. (Anderson, 2010, p. 28)

College student athletes spend the majority of their non-academic time with their team, whether it is through practice, competition, or traveling. It is in this commitment to athletics that their sense of belonging within the school is sacrificed, ultimately causing a decrease in academic motivation (Parham, 1993; Prentice, 1997). As shown in Anderson’s (2010) research, achievement goal theory was able to find a connection between academic motivation and school belonging among college student athletes; thus, it is important to investigate this phenomenon and its relationship to academic motivation.

School Belonging Theory.
Goodenow (1993a) defined students' sense of belonging as the sense of “psychological membership in the school or classroom, that is, the extent to which students feel personally accepted, respected, included, and supported by others in the school environment” (p. 80). Goodenow (1993a) and Wentzel (1996) suggested that school belonging could have a direct influence on a student’s academic motivation and achievement. Additionally, a student’s sense of belonging was strongly related to the value they placed on assignments and class lectures as well as their perceived competence in the classroom (Freeman et al., 2007). Although, school belonging among student athletes has not been heavily researched, research pertaining to non-student athletes has shown a relationship to school belonging and academic motivation (Freeman et al., 2007; Goodenow, 1993a; Pittman & Richmond, 2007). One study in particular examined school belonging and its influence on undergraduate students (Freeman et al. 2007). The researchers used a questionnaire that included items from the Psychological Sense of School Membership Scale (PSSM; Goodenow, 1993b), Motivated Strategies Learning Questionnaire (MSLQ; Garcia & Pintrich, 1996), and Student perceptions of Learning and Teaching (SPLT; McKeachie, 1994). The questionnaire was administered to 238 first semester freshman. The results indicated that school belonging was directly related to academic self-efficacy, intrinsic motivation to achieve, and task value.

Using Elliot and McGregor’s (2001) achievement goal model along with Brew, Beatty, and Watt’s (2004) Sense of School Membership Scale (SSCS), Mueller (2008) set out to discover if school belonging could be a predictor of motivational beliefs among college students. Specifically, the study was designed to answer questions regarding college student sense of belonging and if school belongingness could predict student
motivational beliefs and their relationship to demographic variables in a learning environment. Mueller used a 72-item online survey administered to 393 undergraduate students at a large southern university. Thirty-seven of the questions directly related to the students sense of belonging and motivational beliefs. Mueller found that a relationship existed between school belonging and motivation among both traditional and non-traditional students. Traditional student sense of belonging was associated with a sense of belonging to peers whereas the non-traditional student’s sense of belonging came from instructors. This study determined that a sense of school belonging is an important predictor of motivation among a college student population. Given these findings, it can be assumed that student athletes, in particular revenue producing student athletes, who feel socially disconnected from their school, teachers, or peers would share the same results of non-student athletes which would yield a decline in academic motivation. When looking directly at the revenue producing sport population, Simon et al. (1999) suggested that when these student athletes felt a lack of academic support, their motivation to achieve in the classroom declined as well as an increase in feelings of resentment towards the academic community.

**Summary**

Regardless of the motivational model (Anderson, 2010; Gaston, 2005; Mueller, 2008; Simons, Rheenen, & Covington, 1999), findings show that academic motivation does have a relationship to the academic performance of student athletes (Anderson, 2010). Anderson (2010) stated that:

high revenue and non-White student athletes appear to consistently display motivational profiles associated with negative academic outcomes. This subset of
students display lower feelings of academic self-worth, have less motivation to achieve academically, and feel unsupported by the university system (Simons & Van Rheenen, 2000; Simons, Rheenen, & Covington, 1999). These factors significantly influence academic motivation and performance at the collegiate level. (p. 7)

The literature in this chapter provided a framework for future studies regarding college student athletes, academic motivation, and sport season influences. However, there is a gap in the available literature that does not fully explain how academic motivation is influenced by a student athlete’s sport semester. NCAA Division I football players are highly professionalized which can send conflicting messages to student athletes about their reason for being at the institution (Carter, 2012). It is in this conflicting message that football student athletes have trouble balancing their role as a student versus their role as an athlete. Division I football players also have an opportunity for a professional sports career; however, it is more likely that they will not and thus they will neither graduate nor pursue professional sports (Carter, 2012). In fact, only 1.7% of senior NCAA football players are able to pursue a career in professional athletics (NCAA Research, 2011); thus, it is important that student athletes stay motivated towards excelling in academics task in order to graduate.

It is clear through research that academic motivation can predict academic performance (Gaston, 2003; Gaston-Gayles, 2004; Simons, Van-Rheenen, & Covington, 1999; Simons & Van-Rheenen, 2000); however, in order to better understand what affects college student athletes’ academic motivation, more research needs to be completed. It is also clear that academic motivation can be assessed through several
motivational models and theories such as the Expectancy Value Theory and Self Efficacy Theory (Gaston-Gayles, 2005); the Self-worth theory, the theory of approach and avoidance (Atkinson, 1964) and the attribution theory (Weiner, 1972), Mastery-performance goal theory (Dweck & Leggett, 1988), and School Belonging (Goodenow, 1993a). Using these theories to assess academic motivation within a student athletes’ sport semester, may help explain when and if it changes. Administering surveys to Division I football players during their competition and non-competition semester may shed light on their motivational patterns and allow their institutions to develop strategies in order to influence their academic performances.
CHAPTER III

METHODODOLOGY

Introduction

This chapter will first introduce the purpose of the study, the research questions, and the hypothesis that guided this study. Next, the chapter presents the research design, dependent and independent variables, sampling technique, and the participants in this study. Furthermore, the chapter explains the instrumentation, data collection procedures, and procedures used to analyze the data. Lastly, the chapter concludes with summary highlighting key points of the methodology design.

The purpose of this study was to (a) develop a better understanding of NCAA Division I football player’s academic motivation throughout their competition and non-competition semesters, (b) to examine which semesters yields a greater overall academic motivation among the NCAA Division I football players, and (c) to discover if changes occur (i.e. directional pattern) in the academic motivation of NCAA Division I football players within their competition and non-competition semesters. Therefore, the following research questions and hypothesis guided the study.

Research Question 1

How does NCAA Division I football players’ academic motivation within their competition semester (Fall 2012) differ from their academic motivation within their non-competition semester (Spring 2013) based on their responses to the College Student Athlete Academic Motivation Survey (CSAAM-S)?

Hypothesis
It is hypothesized that the overall academic motivation within the NCAA Division I football player’s competition semester (Fall 2012) will be lower than the overall academic motivation within the NCAA Division I football player’s non-competition semester (Spring 2013).

**Research Question 2**

How does NCAA Division I football players’ academic motivation change each month within their competition semester (Fall 2012) based on the student athletes’ responses to the College Student Athlete Academic Motivation Survey (CSAAM-S)?

**Hypothesis**

It is hypothesized that academic motivation levels will be significantly different for each month indicating a decreasing directional pattern within the NCAA Division I football players’ competition semester (Fall 2012).

**Research Question 3**

How does NCAA Division I football players’ academic motivation change each month within their non-competition semester (Spring 2013) based on the student athletes’ responses to the College Student Athlete Academic Motivation Survey (CSAAM-S)?

**Hypothesis**

It is hypothesized that academic motivation levels will be significantly different for each month indicating an increasing directional pattern within the NCAA Division I football players’ non-competition semester (Spring 2013).
In order to understand the relationship between academic motivation and the football player’s semester (competition and non-competition) and answer the research questions and hypotheses that guided this study, an analysis of variance (ANOVA) and Post Hoc Pairwise Comparison was employed. Specifically, a repeated measures ANOVA was used to test the equality of the means of academic motivation among the football players within their competition (Fall 2012) and non-competition (Spring 2013) semesters. For research questions two and three and the corresponding hypothesis, a repeated measures ANOVA was performed to determine the statistical level of significance ($p<.05$) of the mean differences between each month (August, September, October) within the Fall 2012 semester and (February, March, April) within the Spring 2013 semester with $p = 0.05$ used as the level of significance for evaluating the F-Ratio. It was also important to investigate academic motivational differences within the football player population’s subgroups of race/ethnicity, athletic standing, and scholarship type. Thus, a repeated measures ANOVA was also used to examine the mean differences between subgroups within the football player population.

**Research Design**

For the current study, quantitative descriptive research was employed using a longitudinal study design. Longitudinal designs are often employed when a researcher collects data from a sample at different points in time that helps to discover changes or continuity among the participants (Gall, Gall & Borg, 2007). Specifically, a longitudinal panel study was employed which requires a sample to be selected on the onset of the study and then surveys the same sample at different data-collection points (Gall, Gall & Borg, 2007). For the current study, data was collected on two different occasions during
the participant’s sport season (Fall 2012, Spring 2013) using the same participants (N=75). Additionally, the study sought to explain phenomena through a cause and effect relationship using a dependent variable and an independent variable.

**Variables**

Non-cognitive variables such as academic motivation and sport semester have been found to influence and predict college student athletes’ academic performances (Adler & Adler, 1987; Gaston, 2002; Simons, Rheenen, & Covington, 1999). For the current study, academic motivation is the dependent variable and the participant’s sport semester (competition and non-competition semesters) are the independent variables.

For this study, academic motivation is the dependent variable and can be defined as the underlying causes of students’ behaviors and desires to excel in academic activities (Vallerand, et al, 1992). Moreover, academic motivation has been shown to change throughout a student athlete’s college career (Adler & Adler, 1999); however, at this point in time, no research has specifically analyzed academic motivation over a college football players’ competition and non-competition semesters. As such, the independent variables used in this study are the football player’s competition and non-competition semester. Specifically, the competition semester refers to when a NCAA Division I football player is practicing and participating in games with outside competition and is concluded with the NCAA national championship. The non-competition semester refers to when a NCAA Division I football player sport is only practicing and not competing against outside competition.

There are other variables that are important for this study; for example, preliminary population and sample data suggest that race, gender, and sport differences
may be important in understanding the predictors of academic motivation among college student athletes (Gaston, 2002; Hyatt, 2001; Meyer, 1990; Pascarella & Smart, 1991; Rishe, 2003; Ryan, 1989; Snyder, 1996; Wempe, 2001). That is, different predictors of academic motivation appear to exist for white versus black college student athletes as well as for the sport in which the student athlete participates. For this study, race or ethnicity was delineated into six self-reported categories: African American/Black, White/Caucasian (non-Hispanic), Asian or Pacific Islander, Native American, and other. A second variable that was considered in this study as a selection criterion was scholarship type. Scholarship type referred to whether or not the football player received a full athletics scholarship (tuition and fees, book, room, board, tuition waivers).

**Sampling Technique**

When calculating the appropriate sample size for multiple correlations, Tabachnick and Fidell (2001) recommended using the following formula: \( N > 50 + 8m \) (where \( m \) is equal to the number of independent variables); therefore, this study needed a minimum of 66 participants in order to ensure statistical validity. A convenience sampling technique was used to form the population for this study. Convenience sampling is used when a researcher uses a population that suits the purpose of the study and that is convenient (Gall at el, 2007, p. 175). The population for this study is convenient for a variety of reasons. First, the researcher is a former student athlete and alumni at the institution being used in this study. Second, the institution is in a workable proximity to collect data in person rather than through a web based application that will help to ensure more accurate responses and increase participation in the study. Additionally, the researcher’s career field is in athletic administration, so being around
student athletes, coaches, and athletic staff is a normal practice. When a convenience sample is used, the researchers and readers must be able to generalize the results to a population by inference; therefore, to help with the inference process, a description of the population is provided below (Gall, et al, 2007).

**Participants**

The target population for this study consisted of NCAA Division I football student athletes enrolled during the 2012-2013 year at a large Southeastern institution. The group population of prospective participants for the study consisted of 109 football players who attended Clemson University during the Fall 2012 and Spring 2013 semesters. All football players were invited to attend a team meeting on October 15th, 2012 and again on April 16, 2013 during which the researcher had the participants complete the survey. All football players who were present were invited to participate in the survey. Since this study used a within subjects study design, only football players who took both the fall and spring surveys were included in the calculated statistics. Moreover, football players who took the survey only one time either in the fall or the spring were excluded in this study. A total of 109 football players participated in the study in the fall; however, one survey was incomplete because of an inadequate survey response and not recorded. A total of 98 players participated in the survey in the spring; however, 13 were incomplete and not recorded because of inadequate survey responses and 10 were football players who did not complete the survey in the fall semester. As a result, a total of 75 football players completed the survey in both the Fall 2012 and Spring 2013 semesters; therefore, the within subjects design sample for this study is N=75.
Clemson University football players were chosen because of the similar experiences they share with other NCAA Division I football players in that they must abide by the same practice and playing season regulations provided by the NCAA. For example, in order to participate in intercollegiate athletics, the NCAA stipulates that all student athletes be full-time (enrolled in minimum of 12 hours), degree seeking students.

Secondly, Clemson University’s football program is considered a top tier NCAA Division I program and thus the football players face the same academic, social, and athletic pressures as other top tier NCAA Division I programs which may help with the generalizability of the results.

Gall et al (2007) pointed out that participants need to be reasonably homogeneous in order to ensure accurate casual relationships among variables; therefore, all of the football players at Clemson University were allowed to participate in the study regardless of their athletic, academic, and athletic aid status. However, these variables will be assessed in order to make inferences about the population as it relates to academic motivation.

**Instrumentation**

Survey research is “a technique in which data are gathered by asking questions of a group of individuals called respondents” (Ary, Jacobs, & Razavieh, 2002, p. 374). This study used a sample survey for data collection that is specifically used when only a portion of a population is being surveyed (Mertens, 2005). As mentioned previously, the respondents for this study are NCAA Division I football players which make up a subset of the overall NCAA Division I student athlete population at Clemson University. The researcher created a survey entitled the College Student-Athlete Academic Motivation
Survey (CSAAM-S) which examined academic motivation among college student athletes; in particular, NCAA Division I football players. The CSAAM-S was created by combining questions from four separate instruments found to impact academic motivation among college student athletes namely the SAMSAQ, (Gaston-Gayles, 2005); Achievement Goal Questionnaire, (Elliot & McGregor, 2001); Sense of Social Connectedness Scale (Brew et al., 2004); and the Athletic Commitment Relationship Scale (Simons & Rheenen, 2000). Each of these abovementioned instruments used a variety of theoretical lenses shown to have a connection to motivation; such as, Expectancy-value theory (Fishbein, 1963); School Belonging theory (Mueller, 2008); Self-efficacy (Bandura, 1977); Self-worth theory (Theory of Approach and Avoidance (Atkinson, 1964) and the Attribution theory (Weiner, 1972); Achievement Goal theory (Dweck, 1986). The four instruments and the questions used to create the CSAAM-S are described below.

**Student Athlete Motivation toward Sports and Academic Questionnaire**

The SAMSAQ’s validity and reliability had been determined to be dependable in predicting academic motivation among college student athletes (Gaston-Gayles, 2005). In 2005, Gaston-Gayles used Comprehensive Exploratory Factor Analysis (CEFA) to determine the validity and reliability of the SAMSAQ. Exploratory factor analysis revealed low factor loadings for three items causing Gaston to eliminate the items from the SAMSAQ (Althouse, 2007). Additional research found four more items that needed to be removed due to low factor loadings (Althouse, 2007). After the items were eliminated, the academic motivation subscale of the SAMSAQ consisted of 16 items with factor loadings ranging from .38 to .79 in absolute value. The SAMSAQ was derived
from three achievement related theories (Attribution Theory (Weiner, 1974), the Expectancy Value Theory (Fishbein, 1963; Vroom, 1964), and the Self-efficacy theory (Bandura, 1977). For this study, 11 statements were derived from the Student Athlete Motivation toward Sports and Academic Questionnaire (SAMSAQ) to assess academic motivation among college student athletes; however, the statements were re-worded to fit the structure of the CSAAM-S. The underlying meaning of each statement and its theoretical foundation remained the same. Figure 1 represents the statements used on the CSAAM-S that were derived from the SAMSAQ used to measure academic motivation.

**Figure 1**

<table>
<thead>
<tr>
<th>SAMSAQ Items used to Measure Academic Motivation on the CSAAM-S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Level of motivation to put in the time to earn excellent grades.</td>
</tr>
<tr>
<td>3. Level of motivation to put in the effort to earn excellent grades in my courses.</td>
</tr>
<tr>
<td>4. Level of motivation due to the fear of performing poorly academically.</td>
</tr>
<tr>
<td>5. Level of motivation to learn as much as possible in my classes.</td>
</tr>
<tr>
<td>10. Level of motivation to complete homework or assignments.</td>
</tr>
<tr>
<td>15. Level of motivation to ask instructors questions about things that I did not understand</td>
</tr>
<tr>
<td>16. Level of motivation to earn an “A” on a test or major assignment over winning a game.</td>
</tr>
<tr>
<td>17. Level of motivation to achieve a high grade point average (3.0 or above).</td>
</tr>
<tr>
<td>18. Level of motivation to perform better academically than others from my team.</td>
</tr>
<tr>
<td>19. Level of motivation to earn a college degree.</td>
</tr>
<tr>
<td>20. Level of motivation to participate in my sport even if it interferes with my progress towards a degree.</td>
</tr>
</tbody>
</table>

**Achievement Goal Questionnaire**
Using Elliot and McGregor’s (2001) Achievement Goal Questionnaire, Anderson (2010) examined the relationship between school belonging, academic motivation, and academic achievement among 143 college student athletes at a large public university. The Internal consistency estimates for the Achievement Goal Questionnaire subscale in all four orientations (performance approach orientation, performance avoidance orientation, mastery approach orientation, and mastery avoidance orientation) had adequate internal consistency estimates and evidence of discriminant validity (Anderson, 2010). For this study, five statements were derived from Elliot and McGregor’s (2001) Achievement Goal Questionnaire to assess academic motivation among college student athletes; however, the statements were re-worded to fit the structure of the CSAAM-S. The underlying meaning of each statement and its theoretical foundation remained the same however. Figure 2 represents the statements used on the CSAAM-S that were derived from the Achievement Goal Questionnaire used to measure academic motivation.

**Figure 2**

<table>
<thead>
<tr>
<th>Achievement Goal Questionnaire Items used on the CSAAM-S</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Level of motivation to achieve a high level of academic performance in my classes.</td>
</tr>
<tr>
<td>6. Level of motivation to learn what is taught in my courses.</td>
</tr>
<tr>
<td>7. Level of motivation to earn better grades than most of the other students.</td>
</tr>
<tr>
<td>13. Level of motivation to study hard enough to stay eligible to play my sport.</td>
</tr>
<tr>
<td>21. Level of motivation to perform better in my sport than my school.</td>
</tr>
</tbody>
</table>

**Sense of Social Connectedness Scale**

Using Brew, Beatty, and Watt’s (2004) Sense of School Membership Scale (SSCS), Mueller (2008) found that a relationship existed between school belonging and motivation between both traditional and non-traditional students college students. This
study determined that a sense of school belonging is an important predictor of motivation among a college student population. For this study, factor analysis indicated that sense of school belonging items were comprised of three reliable factors that included sense of belonging with peers, instructor support, and relatedness of self with school. For the current study, four statements were derived from Brew, Beatty, and Watt’s (2004) Sense of School Membership Scale (SSCS) to assess academic motivation among college student athletes; however, the statements were re-worded to fit the structure of the CSAAM-S. The underlying meaning of each statement and its theoretical foundation remained the same however. Figure 3 represents the statements used on the CSAAM-S that were derived from the Sense of School Membership Scale used to measure academic motivation.

**Figure 3**

<table>
<thead>
<tr>
<th>School Membership Scale Items used on the CSAAM-S</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Level of motivation to learn all that I possibly could in my classes.</td>
</tr>
<tr>
<td>23. Level of motivation to feel a sense of belonging to the university.</td>
</tr>
<tr>
<td>12. Level of motivation to feel like a part of the university.</td>
</tr>
<tr>
<td>24. Level of motivation to concentrate on what I am doing in my classes.</td>
</tr>
</tbody>
</table>

**Athletic Commitment Relationship Scale**

Simons and Rheenen’s (2000) used the Athletic Commitment Relationship Scale along with other instruments to explore non-cognitive variables on achievement motivation to explain academic performance among college student athletes. One non-cognitive variable in particular, which was a student athlete’s commitment to their athletic role, found that the more committed the participants were to their athletic role
than the academic role, the lower their university GPA. Simons and Rheenen (2000) discovered that the higher the score on this particular scale, the stronger the commitment was to their athletic role. The authors performed a Chronbach’s Alpha for the scale which was .79, indicating strong internal consistency. For the current study, four statements were derived from Simons and Rheenen’s (2000) Athletic Commitment Relationship Scale to assess academic motivation among college student athletes; however, the statements were re-worded to fit the structure of the CSAAM-S. The underlying meaning of each statement and its theoretical foundation remained the same however. Figure 4 represents the statements used on the CSAAM-S that were derived from the Athletic Commitment Relationship Scale used to measure academic motivation.

**Figure 4**

*Athletic Commitment Relationship Scale Items used on the CSAAM-S*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Level of motivation to put energy into sports because I know I have got the rest of my life to earn a degree.</td>
</tr>
<tr>
<td>9</td>
<td>Level of motivation to succeed in sports rather than do well in school.</td>
</tr>
<tr>
<td>11</td>
<td>Level of motivation to utilize extra time towards academics.</td>
</tr>
<tr>
<td>22</td>
<td>Level of motivation to care about what I am doing in my classes.</td>
</tr>
</tbody>
</table>

Additionally, the CSAAM-S gathered student athlete background information such as ethnicity, athletic standing, and scholarship type in order to determine if correlations exist between those and academic motivation. Descriptions for each background question are below.

**Ethnicity.** Each student-athlete was asked “What is your ethnicity? “Student athletes chose from Black/African American, American Indian, Asian/Pacific Islander, Hispanic, White/Caucasian, or other. If a student-athlete chose other, they responded by specifying their ethnicity.
Scholarship type. Each student athlete was asked “Are you on an athletic scholarship?” Student athletes responded by checking yes or no.

Athletic standing. Each student athlete was asked, “What is your athletic standing?” Responses were based on student athletes checking the corresponding responses of freshman, sophomore, junior, or senior.

Date of Birth. Each student athlete was asked “What is your date of birth? Student athletes responded by filling in their month, day, and year.

The CSAAM-S was designed to examine academic motivation among NCAA Division I football players during their competition and non-competition semesters because Gaston-Gayles (2004) suggested that assessing student’ motivation over a period of time could provide a better understanding of academic performance among college student athletes. Due to Gaston’s claim, the CSAAM-S was designed in a way that examined academic motivation over a period of time rather than a single point in time, in particular, throughout a football player’s academic year. To achieve this, the CSAAM-S was provided to the football players during both the Fall 2012 and Spring 2013 semesters. Additionally, in order to capture the football player’s academic motivation over a period of time, the CSAAM-S was arranged so that each respondent had to reflect back on his academic motivation for three months during the respective semester. To do this, the football players were required to indicate the extent to which they experienced low motivation, high motivation, or if there was no change in motivation for the three corresponding months at the respective survey time. For example, during their competition semester (Fall 2012), the football student athletes were required to reflect back on their academic motivation for August 2012, September 2012, and October 2012.
Subsequently, the CSAAM-S was also given out to the football student athletes during their non-competition semester and required them to reflect back and indicate their academic motivation during February 2013, March 2013, and April 2013. Figure 5 and Figure 6 represents the legend displayed on the CSAAM-S that explains the possible responses in more detail and a sample question taken from the CSAAM-S that will provide a better understanding of the CSAAM-S’s concept.

**Figure 5**

**CSAAM-S Legend for motivational choices**

<table>
<thead>
<tr>
<th>Low Motivation (1)</th>
<th>Means that you have limited desire to achieve in your learning. Your level of motivation towards school is less than what you would expect of yourself.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivated (2)</td>
<td>Means that you have a desire to achieve in your learning. Your level of motivation towards school is consistent with what you would expect of yourself.</td>
</tr>
<tr>
<td>High Motivation (3)</td>
<td>Means that you have a high desire to achieve in your learning. Your level of motivation towards school is higher than what you would expect of yourself.</td>
</tr>
</tbody>
</table>

**Figure 6**

**Sample CSAAM-S question**

1. **Level of motivation to perform better in my sport than my school work.**

   _1_ August _1_ September _3_ October

   You indicated that for the month of August and September your motivation was low compared to October when it was high.

**Data Collection Procedures**

Initially, the researcher used a gatekeeper to contact the Vice President for Academic Affairs and Provost at Clemson University due to a personal relationship
between the two. Through this contact, the researcher was instructed to communicate with Clemson University’s Faculty Athletic Representative (FAR) pertaining to the details of the research. Once initial permission was approved by the FAR, contact was made to the head coach to gain further approval. The head coach approved the research study and offered a day and time for the research to take place. Once this date was secured, a research packet was submitted to the Georgia Southern University’s Institutional Review Board (IRB) for approval. The reason the researcher made contact with research institution before IRB approval was confirmed was due to the nature of the participants. The researcher wanted to make sure it was possible to gain access to the team due to the nature and popularity of the sport before preparing the IRB packet. The researcher obtained IRB approval from Georgia Southern University in October 2012. Subsequently, the IRB approval letter was sent to Clemson’s IRB for their review. Clemson University’s IRB approved the research and the data collection date was confirmed.

During a team meeting on October 15, 2012 and again on April 16, 2013, the Clemson Football team gathered in one room in order to complete the CSAAM-S. One of the assistant coaches introduced the researcher to the team and explained the reason for the meeting. The researcher described the study, discussed the informed consent form, and allowed the participants to ask questions. Each student-athlete received a packet containing two informed consent forms and a copy of the survey that included the demographic questions. The researcher distributed the packet. The participants kept one copy of the informed consent form for their records, placed the other signed copy of the informed consent form, along with the survey into their packet and handed it back to the
researcher. The average time for the student athletes to complete the survey was approximately 20 minutes. The data collection procedures and survey (CSAAM-S) were the same for both meetings (October 15, 2012, and April 16, 2013). The consent form and the survey were coded using the participant’s name. Due to the research using a within subjects design, the participant’s names were included so the data could be tracked to the specific student over the two times the survey was administered; however, individual names were not used in the reporting of the results in this document. Data were reported in aggregate form for the total group of football players completing the CSAAM-S for both the fall and spring semesters. All data was maintained in a locked file cabinet in the researcher’s office at Georgia Gwinnett College. Only the researcher had access to the locked file cabinet. The data will be kept for three years in the locked file cabinet and then destroyed in April 2016. The results are available to Clemson University personnel or the football staff if requested.

**Data Analysis Procedures**

First, analysis including frequencies for descriptive purposes (e.g., means and standard deviation) analyzing race/ethnicity, athletic standing, scholarship type, and academic motivation were used. Describing the population using additional demographic data is helpful when making assessments about the generalizability of the findings (Carter, 2012). Second, a within subjects study design also known as a repeated measures design was used. A within subjects design is an experiment in which the same group of subjects serves in more than one treatment; thus, every single participant is subjected to every treatment, including the control (Hall, 1998). A within subjects design also requires less participants and allows the researcher to monitor the effects upon
individuals which help to lower the possibility of individual differences skewing the results (Shuttleworth, 2009). The repeated measure (ANOVA) was used to determine general measurements of academic motivation that existed within the items of the College Student Athlete Academic motivation Survey (CSAAM-S). The repeated measures ANOVA tests the equality of means. It was used here because all members of the sample were measured under a number of different conditions (e.g. Fall versus Spring, and month to month). Since the sample is subject to each condition more than once, the measurement of the dependent variable is repeated. Thus, a repeated measures ANOVA was performed to determine the statistical level of significance ($p<.05$) of the mean differences between each month (August, September, October) within the Fall 2012 semester and (February, March, April) within the Spring 2013 semester with $p = 0.05$ used as the level of significance for evaluating the F-Ratio. Babbie (2001) defined level of significance as “the probability of the measured associations being due only to sampling error” (p. 456). All analyses were calculated using the Statistical Package for Social Sciences (SPSS) 21 software program. The results were related back to the research questions guiding this study.

**Summary**

The methodology and research design of this study were employed to explore academic motivation among football players and to add a new dimension to the way academic motivation is being studied in the future. Quantitative inquiry, specifically, a longitudinal design was appropriate for understanding the constructs of academic motivation among football players throughout the 2012-2013 academic year. NCAA Division I football student athletes were chosen for this study due to the notoriety and
popularity of NCAA Division I football and because they traditionally perform worse academically than other student athletes.

To collect this data, the researcher created a survey entitled the College Student-Athlete Academic Motivation Survey (CSAAM-S) by combining questions from four separate instruments found to impact academic motivation among college student athletes (i.e. SAMSAQ, (Gaston-Gayles, 2005); Achievement Goal Questionnaire, (Elliot & McGregor, 2001); Sense of Social Connectedness Scale (Brew et al., 2004); and the Athletic Commitment Relationship Scale (Simons & Rheenen, 2000). Once the survey was collected and the data recorded, a within subjects study (repeated measures) was employed since the same group of subjects served in more than one treatment. Additionally, given the fact that N=75, a within subjects design allowed the researcher to monitor the effects upon individuals which help to lower the possibility of individual differences skewing the results (Shuttleworth, 2009). A repeated measures ANOVA was used to compare the statistical level of significance \((p<.05)\) of the mean differences of academic motivation for the competition semester (Fall 2012) and the non-competition semester (Spring 2013) and between each month (August, September, October) within the Fall 2012 semester and (February, March, April) within the Spring 2013 semester.
CHAPTER IV

RESULTS

The purpose of this chapter is to present the findings of the current study’s research questions that guided the inquiry of this study. Descriptive characteristics of the participants are presented in Tables 1-3. Displayed in Tables 4 - 57 are the results of the findings analyzing football player’s academic motivation within their competition and non-competition semesters for the 2012-2013 academic year.

Descriptive Characteristics of Student-Athlete Sample

Table 1 displays the distribution of the student athlete by race/ethnicity. Race/Ethnicity includes African American, White, Hispanic, Asian/Pacific Islander, and other. Of the overall NCAA Football student athlete population (participating in this study) at Clemson University (75), 48 (64%) reported as African Americans and 25 (33.3%) reported as White. Other races or ethnicities were reported as 2 (2.6%) (e.g., Hispanic, Asian, and Pacific Islander).

Table 1

<table>
<thead>
<tr>
<th>Distribution of Race/Ethnicity</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>48</td>
<td>64.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>25</td>
<td>33.3</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2 displays the distribution of the student athlete by athletic standing. Athletic standing level includes freshmen, sophomore, junior, and senior. Of the overall NCAA Football student athlete population at Clemson University (75), 28 (37.3%)
reported as freshman 32 (42.7%), reported as sophomores, 13 (17.3%) reported as juniors, and 2 (2.7%) reported as seniors.

Table 2

<table>
<thead>
<tr>
<th>Athletic Standing</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>28</td>
<td>37.3</td>
</tr>
<tr>
<td>Sophomore</td>
<td>32</td>
<td>42.7</td>
</tr>
<tr>
<td>Junior</td>
<td>13</td>
<td>17.3</td>
</tr>
<tr>
<td>Senior</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 3 displays the distribution of the student athlete by athletic scholarship using descriptive statistics. Scholarship recipient includes either “yes” for receiving an athletic scholarship or “no” for not receiving an athletic scholarship. Of the overall NCAA Football student athlete population at Clemson University (N=75), 58 (77.3%) did receive athletic scholarships while 17 (22.7%) did not.

Table 3

<table>
<thead>
<tr>
<th>Scholarship Type</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholarship</td>
<td>58</td>
<td>77.3</td>
</tr>
<tr>
<td>Non-Scholarship</td>
<td>17</td>
<td>22.7</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Results for Research Question One

The first research question asked how does NCAA Division I football players academic motivation within their competition semester (Fall 2012) differ from their academic motivation within their non-competition semester (Spring 2013) based on their responses to the College Student Athlete Academic Motivation Survey (CSAAM-S)? Therefore, the following hypothesis was developed. The first hypothesis stated that the overall academic motivation within the NCAA Division I football player’s competition
semester (Fall 2012) will be lower than the overall academic motivation within the
NCAA Division I football player’s non-competition semester (Spring 2013).

Table 4 shows descriptive statistics (means and standard deviations) for the
academic motivation for the Fall 2012 and Spring 2013 semesters. Participants had
response options of 1 – Low Motivation to 3 – High Motivation so the calculations are
based on scores ranging from 1 to 3. For the Fall 2012 semester (M=2.1810, SD=.27372)
and for the spring semester (M=2.2646, SD=.24660). When looking at the overall
motivational scores between to the two semesters, the participants are indicating that they
are slightly more academically motivated during their non-competition semester
compared to their competition semester. This result indicates that a variable may be
present during the competition semester which caused academic motivation among the
football players to be lower during this particular semester. Past research has pointed
specifically to increased sport participation as a reason for low academic motivation and
academic performance among student athletes. Accordingly, it can be inferred that
increased sport participation played a role in the football player’s academic motivation
for the current study as well.

Table 4

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall 2012</strong></td>
<td>2.1810</td>
<td>.27372</td>
<td>75</td>
</tr>
<tr>
<td><strong>Spring 2013</strong></td>
<td>2.2646</td>
<td>.24660</td>
<td>75</td>
</tr>
</tbody>
</table>

Table 5 displays a repeated measures ANOVA used to analyze differences in
academic motivation between the competition semester (Fall 2012) and the non-
competition semester (Spring 2013). Findings revealed that the academic motivation
during the non-competition semester (Spring 2013) was significantly higher than the
competition semester (Fall 2012), $F(1,74) = 7.706, p < 0.007$; therefore, hypothesis one
was supported.

**Table 5**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall and Spring Sphericity Assumed</td>
<td>.262</td>
<td>1</td>
<td>.262</td>
<td>7.706</td>
<td>.007</td>
<td>.094</td>
</tr>
<tr>
<td>Error (Fall and Spring) Sphericity Assumed</td>
<td>2.519</td>
<td>74</td>
<td>.034</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Results for Research Question Two**

The second research question asked how does NCAA Division I football players’
academic motivation *change* each month within their *competition semester (Fall 2012)*
based on the student athletes’ responses to the College Student Athlete Academic
Motivation Survey (CSAAM-S)? Therefore, the following hypothesis was developed.
The first hypothesis stated that *academic motivation* levels would be significantly
different for each month indicating a *decreasing* directional pattern within the NCAA
Division I football players’ *competition semester*.

Table 6 shows descriptive statistics (means and standard deviations) for the
academic motivation during August, September, and October. A higher mean score is
reflective of the participants indicating that they are more academically motivated during
those moments in time. For the football players, the average level of academic
motivation during August was 2.1291 (SD=.38851), for September it was 2.1372
(SD=.28349), and for October it was 2.2767 (SD=.32280). Data revealed the means to be
lower in the earlier months of the Fall 2012 semester, but indicated an increase in
motivation in the latter month of October meaning they were more academically motivated during that moment in time.

Table 6

<table>
<thead>
<tr>
<th>All Football Players</th>
<th>Mean</th>
<th>Standard Deviation (SD)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>2.1291</td>
<td>.38851</td>
<td>75</td>
</tr>
<tr>
<td>September</td>
<td>2.1372</td>
<td>.28349</td>
<td>75</td>
</tr>
<tr>
<td>October</td>
<td>2.2767</td>
<td>.32280</td>
<td>75</td>
</tr>
</tbody>
</table>

Table 7 displays a repeated measures ANOVA used to determine if there was an overall significant difference between the means for the three months (August, September, and October) within the Fall 2012 semester. From this table, an $F$ value for “academic motivation” is discovered with its associated significance level and effect size (Partial Eta Squared). Findings revealed that the academic motivation during the Fall 2012 was significantly different throughout the semester, $F(2, 148) = 9.324, p < 0.05$.

Based on this statistical analysis, during August, the participants indicated statistically lower levels of academic motivation compared to both September and October. Additionally, during September, the participants indicated statistically lower levels of motivation compared to October. Accordingly, October produced higher levels of academic motivation among the participants compared to August and September indicating an increasing trend in their motivation over the three-month time period.

Table 7

<table>
<thead>
<tr>
<th>All Football Players</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Error (Fall)</td>
<td>Sphericity Assumed</td>
<td>1.032</td>
<td>2</td>
<td>.516</td>
<td>9.324</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Sphericity Assumed</td>
<td>8.194</td>
<td>148</td>
<td>.055</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 8 displays a Post Hoc Pairwise Comparison used to analyze the significance level for differences between each month during the Fall 2012 semester. Findings revealed a significant difference in academic motivation between months, specifically October and August \( (p=.004) \) and October and September \( (p = .000) \). Academic motivation did not differ between August and September \( (p = .794) \). Additionally, the Mean Difference (I-J) column data indicated that academic motivation was reduced between August and September. Findings revealed that academic motivation was lowest in August and highest in October which indicated an increasing pattern throughout the competition (Fall 2012) semester. Given these findings, the first hypothesis cannot be supported despite the fact that significant differences were found in academic motivation throughout the competition (Fall 2012) semester.

Table 8

<table>
<thead>
<tr>
<th>(I) Fall</th>
<th>(J) Fall</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval for Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>September</td>
<td>-.008</td>
<td>.031</td>
<td>.794</td>
<td>-0.070 to 0.054</td>
</tr>
<tr>
<td></td>
<td>October</td>
<td>-.148*</td>
<td>.050</td>
<td>.004</td>
<td>-0.247 to -0.048</td>
</tr>
<tr>
<td>September</td>
<td>August</td>
<td>.008</td>
<td>.031</td>
<td>.794</td>
<td>-.054 to 0.070</td>
</tr>
<tr>
<td></td>
<td>October</td>
<td>-.139*</td>
<td>.031</td>
<td>.000</td>
<td>-.201 to -.078</td>
</tr>
<tr>
<td>October</td>
<td>August</td>
<td>.148*</td>
<td>.050</td>
<td>.004</td>
<td>0.048 to 0.247</td>
</tr>
<tr>
<td></td>
<td>September</td>
<td>.139*</td>
<td>.031</td>
<td>.000</td>
<td>0.078 to 0.201</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the .05 level.*

Results for Research Question Three

The third research question asked how does NCAA Division I football players’ academic motivation change each month within their non-competition semester (Spring 2013) based on the student athletes’ responses to the College Student Athlete Academic Motivation Survey (CSAAM-S)? Therefore, the following hypothesis was developed.
The first hypothesis stated that *academic motivation* levels would be significantly different for each month indicating an *increasing* directional pattern within the NCAA Division I football players’ *non-competition semester*. Table 9 shows descriptive statistics (means and standard deviations) for the academic motivation during February, March, and April. For the football players, the average level of academic motivation during February was 2.1817 (SD=.33147), for March it was 2.2394 (SD=.30818), and for April it was 2.3728 (SD=.30564). A higher mean score is reflective of the participants indicating that they are more academically motivated during those moments in time. Once again, data indicated the mean motivation to be higher in the later month compared to the earlier months of the Spring 2013 term.

**Table 9**

<table>
<thead>
<tr>
<th>All Football Players</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>2.1817</td>
<td>.33147</td>
<td>75</td>
</tr>
<tr>
<td>March</td>
<td>2.2394</td>
<td>.30818</td>
<td>75</td>
</tr>
<tr>
<td>April</td>
<td>2.3728</td>
<td>.30564</td>
<td>75</td>
</tr>
</tbody>
</table>

Table 10 displays a repeated measures ANOVA used to determine if there was an overall significant difference between the means for the three months (February, March, April) during the Spring 2013 (non-competition) semester. From this table, an F value for “academic motivation” is discovered by testing two degrees-of-freedom; the between-groups degrees of freedom divided by the within-groups degrees of freedom. The F statistic is reported along with its associated significance level and effect size (Partial Eta Squared). The higher the F statistic, the lower the significance value will be and if the significance value is (P<.05) than the results are significant. The F statistic is generated by the difference in the sample distribution for each variable.
Findings revealed that the academic motivation during the Spring 2013 semester was significantly different throughout the semester, \( (F (2, 148) = 12.440, p < 0.001) \). Since the significance level was \( (p < 0.05) \), then we can say with 95% confidence that the variance is not due by chance but rather due to the influence of the tested factor.

Based on this statistical analysis, during February, the participants indicated statistically lower levels of academic motivation compared to both March and April. Additionally, during March, the participants indicated statistically lower levels of motivation compared to April. Accordingly, April produced higher levels of academic motivation among the participants compared to February and March indicating an increasing trend in their motivation over the three-month time period.

**Table 10**

<table>
<thead>
<tr>
<th>Spring</th>
<th>Sphericity Assumed</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error</td>
<td>Sphericity Assumed</td>
<td>1.441</td>
<td>2</td>
<td>.720</td>
<td>12.440</td>
<td>.000</td>
<td>.144</td>
</tr>
<tr>
<td>(Spring)</td>
<td>Sphericity Assumed</td>
<td>8.572</td>
<td>148</td>
<td>.058</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11 displays a Post Hoc Pairwise Comparison used to analyze differences between each month within the Spring 2013 semester. Findings revealed a significant difference in academic motivation between months, specifically April and February (MD=.191, \( p<.001 \)) and April and March (MD=.133, \( p<.001 \)). Findings also revealed academic motivation between February and March was not significant. The findings revealed that academic motivation was lowest in February and highest in April which indicated an increasing pattern throughout the competition (Spring 2013) semester.
Given these findings and the findings revealing a significant difference in academic motivation throughout the semester, the hypothesis is supported.

Table 11

<table>
<thead>
<tr>
<th>All Football Players</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval for Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>-.058</td>
<td>.040</td>
<td>.148</td>
<td>-.136 - .021</td>
</tr>
<tr>
<td>April</td>
<td>-.191*</td>
<td>.049</td>
<td>.000</td>
<td>-.289 - -.093</td>
</tr>
<tr>
<td>March</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>.058</td>
<td>.040</td>
<td>.148</td>
<td>-.021 .136</td>
</tr>
<tr>
<td>April</td>
<td>-.133*</td>
<td>.026</td>
<td>.000</td>
<td>-.185 -.082</td>
</tr>
<tr>
<td>April</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>.191</td>
<td>.049</td>
<td>.000</td>
<td>.093 .289</td>
</tr>
<tr>
<td>March</td>
<td>.133*</td>
<td>.026</td>
<td>.000</td>
<td>.082 .185</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the .05 level.

Summary of Results for NCAA Division I Football Players’ Academic Motivation Based on Race and Ethnicity

All Race/Ethnicities

Table 12 shows descriptive statistics (means and standard deviations) for the academic motivational constructs in regards to race/ethnicity for each semester. Ethnicity was defined as African American, White, Hispanic, Asian/Pacific Islander, and other. For the Fall 2012 (competition) semester, African Americans indicated a slightly lower level of academic motivation (M=2.1686, SD=.27888) than their Caucasian counterparts (M=2.1842, SD=.26657). Conversely, during the Spring 2013 (non-competition) semester, African Americans showed a slightly higher academic motivation level (M=2.2975, SD=.23769) than Caucasian (M= 2.2078, SD=.24403). All other ethnicities were redacted due to limited numbers and chance of identifying the participants.
Table 12

Descriptive Statistics for Fall 2012 and Spring 2013

<table>
<thead>
<tr>
<th></th>
<th>Race/Ethnicities</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012</td>
<td>African American</td>
<td>2.1686</td>
<td>.27888</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Caucasian</td>
<td>2.1842</td>
<td>.26657</td>
<td>25</td>
</tr>
<tr>
<td>Spring 2013</td>
<td>African American</td>
<td>2.2975</td>
<td>.23769</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Caucasian</td>
<td>2.2078</td>
<td>.24403</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 13 displays a repeated measures ANOVA used to analyze differences between academic motivation and race/ethnicity during the Fall 2012 and Spring 2013 semester. Findings revealed that there was not a significant difference between academic motivation in the Fall 2012 compared to the Spring 2013 semesters when analyzed with race/ethnicity, \((F(1, 71) = 2.629 \ p < .057)\).

Table 13

Test of Within Subjects Effects for Fall 2012 and Spring 2013 Semesters

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012 and Spring 2013</td>
<td>Sphericity Assumed</td>
<td>.029</td>
<td>1</td>
<td>.029</td>
<td>.906</td>
<td>.344</td>
</tr>
<tr>
<td>Fall 2012 and Spring 2013 * Error(Fall 2012 and Spring 2013)</td>
<td>Sphericity Assumed</td>
<td>.252</td>
<td>3</td>
<td>.084</td>
<td>2.629</td>
<td>.057</td>
</tr>
</tbody>
</table>

African American and Caucasian (Fall 2012)

Table 14 shows descriptive statistics (means and standard deviations) for the academic motivational constructs between African American and Caucasian football players for each month within the Fall 2012 semester. During August, African American football players indicated a slightly lower level of academic motivation (M=2.1075, SD=.37561) compared to Caucasian football players (M= 2.1344, SD=.41181).
Similarly for September, African American football players indicated a slightly lower level of academic motivation (M=2.1207, SD=.28871) compared to Caucasian football players (M= 2.1550, SD= .28477). October was the only month within the Fall 2012 semester that indicated a higher level of academic motivation among African American football players (M=2.2778, SD=.32835) compared to Caucasian football players (M= 2.2633, SD=.32275).

Table 14

<table>
<thead>
<tr>
<th></th>
<th>Race/Ethnicity</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>African American</td>
<td>2.1075</td>
<td>.37561</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Caucasian</td>
<td>2.1344</td>
<td>.41181</td>
<td>25</td>
</tr>
<tr>
<td>September</td>
<td>African American</td>
<td>2.1207</td>
<td>.28871</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Caucasian</td>
<td>2.1550</td>
<td>.28477</td>
<td>25</td>
</tr>
<tr>
<td>October</td>
<td>African American</td>
<td>2.2778</td>
<td>.32835</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Caucasian</td>
<td>2.2633</td>
<td>.31817</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 15 displays a repeated measures ANOVA used to analyze academic motivational constructs between African American and Caucasian football players for each month within the Fall 2012 semester. Findings revealed that there was not a significant difference in academic motivation between the months within the Fall 2012 semester when analyzed with race/ethnicity, \( F(2, 142) = .202 \ p < .817 \).

Table 15

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012</td>
<td>Sphericity Assumed</td>
<td>.883</td>
<td>2</td>
<td>.441</td>
<td>7.857</td>
<td>.001</td>
</tr>
<tr>
<td>Fall 2012 *</td>
<td>Sphericity Assumed</td>
<td>.023</td>
<td>2</td>
<td>.011</td>
<td>.202</td>
<td>.817</td>
</tr>
<tr>
<td>Error(Fall 2012)</td>
<td>Sphericity Assumed</td>
<td>7.979</td>
<td>142</td>
<td>.056</td>
<td></td>
<td>.003</td>
</tr>
</tbody>
</table>
African American and Caucasian (Spring 2013)

Table 16 shows descriptive statistics (means and standard deviations) for the academic motivational constructs between African American and Caucasian football players for each month within the Spring 2013 semester. All three months yield higher levels of academic motivation among African American football players compared to Caucasian football players. For February, the level of academic motivation for African Americans was (M=2.2057, SD=.36267) compared to Caucasians (M= 2.1383, SD=.24257). For March, the level of academic motivation for African Americans was (M=2.2700, SD=.30034) compared to Caucasians (M= 2.1917, SD=.30737). For April, the level of academic motivation for African Americans was (M=2.4167, SD=.31145) compared to Caucasians (M= 2.933, SD=.29054).

Table 17 displays a repeated measures ANOVA used to analyze academic motivational constructs among African American and Caucasian football players for each month within the Spring 2013 semester. Findings revealed that there was not a significant difference in academic motivation between the months within the Spring 2013 semester when analyzed with race/ethnicity, \( F(2, 142) = .243, p < .784 \).
Table 17

Test of Within Subjects Effects for Spring 2013 Semester Months

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2013 Months</td>
<td>Sphericity Assumed</td>
<td>1.148</td>
<td>2</td>
<td>.574</td>
<td>9.662</td>
<td>.000</td>
</tr>
<tr>
<td>Spring 2013 Months *</td>
<td>Sphericity Assumed</td>
<td>.029</td>
<td>2</td>
<td>.014</td>
<td>.243</td>
<td>.784</td>
</tr>
<tr>
<td>Error(Spring 2013 Months)</td>
<td>Sphericity Assumed</td>
<td>8.432</td>
<td>142</td>
<td>.059</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

African American and Caucasian (Fall 2012 and Spring 2013)

Table 18 shows descriptive statistics (means and standard deviations) for the academic motivation among African American and Caucasian football players for the Fall 2012 and Spring 2013 semester. For the Fall 2012 semester (M=2.1740, SD=.27297) and for the Spring 2013 semester (M=2.2667, SD=.24201). When looking at the overall motivational scores between to the two semesters, the African American and Caucasian football players indicated that they are slightly more academically motivated during their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012).

Table 18

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>2.1686</td>
<td>.27888</td>
<td>48</td>
</tr>
<tr>
<td>Caucasian</td>
<td>2.1842</td>
<td>.26657</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>2.1740</td>
<td>.27297</td>
<td>73</td>
</tr>
<tr>
<td>Spring 2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>2.2975</td>
<td>.23769</td>
<td>48</td>
</tr>
<tr>
<td>Caucasian</td>
<td>2.2078</td>
<td>.24403</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>2.2667</td>
<td>.24201</td>
<td>73</td>
</tr>
</tbody>
</table>
Table 19 displays a repeated measures ANOVA used to analyze differences in academic motivation among African American and Caucasian football players during their competition semester (Fall 2012) compared to their non-competition semester (Spring 2013). Findings revealed that there was not a significant difference in academic motivation between the Fall 2012 and Spring 2013 semester when analyzed with African American and Caucasian football players. \((F (1, 71) = 2.852, p < 0.096)\).

### Table 19

Test of Within Subjects Effects for Fall 2012 and Spring 2013 semester

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012 and Spring 2013</td>
<td>Sphericity Assumed</td>
<td>.191</td>
<td>1</td>
<td>.191</td>
<td>5.972</td>
</tr>
<tr>
<td>Fall 2012 and Spring 2013 *</td>
<td>Sphericity Assumed</td>
<td>.091</td>
<td>1</td>
<td>.091</td>
<td>2.852</td>
</tr>
<tr>
<td>Error(Fall 2012 and Spring 2013)</td>
<td>Sphericity Assumed</td>
<td>2.268</td>
<td>71</td>
<td>.032</td>
<td></td>
</tr>
</tbody>
</table>

**African American Football Players (Fall 2012)**

Table 20 shows descriptive statistics (means and standard deviations) for academic motivation among African American football players for each month within the Fall 2012 semester. For the football players, the average level of academic motivation during August was 2.1075 (SD=.37561), for September it was 2.1207 (SD=.28871), and for October it was at its highest during the Fall 2012 semester at 2.2778 (SD=.32835).
Table 20

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>2.1075</td>
<td>.37561</td>
<td>48</td>
</tr>
<tr>
<td>September</td>
<td>2.1207</td>
<td>.28871</td>
<td>48</td>
</tr>
<tr>
<td>October</td>
<td>2.2778</td>
<td>.32835</td>
<td>48</td>
</tr>
</tbody>
</table>

Table 21 displays a repeated measures ANOVA used to analyze academic motivational among African American football players for each month within the Fall 2012 semester. Findings revealed that there was a significant difference in academic motivation among the African American football players between each month within the Fall 2012 semester, \( F(2, 94) = 8.711, p < .000 \).

Table 21

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012 Sphericity Assumed</td>
<td>.862</td>
<td>2</td>
<td>.431</td>
<td>8.711</td>
<td>.000</td>
<td>.156</td>
</tr>
<tr>
<td>Error(Fall 2012) Sphericity Assumed</td>
<td>4.649</td>
<td>94</td>
<td>.049</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

African American Football Players (Spring 2013)

Table 22 shows descriptive statistics (means and standard deviations) for academic motivation among African American football players for each month within the Spring 2013 semester. For the football players, the average level of academic motivation during February was 2.2057 (SD=.36267), for March it was 2.2700 (SD=.30034), and for April it was 2.4167 (SD=.31145).
Table 22

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>2.2057</td>
<td>.36267</td>
<td>48</td>
</tr>
<tr>
<td>March</td>
<td>2.2700</td>
<td>.30034</td>
<td>48</td>
</tr>
<tr>
<td>April</td>
<td>2.4167</td>
<td>.31145</td>
<td>48</td>
</tr>
</tbody>
</table>

Table 23 displays a repeated measures ANOVA used to analyze academic motivational among African American football players for each month within the Spring 2013 semester. Findings revealed that there was a significant difference in academic motivation among the African American football players between each month within the Spring 2013 semester, ($F(2, 94) = 7.520, p < .001$).

Table 23

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2013 Sphericity Assumed</td>
<td>1.122</td>
<td>2</td>
<td>.561</td>
<td>7.520</td>
<td>.001</td>
<td>.138</td>
</tr>
<tr>
<td>Error(Spring 2013) Sphericity Assumed</td>
<td>7.014</td>
<td>94</td>
<td>.075</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

African American Football Players (Fall 2012 and Spring 2013)

Table 24 shows descriptive statistics (means and standard deviations) for the academic motivation among African American football players for the Fall 2012 and Spring 2013 semesters. For the Fall 2012 semester (M=2.1686, SD=.27888) and for the Spring 2013 semester (M=2.2975, SD=.23769). When looking at the overall motivational scores between to the two semesters, the African American football players indicated that they are slightly more academically motivated during their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012).
Table 24

Descriptive Statistics for the Fall 2012 and Spring 2013 Semesters

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012</td>
<td>2.1686</td>
<td>.27888</td>
<td>48</td>
</tr>
<tr>
<td>Spring 2013</td>
<td>2.2975</td>
<td>.23769</td>
<td>48</td>
</tr>
</tbody>
</table>

Table 25 displays a repeated measures ANOVA used to analyze differences in academic motivation among African American football players during their competition semester (Fall 2012) and their non-competition semester (Spring 2013). Findings revealed that the academic motivation among African American football players was higher during their non-competition semester (Spring 2013) than their competition semester (Fall 2012), \( F(1, 47) = 12.506, p < 0.001 \).

Table 25

Test of Within Subjects Effects for the Fall 2012 and Spring 2013 Semesters

<table>
<thead>
<tr>
<th></th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall and Spring</td>
<td>Sphericity Assumed</td>
<td>.398</td>
<td>1</td>
<td>.398</td>
<td>12.506</td>
</tr>
<tr>
<td>Error(Fall and Spring)</td>
<td>Sphericity Assumed</td>
<td>1.497</td>
<td>47</td>
<td>.032</td>
<td></td>
</tr>
</tbody>
</table>

Caucasian Football Players (Fall 2012)

Table 26 shows descriptive statistics (means and standard deviations) for academic motivation among Caucasian football players for each month within the Fall 2012 semester. For the Caucasian football players, the average level of academic motivation during August was 2.1344 (SD=.41181), for September it was 2.1550 (SD=.28477), and for October it was its highest level at 2.2633 (SD=.31817).
Table 26

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>2.1344</td>
<td>.41181</td>
<td>25</td>
</tr>
<tr>
<td>September</td>
<td>2.1550</td>
<td>.28477</td>
<td>25</td>
</tr>
<tr>
<td>October</td>
<td>2.2633</td>
<td>.31817</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 26 displays a repeated measures ANOVA used to analyze academic motivational among Caucasian football players for each month within the Fall 2012 semester. Findings revealed that there was not a significant difference in academic motivation among the Caucasian football players between each month within the Fall 2012 semester, ($F(2, 48) = 1.729$ p < .188).

Table 27

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012 Sphericity Assumed</td>
<td>.240</td>
<td>2</td>
<td>.120</td>
<td>1.729</td>
<td>.188</td>
<td>.067</td>
</tr>
<tr>
<td>Error(Fall 2012) Sphericity Assumed</td>
<td>3.330</td>
<td>48</td>
<td>.069</td>
<td>.188</td>
<td></td>
<td>.067</td>
</tr>
</tbody>
</table>

Table 28 shows descriptive statistics (means and standard deviations) for academic motivation among Caucasian football players for each month within the Spring 2013 semester. For the Caucasian football players, the average level of academic motivation during February was 2.1383 (SD=.24257), for March it was 2.1917 (SD=.30737), and for April it was at its highest level during the Spring 2013 semester at 2.2933 (SD=.29054).
Table 28

Descriptive Statistics for Each Month Within Spring 2013 Semester

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>2.1383</td>
<td>.24257</td>
<td>25</td>
</tr>
<tr>
<td>March</td>
<td>2.1917</td>
<td>.30737</td>
<td>25</td>
</tr>
<tr>
<td>April</td>
<td>2.2933</td>
<td>.29054</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 29 displays a repeated measures ANOVA used to analyze academic motivational among Caucasian football players for each month within the Spring 2013 semester. Findings revealed that there was a significant difference in academic motivation among the Caucasian football players between each month within the Spring 2013 semester, \( F(2, 48) = 5.248 \ p < .009 \).

Table 29

Test of Within Subjects Effects for the Spring 2013 Semester Months

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2013 Sphericity Assumed</td>
<td>.310</td>
<td>2</td>
<td>.155</td>
<td>5.248</td>
<td>.009</td>
<td>.179</td>
</tr>
<tr>
<td>Error(Spring 2013) Sphericity Assumed</td>
<td>1.418</td>
<td>48</td>
<td>.030</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Caucasian Football Players (Fall 2012 and Spring 2013)

Table 30 shows descriptive statistics (means and standard deviations) for the academic motivation among Caucasian football players during the Fall 2012 and Spring 2013 semesters. For the Fall 2012 semester, academic motivation was lower (M=2.1842, SD=.26657) than the Spring 2013 semester (M=2.2078, SD=.24403). When looking at the overall motivational scores between to the two semesters, Caucasian football players indicated that they are slightly more academically motivated during their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012).
Table 30

Descriptive Statistics for the Fall 2012 and Spring 2013 Semesters

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012</td>
<td>2.1842</td>
<td>.26657</td>
<td>25</td>
</tr>
<tr>
<td>Spring 2013</td>
<td>2.2078</td>
<td>.24403</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 31 displays a repeated measures ANOVA used to analyze differences in academic motivation among Caucasian football players during their competition semester (Fall 2012) and their non-competition semester (Spring 2013). Findings revealed that the academic motivation among Caucasian football players was not significantly different during their competition semester Fall 2012 compared to their non-competition semester (Spring 2013), \( F(1, 24) = .215, p < .647 \).

Table 31

Test of Within Subjects Effects for the Fall 2012 and Spring 2013 Semesters

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012 and Spring 2013</td>
<td>Sphericity Assumed</td>
<td>.007</td>
<td>1</td>
<td>.007</td>
<td>.215</td>
</tr>
<tr>
<td>Error(Fall 2012 and Spring 2013)</td>
<td>Sphericity Assumed</td>
<td>.771</td>
<td>24</td>
<td>.032</td>
<td></td>
</tr>
</tbody>
</table>

Summary of Results for NCAA Division I Football Players’ Academic Motivation Based on Athletic Standing.

All Athletic Standings (Fall 2012)

Table 32 shows descriptive statistics (means and standard deviations) for the academic motivational constructs in regards to athletic standing for the Fall 2012 semester. Athletic Standing was defined as freshman, sophomore, junior, and senior. For the Fall 2012 (competition) semester, Freshman indicated a slightly higher level of academic motivation (M=2.2703, SD=.26432) than all other standings. The second
highest level of academic motivation was sophomores (M= 2.1771, SD= .26115) followed by seniors (M= 2.1653, SD= .22374). Juniors showed the lowest academic motivation levels (M=2.007, SD=.26499) within the Fall 2012 semester.

Table 32

<table>
<thead>
<tr>
<th>Standing</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>2.2703</td>
<td>.26432</td>
<td>28</td>
</tr>
<tr>
<td>Sophomore</td>
<td>2.1771</td>
<td>.26115</td>
<td>32</td>
</tr>
<tr>
<td>Junior</td>
<td>2.0007</td>
<td>.26499</td>
<td>13</td>
</tr>
<tr>
<td>Senior</td>
<td>2.1653</td>
<td>.23374</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 33 displays a repeated measure ANOVA used to analyze academic motivation among all academic standings for the Fall 2012 semester. Findings revealed that there was not a significant difference in academic motivation among the football players for the Fall 2012 semester when comparing all academic standings, (F (2, 142) = .349 p < .910).

Table 33

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012 * Standing</td>
<td>Sphericity Assumed</td>
<td>.282</td>
<td>.141</td>
<td>2.477</td>
<td>.088</td>
</tr>
<tr>
<td>Error(Fall 2012)Sphericity Assumed</td>
<td>8.075</td>
<td>142</td>
<td>.057</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All Athletic Standings (Spring 2013)

Table 34 shows descriptive statistics (means and standard deviations) for the academic motivational constructs among all athletic standings for the Spring 2013 semester. Seniors indicated a slightly higher level of academic motivation (M=2.847,
SD=.10803) than all other standings. The second highest level of academic motivation was sophomores (M= 2.2821, SD= .24279) followed by freshman (M= 2.2817, SD= .27672). Juniors showed the lowest academic motivation levels (M=2.1816, SD=.20107) within the Spring 2013 semester.

Table 34

<table>
<thead>
<tr>
<th>Standing</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>2.2817</td>
<td>.27672</td>
<td>28</td>
</tr>
<tr>
<td>Sophomore</td>
<td>2.2821</td>
<td>.24279</td>
<td>32</td>
</tr>
<tr>
<td>Junior</td>
<td>2.1816</td>
<td>.20107</td>
<td>13</td>
</tr>
<tr>
<td>Senior</td>
<td>2.2847</td>
<td>.10803</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 35 displays a repeated measures ANOVA used to analyze academic motivational among all academic standings for the Spring 2013 semester. Findings revealed that there was not a significant difference in academic motivation among the football players for the Spring 2013 semester when comparing all academic standings, ($F (2, 142) = .823 p < .554$).

Table 35

| Test of Within Subjects Effects for Spring 2013 All Academic Standings |
|-----------------------------|-----------------|-------|----------|---------|--------|--------|
| Source                      | Type III        | df    | Mean Square | F      | Sig.   |
| Spring 2013                | Sphericity Assumed | 1.120 | 2      | .560   | 9.596  | .000   |
| Spring 2013 * Standing     | Sphericity Assumed | .288  | 6      | .048   | .823   | .554   |
| Error(Spring 2013)         | Sphericity Assumed | 8.284 | 142    | .058   |        |        |

All Athletic Standings (Fall 2012 and Spring 2013)
Table 36 shows descriptive statistics (means and standard deviations) for the academic motivational constructs among all athletic standings for the Fall 2012 and Spring 2013 semesters. Based on all academic standing, the football players indicated a higher level of academic motivation during the spring 2013 (non-competition) semester M= 2.2646, SD= .24660 compared to the Fall 2012 (competition) semester M=2.1810, SD= .27372.

Table 36

<table>
<thead>
<tr>
<th>All Athletic Standings</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012</td>
<td>2.1810</td>
<td>.27372</td>
<td>75</td>
</tr>
<tr>
<td>Spring 2013</td>
<td>2.2646</td>
<td>.24660</td>
<td>75</td>
</tr>
</tbody>
</table>

Table 37 displays a repeated measures ANOVA used to determine if there was a significant difference in academic motivation among football players based on their athletic standing in the Fall 2012 compared to the Spring 2013 semester. Findings revealed a significant difference in academic motivation among football players when comparing the Fall 2012 and Spring 2013 semesters, \((F (1, 74) = 7.706, p < 0.007)\).

Table 37

<table>
<thead>
<tr>
<th>Test of Within Subjects Effects for Fall 2012 and Spring 2013 Semesters</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall and Spring Error(Fall and Spring) Sphericity Assumed</td>
<td>.262</td>
<td>1</td>
<td>.262</td>
<td>7.706</td>
<td>.007</td>
</tr>
<tr>
<td>Fall and Spring Sphericity Assumed</td>
<td>2.519</td>
<td>74</td>
<td>.034</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Freshman Football Players (Fall 2012)

Table 38 shows descriptive statistics (means and standard deviations) for academic motivation among freshman football players for each month within the Fall
2012 semester. For the freshman football players, the average level of academic motivation during August was 2.1843 (SD=.40797), for September it was 2.2351 (SD=.29116), and for October it was at its highest level during the Fall 2012 semester at 2.3914 (SD=.33951).

Table 38

Descriptive Statistics for each month within the Fall 2012 semester

<table>
<thead>
<tr>
<th></th>
<th>Standing</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>August Freshman</td>
<td></td>
<td>2.1843</td>
<td>.40797</td>
<td>28</td>
</tr>
<tr>
<td>September</td>
<td>Freshman</td>
<td>2.2351</td>
<td>.29116</td>
<td>28</td>
</tr>
<tr>
<td>October</td>
<td>Freshman</td>
<td>2.3914</td>
<td>.33951</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 39 displays a repeated measures ANOVA used to analyze academic motivational among freshman football players for each month within the Fall 2012 semester. Findings revealed that there was a significant difference in academic motivation among the freshman football players between each month within the Fall 2012 semester, $(F (2, 54) = 4.157 \ p < .021)$.

Table 39

Test of Within Subjects Effects for Fall 2012 Semester

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012</td>
<td>Sphericity Assumed</td>
<td>.652</td>
<td>2</td>
<td>.326</td>
<td>4.157</td>
</tr>
<tr>
<td>Error(Fall 2012)</td>
<td>Sphericity Assumed</td>
<td>4.236</td>
<td>54</td>
<td>.078</td>
<td></td>
</tr>
</tbody>
</table>

Freshman Football Players (Spring 2013)

Table 40 shows descriptive statistics (means and standard deviations) for academic motivation among freshman football players for each month within the Spring 2013 semester. For the freshman football players, the average level of academic motivation during February was 2.2232 (SD=.31595), for March it was 2.2515
(SD=.30629), and for April it was at its highest during the Spring 2013 2.3705 (SD=.33551).

Table 40

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>2.2232</td>
<td>.31595</td>
<td>28</td>
</tr>
<tr>
<td>March</td>
<td>2.2515</td>
<td>.30629</td>
<td>28</td>
</tr>
<tr>
<td>April</td>
<td>2.3705</td>
<td>.33551</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 41 displays a repeated measures ANOVA used to analyze academic motivational among freshman football players for each month within the Spring 2013 semester. Findings revealed that there was a significant difference in academic motivation among the freshman football players between each month within the Spring 2013 semester, \((F(2, 54) = 4.475 \ p < .016)\).

Table 41

<table>
<thead>
<tr>
<th>Test of Within Subjects Effects for Spring 2013 Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Spring 2013</td>
</tr>
<tr>
<td>Error(Spring 2013) Sphericity Assumed</td>
</tr>
</tbody>
</table>

Freshman Football Players (Fall 2012 and Spring 2013)

Table 42 shows descriptive statistics (means and standard deviations) for the academic motivation among freshman football players for the Fall 2012 and Spring 2013 semesters. For the Fall 2012 semester (M=2.2703, SD=.26432) and for the Spring 2013 semester (M=2.2817, SD=.27672). When looking at the overall motivational scores between to the two semesters, the freshman football players indicated that they are
slightly more academically motivated during their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012).

Table 42

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012</td>
<td>2.2703</td>
<td>.26432</td>
<td>28</td>
</tr>
<tr>
<td>Spring 2013</td>
<td>2.2817</td>
<td>.27672</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 43 displays a repeated measures ANOVA used to analyze differences in academic motivation among freshman football players during their competition semester (Fall 2012) and their non-competition semester (Spring 2013). Findings revealed that the academic motivation among freshman football payers was not significantly different during their competition semester Fall 2012 compared to their non-competition semester (Spring 2013), \( F(1, 27) = .045, p < .834 \).

Table 43

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012 and Spring 2013</td>
<td>Sphericity Assumed</td>
<td>1</td>
<td>.002</td>
<td>.045</td>
<td>.834</td>
</tr>
<tr>
<td>Error (Fall 2012 and Spring 2013)</td>
<td>Sphericity Assumed</td>
<td>27</td>
<td>.041</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sophomore Football Players (Fall 2012)

Table 44 shows descriptive statistics (means and standard deviations) for academic motivation among sophomore football players for each month within the Fall 2012 semester. For the sophomore football players, the average level of academic motivation during August was 2.1563 (SD=.36904), for September it was 2.1250
(SD=.24843), and for October it was at its highest during the Fall 2012 semester at 2.2500 (SD=.29042).

Table 44

<table>
<thead>
<tr>
<th>Month</th>
<th>Standing</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>Sophomore</td>
<td>2.1563</td>
<td>.36904</td>
<td>32</td>
</tr>
<tr>
<td>September</td>
<td>Sophomore</td>
<td>2.1250</td>
<td>.24843</td>
<td>32</td>
</tr>
<tr>
<td>October</td>
<td>Sophomore</td>
<td>2.2500</td>
<td>.29042</td>
<td>32</td>
</tr>
</tbody>
</table>

Table 45 displays a repeated measures ANOVA used to analyze academic motivational among sophomore football players for each month within the Fall 2012 semester. Findings revealed that there was a significant difference in academic motivation among sophomore football players between each month within the Fall 2012 semester, \( F (2, 62) = 3.488 \ p < .037 \).

Table 45

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012 Sphericity Assumed</td>
<td>.271</td>
<td>2</td>
<td>.135</td>
<td>3.488</td>
<td>.037</td>
</tr>
<tr>
<td>Error(Fall 2012) Sphericity Assumed</td>
<td>2.407</td>
<td>62</td>
<td>.039</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sophomore Football Players (Spring 2013)

Table 46 shows descriptive statistics (means and standard deviations) for academic motivation among sophomore football players for each month within the Spring 2013 semester. For the sophomore football players, the average level of academic motivation during February was 2.1784 (SD=.36111), for March it was 2.2799
(SD=.32881), and for April it was at its highest during the Spring 2013 semester at 2.3880 (SD=.31403).

Table 46

<table>
<thead>
<tr>
<th>Month</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>2.1784</td>
<td>.36111</td>
<td>32</td>
</tr>
<tr>
<td>March</td>
<td>2.2799</td>
<td>.32881</td>
<td>32</td>
</tr>
<tr>
<td>April</td>
<td>2.3880</td>
<td>.31403</td>
<td>32</td>
</tr>
</tbody>
</table>

Table 47 displays a repeated measures ANOVA used to analyze academic motivational among sophomore football players for each month within the Spring 2013 semester. Findings revealed that there was a significant difference in academic motivation among the sophomore football players between each month within the Spring 2013 semester, ($F(2, 62) = 4.388, p < .017$).

Table 47

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2013</td>
<td>0.703</td>
<td>2</td>
<td>0.352</td>
<td>4.388</td>
<td>.017</td>
</tr>
<tr>
<td>Error(Spring 2013)</td>
<td>4.969</td>
<td>62</td>
<td>0.080</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 48 shows descriptive statistics (means and standard deviations) for the academic motivation among sophomore football players for the Fall 2012 and Spring 2013 semesters. For the Fall 2012 semester (M=2.1771, SD=.26115) and for the Spring 2013 semester (M=2.2821, SD=.24279). When looking at the overall motivational scores between to the two semesters, the sophomore football players indicated that they are
slightly more academically motivated during their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012).

Table 48

<table>
<thead>
<tr>
<th>Descriptive Statistics for Fall 2012 and Spring 2013 Semesters</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophomores</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Fall 2012</td>
<td>2.1771</td>
<td>.26115</td>
</tr>
<tr>
<td>Spring 2013</td>
<td>2.2821</td>
<td>.24279</td>
</tr>
</tbody>
</table>

Table 49 displays a repeated measures ANOVA used to analyze differences in academic motivation among sophomore football players during their competition semester (Fall 2012) and their non-competition semester (Spring 2013). Findings revealed that the academic motivation among sophomore football players was significantly different during their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012), \(F(1, 31) = 5.733, p < .023\).

Table 49

<table>
<thead>
<tr>
<th>Test of Within Subjects Effects for Fall 2012 and Spring 2013 Semesters</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophomores</td>
<td>Type III Sum of Squares</td>
<td>df</td>
<td>Mean Square</td>
<td>F</td>
</tr>
<tr>
<td>Fall 2012 and Spring 2013 Sphericity Assumed</td>
<td>.177</td>
<td>1</td>
<td>.177</td>
<td>5.733</td>
</tr>
<tr>
<td>Error(Fall 2012 and Spring 2013) Sphericity Assumed</td>
<td>.954</td>
<td>31</td>
<td>.031</td>
<td></td>
</tr>
</tbody>
</table>

Junior Football Players (Fall 2012)

Table 50 shows descriptive statistics (means and standard deviations) for academic motivation among junior football players for each month within the Fall 2012 semester. For the junior football players, the average level of academic motivation
during August was 1.9477 (SD=.39745), for September it was 1.9487 (SD=.27907), and for October it was at its highest at 2.1058 (SD=.30506).

Table 50

<table>
<thead>
<tr>
<th></th>
<th>Standing</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>Junior</td>
<td>1.947</td>
<td>.397</td>
<td>13</td>
</tr>
<tr>
<td>September</td>
<td>Junior</td>
<td>1.948</td>
<td>.279</td>
<td>13</td>
</tr>
<tr>
<td>October</td>
<td>Junior</td>
<td>2.106</td>
<td>.305</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 51 displays a repeated measures ANOVA used to analyze academic motivational among junior football players for each month within the Fall 2012 semester. Findings revealed that there was not a significant difference in academic motivation among junior football players between each month within the Fall 2012 semester, \( F(2, 24) = 1.820 \ p < .184 \).

Table 51

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012</td>
<td>Sphericity Assumed</td>
<td>.215</td>
<td>2</td>
<td>.108</td>
<td>1.820</td>
</tr>
<tr>
<td>Error(Fall 2012)</td>
<td>Sphericity Assumed</td>
<td>1.419</td>
<td>24</td>
<td>.059</td>
<td></td>
</tr>
</tbody>
</table>

Junior Football Players (Spring 2013)

Table 52 shows descriptive statistics (means and standard deviations) for academic motivation among junior football players for each month within the Spring 2013 semester. For the junior football players, the average level of academic motivation during February was 2.1250 (SD=.32185), for March it was 2.1218 (SD=.27081), and for April it was at its highest during the Spring 2013 semester at 2.2981 (SD=.19158).
Table 52

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>2.1250</td>
<td>.32185</td>
<td>13</td>
</tr>
<tr>
<td>March</td>
<td>2.1218</td>
<td>.27081</td>
<td>13</td>
</tr>
<tr>
<td>April</td>
<td>2.2981</td>
<td>.19158</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 53 displays a repeated measures ANOVA used to analyze academic motivational among junior football players for each month within the Spring 2013 semester. Findings revealed that there was not a significant difference in academic motivation among the junior football players between each month within the Spring 2013 semester, \( F(2,24) = 2.864 \ p < .077 \).

Table 53

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2013</td>
<td>Sphericity Assumed</td>
<td>2</td>
<td>.132</td>
<td>2.864</td>
<td>.077</td>
</tr>
<tr>
<td>Error(Spring 2013)</td>
<td>Sphericity Assumed</td>
<td>24</td>
<td>.046</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Junior Football Players (Fall 2012 and Spring 2013)

Table 54 shows descriptive statistics (means and standard deviations) for the academic motivation among junior football players for the Fall 2012 and Spring 2013 semesters. For the Fall 2012 semester (M=2.0007, SD=.26499) and for the Spring 2013 semester (M=2.1816, SD=.20107). When looking at the overall motivational scores between to the two semesters, the junior football players indicated that they are slightly more academically motivated during their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012).
Table 54

**Descriptive Statistics for Fall 2012 and Spring 2013 Semesters**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012</td>
<td>2.0007</td>
<td>.26499</td>
<td>13</td>
</tr>
<tr>
<td>Spring 2013</td>
<td>2.1816</td>
<td>.20107</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 55 displays a repeated measures ANOVA used to analyze differences in academic motivation among junior football players during their competition semester (Fall 2012) and their non-competition semester (Spring 2013). Findings revealed that the academic motivation among junior football players was significantly different during their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012), \( F(1, 12) = 10.231 \ p < .008 \).

Table 55

**Test of Within Subjects Effects for Fall 2012 and Spring 2013 Semesters**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012 and Spring 2013</td>
<td>Sphericity Assumed</td>
<td>.213</td>
<td>1</td>
<td>.213</td>
<td>10.231</td>
</tr>
<tr>
<td>Error (Fall 2012 and Spring 2013)</td>
<td>Sphericity Assumed</td>
<td>.249</td>
<td>12</td>
<td>.021</td>
<td>.008</td>
</tr>
</tbody>
</table>

**Senior Football Players**

The number of senior football players who participated in the study did not produce enough participants to run reliable statistics.

**Summary of Results for NCAA Division I Football Players’ Academic Motivation Based on Receiving an Athletic Scholarship.**

Table 56 displays descriptive statistics (means and standard deviations) for the academic motivational constructs in regards to scholarship type for each semester. Scholarship type was defined as either receiving athletic scholarship (Yes) or not.
receiving an athletic scholarship (No). Findings revealed that academic motivation during the Fall 2012 semester was slightly higher for non-scholarship football players (M=2.2770, SD=.23966) than for scholarship football players (M=2.1528, SD=.27855).

Conversely, during the Spring 2013 semester, academic motivation was higher for scholarship football players (M=2.2754, SD=.25099) compared to non-scholarship football players (M=2.2279, SD=.23447).

**Table 56**

<table>
<thead>
<tr>
<th>Scholarship Types</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall 2012</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2.1528</td>
<td>.27855</td>
<td>58</td>
</tr>
<tr>
<td>No</td>
<td>2.2770</td>
<td>.23966</td>
<td>17</td>
</tr>
<tr>
<td><strong>Spring 2013</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2.2754</td>
<td>.25099</td>
<td>58</td>
</tr>
<tr>
<td>No</td>
<td>2.2279</td>
<td>.23447</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 57 indicates a repeated measures ANOVA used to analyze differences between academic motivation and scholarship type during the Fall 2012 and Spring 2013 semester. Findings revealed that there was a significant difference between academic motivation when compared with scholarship type, \( F(1, 73) = 1.114, p < .016 \).

**Table 57**

| Test of Within Subjects Effects for Fall 2012 and Spring 2013 Semesters |
|------------------|-----------------|-------------|-----------|-----------|
| Source           | Type III Sum of Squares | df | Mean Square | F   | Sig. | Partial Eta Squared |
| Fall and Spring | Sphericity Assumed | .035 | 1 | .035 | 1.114 | .295 | .015 |
| Fall and Spring*| Sphericity Assumed | .194 | 1 | .194 | 6.074 | .016 | .077 |
| Error           | Sphericity Assumed | 2.326 | 73 | .032 | | | |
CHAPTER V
DISCUSSION

The purposes of this study were threefold: (1) to develop a better understanding of NCAA Division I football player’s academic motivation within their competition and non-competition semesters; (2) to examine if one of the semesters yields a greater overall academic motivation among the NCAA Division I football players; and (3) to discover if changes occur (i.e. directional pattern) in the academic motivation of NCAA Division I football players within their competition and non-competition semesters. In addition, three independent variables (race/ethnicity, athletic standing, and scholarship type) were tested with academic motivation to discover possible differences.

Research Question One

Using a quantitative approach, the study used a within subjects design to examine NCAA Division I football player’s academic motivation within their competition and non-competition semesters. For this study, findings revealed that there was a significant difference in academic motivation among NCAA Division I football players within their competition semester compared to their non-competition semester. Data indicated that the academic motivation for the NCAA football players was higher during their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012). The results of the study cannot be generalized beyond the sample of the NCAA Division I football players who completed the CSAAM-S; however, the results strengthened previous findings revealing that participating in sports, specifically revenue producing sports, such as football has a negative impact on academic motivation (Adler & Adler 1987; Bowen & Levin, 2003; Ervin, Saunders, Gillis, & Hogrebe, 1985; Gaston, 2002; Hyatt, 2001; Kennedy & Dimick, 1987; Pascarella & Smart, 1991; Suggs, 2003;
Underwood, 1984). Additionally, considering academic motivation can predict academic performance among college student athletes (Adler & Adler, 1985, 1987; Gaston-Gayles, 2002, 2004), the results also reinforce previous findings suggesting that revenue producing sports, such as football has a negative impact on academic performance (Adler & Adler, 1985; Blann, 1985; Bowen & Levin, 2003; Cogan & Petrie, 1996; Miller & Kerr, 2002; Nyquist, 1979; Shulman & Bowen, 2001; Stuart, 1985; Young & Sowa, 1992). Moreover, since the findings of the current study revealed lower levels of academic motivation among football players in their competition semester compared to their non-competition semester, it can be inferred that their academic performance will also follow this pattern (Adler & Adler, 1987, 1991; Frost, 2001; Maloney & McCormick, 1993). The results of the current study are not surprising given the fact that “athletic time commitments have been found to lead to an academic experience defined by the athletic culture and isolated from the academic culture” (Young, 2010 as cited in Hyatt, 2003, p. 22).

Possible contributions to this study propose that the football player’s academic motivation was lower during their competition semester due to the fact that there are more time demands in regards to sport activities such as practicing, watching game film, traveling and competing in competitions, and receiving treatment. Furthermore, the data was collected at a very intense time for the football players because they were surveyed between two highly important games. Additionally, the football players were given the survey during their fall break when classes were not in session, which may have resulted in a lack of motivation towards academics at the time of the survey. These may be
reasons why the football players’ showed a significant difference in academic motivation during their competition semester compared to their non-competition semester.

**Research Question Two**

The current study also produced findings indicating that academic motivation changes within a football player’s competition semester. For example, data indicated that there was a significant difference in academic motivation for each month throughout the competition semester. Specifically, data revealed that academic motivation was lower for the first two months compared to the final month during the Fall 2012 (competition semester). The findings however, did not support the hypothesis stating that academic motivation would indicate a decreasing directional pattern throughout the competition semester (Fall 2012).

**Research Question Three**

Similarly, data also indicated that there was a significant difference in academic motivation for each month throughout the non-competition semester (Spring 2013). Specifically, data revealed that academic motivation was lower for the first two months compared to the final month during the non-competition semester. Due to these findings, the hypothesis stating that academic motivation would indicate an increasing directional pattern throughout the non-competition (Spring 2013) was supported.

From these results, the researcher concluded that academic motivation does change throughout a NCAA Division I football players’ competition and non-competition semester and therefore should be studied accordingly. Furthermore, studying academic motivation over multiple periods in time rather than a single period of time may provide a more accurate account of student athlete’s academic motivation. Gaston (2004)
suggested that assessing motivation over a period of time could provide a better understanding about academic performance among college student athletes. Provided that academic motivation predicts academic performance among student athletes (Adler & Adler, 1985, 1987; Anderson, 2010; Gaston-Gayles, 2002, 2004), the researcher can infer that the football players in this study were performing worse academically in the first two months compared to the last month during both the competition (Fall 2012) and non-competition semesters (Spring 2013). Knowing this information and understanding the influence that academic motivation has on academic performance, school administrators will be better equipped to helping out student athletes’ academic motivation throughout the school year. Having the ability to predict not only who, but when academic motivation is at its lowest, will help school administrators curb low levels of academic motivation which in turn may curb low levels of academic performance.

Reasons for these results may be due to the student athletes’ academic motivation increasing during the months when their athletic participation increased. In contrast to other researchers, some scholars have found sport participation to have a positive effect on academic motivation and academic performance (Astin, 1993; Smedley, Myers, & Harrell, 1993; Young, Ekeler, Sawyer, & Prichard, 1994). In particular, Astin (1993) found that participating in college athletics, increased motivation to earn a degree. During the football player’s competition season the following months were analyzed; August, September, and October. August was the beginning of school and no games were played until September. September and October brought on an increase in athletics participation which may have increased the football player’s motivation to perform academically as well. Subsequently, the football player’s non-competition season
analyzed the following months: February, March, and April. Although no actual games were being played during the non-competition semester and mandatory practice opportunities were limited by the NCAA (NCAA Manual, 2011), student athletes are now increasingly voluntarily engaging in athletic activities on their own (Young, 2010). Also, the football team has a spring practice season which ends with an inter-squad game during the month of April. Moreover, due to these activities, the month of April has an increase in sport activities compared to February and March that may have influenced the football player’s motivation towards academics.

Reasons for these results may be because the football players begin to realize that the semester is almost over and thus start focusing more on their academics. Because there are NCAA academic eligibility requirements, football players must pass a certain number of classes in order to remain eligible for upcoming games (i.e. bowl games) and to ensure eligibility for the subsequent semester. Consequently, they have a heightened awareness that they need to start focusing on academics towards the end of each semester that in turn raises their level of academic motivation.

**Independent Variables**

**Race/Ethnicities.**

Results from the current study did not find a significant difference in academic motivation between Caucasian and African American football players in either of the competition or non-competition semesters. These results contradict many findings from previous scholars (Hrabowski, 2002; Hyatt, 2001; Snyder, 1996) who have found differences in academic motivation among Caucasian and African American student athletes. For example, a seminal study by Pascarella and Smart (1991) analyzed
intercollegiate athletic participation and academic motivation among Caucasian and African American male student-athletes. The sample consisted of 379 colleges and universities and indicated that there was a significant difference between ethnicity and levels of academic motivation. Although their overall results showed a significant difference in academic motivation among ethnicities, they did find that both African American and Caucasian male student-athletes shared a decreased level of academic motivation due to athletic aspirations (Willis, 2005). Another researcher, Snyder (1996) surveyed 327 male student-athletes from five different universities regarding choices relating to academics and athletics. The majority of the sample was Caucasian student athletes (67%) and African American student-athletes (9.6%). Additionally, 40% of the sample participated in either football or basketball; 282 competed at the NCAA Division I level, and 114 played at the NCAA Division III level. Results indicated that African American student-athletes specifically at NCAA Division I institutions were more motivated to pursue a career in professional athletics than to earn a college degree (Snyder, 1996) which has a direct impact on their academic motivation.

Reasons for these results may be because NCAA Division I football is very competitive and student athletes compete at an extremely high level; most of the football players on these teams have NFL aspirations. For example, there are only 120 institutions that compete at the highest level of NCAA Division I football. Of these schools, 66 are the most profitable and are part of an association known as the Bowl Championship Series (BCS) (Young, 2010). Clemson University is one of the institutions that make up the BCS. Young (2010) stated that “the schools competing in the BCS are highly committed to providing successful football programs and recruiting
the most athletically talented student-athletes” (p. 16). As a result of this, and the fact that only football players participated in this study, it is possible that football players at Clemson University have similar levels of NFL career aspirations and thus have similar levels of academic motivation, regardless of their race or ethnicity.

Even though the current study did not find significant differences in academic motivation between African American and Caucasian football players, the results from the current study did find significant differences in academic motivation specifically among the African American football players. For example, the African American football players indicated that they are slightly more academically motivated during their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012). Additionally, results found significant differences in the academic motivation among African American football players for each month during the both of the Fall 2012 and Spring 2013 semester. Specifically, their academic motivation was highest during the last surveyed month of the respective semester (October and April) compared to the earlier months.

When looking specifically at the Caucasian football players, unlike African American football players, academic motivation was not significantly different during their competition semester Fall 2012 compared to their non-competition (Spring 2013) semester. Additionally, unlike African American football players, there was not a significant difference in academic motivation between each month within the Fall 2012 or between each month within the Spring 2013 semester. Interestingly, even without a significant difference between months, similar to African American football players, the
highest levels of academic motivation among the Caucasian football players were during
the last month of each of the Fall 2012 and Spring 2013 semesters.

One reason for the last month yielding the highest levels of academic motivation
for both semesters may be due because these student athletes perform better under
pressure. NCAA Division I football players are considered some of the most athletically
talented student athletes (Young, 2010), and thus are some of the best at performing
under pressure. It is possible that the football players start to become more academically
motivated due to the fact that the semester is about to end and the pressure to succeed
academically is mounting and students are preparing to write final exams. This may be a
reason why the football players’ academic motivation showed a mean difference increase
for the last month of the survey during both the competition (Fall 2012) and non-
competition semester (Spring 2013) regardless of their race/ethnicity.

**Academic Standing.**

Results from the current study found a significant difference in academic
motivation among football players based on their athletic standing during their non-
competition semester (Spring 2013) compared to their competition semester (Fall 2012).
Specifically, the football players indicated a higher level of academic motivation during
the spring 2013 (non-competition) semester compared to the Fall 2012 (competition)
semester. For freshman specifically, data revealed that the overall motivational means
indicated that the freshman football players are slightly more academically motivated
during their non-competition semester (Spring 2013) compared to their competition
semester (Fall 2012); however, it was not statistically significantly different. On the
contrary, findings did reveal a significant difference in academic motivation between
each month during the fall 2012 and during the spring 2013 semester. Similar to the
independent variable of race/ethnicity and its effect on academic motivation, the last
survey month during each semester yielded the highest levels of academic motivation.

For sophomore and junior football players, academic motivation were
significantly different during their non-competition semester (Spring 2013) compared to
their competition semester. Similar to freshman football players, both sophomore and
junior football players were more academically motivated during their non-competition
semester (Spring 2013) compared to their competition semester (Fall 2012). However,
only sophomores produced significant differences in academic motivation for each month
within the Fall 2012 and Spring 2013 semesters, as junior football players failed to follow
this trend. However, all three athletic standings (freshman, sophomore, and junior)
yielded the highest levels of academic motivation during the last survey month of each
semester. The number of senior football players who participated in the study did not
produce enough participants to run reliable statistics; therefore, contributions cannot be
made regarding their academic motivation.

Results from this study share similar aspects to Adler and Adler’s (1987, 1991)
studies that found male basketball players to be more academically motivated during their
freshman and sophomore years compared to their junior and senior years. Additionally,
during their junior and senior years, they became more athletically motivated which has
also shown to decrease academic motivation (Simons, Rheenen, & Covington, 1999,
Watt & Moore, 2001). Similarly, a number of student athletes become disconnected from
their institutions athletic department once their collegiate athletic eligibility is almost
completed (Berry, 2001). These may be the reasons why the junior football players in
this study had the lowest levels of academic motivation compared to both freshman and sophomores during both of the semesters and failed to show a significant increase in academic motivation from Fall 2012 to Spring 2013.

**Scholarship Type.**

Overall, results indicated that the level of academic motivation was slightly higher for non-scholarship football players within the competition semester (Fall 2012) compared to scholarship football players. However, non-scholarship football players indicated a slightly lower level of academic motivation during their non-competition semester (Spring 2013) compared to scholarship football players.

Reasons for these results may be because scholarship student athletes are more focused on athletics than non-scholarship student athletes during the competition semester due to their level of contribution and commitments. Past research has shown that participating in college athletics positively influences a student athlete’s college experience and increases their motivation to earn a degree (Astin, 1993). For the most part, non-scholarship student athletes are not recruited and are considered to be “walk-ons”. In fact, some of these students were already committed to the institution prior to their participation in football so the commitment to academics was already present. On the other hand, scholarship football players are recruited primary for the purpose of playing football rather than earning a degree (Young, 2010). Young (2010) stated that “it is during the recruiting process that the foundational elements of the athletic culture (i.e. focus on athletic over academic goals, dependency on athletic support programs, neglect of classmate and faculty interactions) are laid” (p. 20). In fact, without being recruited to
play football, many football student athletes say that they would not have attended college in the first place (Hyatt, 2003).

An additional reason for the higher levels of academic motivation among scholarship football players compared to non-scholarship football players during the non-competition semester are NCAA academic eligibility requirements. Meeting these requirements is necessary for the football players to be eligible to compete in the subsequent semester. During the student athletes’ non-competition semester (Spring 2013), it is vitally important that they earn enough hours and satisfy GPA requirements going into the next competition semester (Fall 2013) in order to play. Due to the fact that most non-scholarship student athletes are traditionally “walk-ons” and do not actually play in games; they are not as concerned with academic eligibility as scholarship student athletes. Also, scholarship football players may feel a bit more pressure to succeed academically since they are on an athletic scholarship that can be taken away for poor academic performance or athletic ineligibility.

**Recommendations for Future Research**

The data derived from this study are specific to Clemson University NCAA Division I football student athletes. The first recommendation of this study is to replicate it with other NCAA Football players. Collecting more data on academic motivation during the competition and non-competition semesters would help to determine if similar academic motivational levels and changes exist among other NCAA Division I football player populations. Additionally, being able to compare data with other NCAA Division I football student athletes would aide in discovering changes in academic motivation that are specific to Clemson University football players or if other specific characteristics
have an influence on academic motivation. Moreover, it is recommended that comparable data for student athletes from other sports, NCAA Divisions (II and III), and associations (NAIA and Junior College institutions) be collected. This type of study would enable academic motivation to be examined within various categories of student athletes such as race, gender, institution size, and revenue and nonrevenue producing sports. This data would help to discover if all student athletes have academic motivational changes during their competition and non-competition semesters.

The major purpose of the study was to determine if academic motivation among NCAA Division I football players is significantly different during their competition semester compared to their non-competition semester and to discover if academic motivation significantly changes within each semester. With the results from the current study in mind, it is important for future researchers to design studies that capture academic motivation over multiple periods of time rather than at one point in time. Given the design limitation of this study in terms of having to collect data at one point in time with the football players reflecting back on three months within each semester, future studies should collect data at each specific point during the semester.

**Limitations**

Limitations of this study included restricting the sample to only Clemson University football players. While this study sought to be able to generalize to all college student athletes, inferences to from this study are limited to Division I football players. Inferences to other student athletes (NCAA Division II, II, NAIA, and Junior Colleges) would not be appropriate given the type of sport and the nature of high profile student athletes.
An additional limitation was the accuracy of self-reporting among the respondents when completing the CSAAM-S both in the fall and spring semesters. Although, the researcher personally gave instructions and distributed the surveys, students may or may not have fully understood the study and thus answered questions to simply complete the survey quickly. Also, the respondents may have responded to the questions in such a way that they answered on what they think the answer should be, rather than their actual academic motivation at the time.

A third limitation was the data collection procedures of the study including the timing of the CSAAM-S. One of the purposes of the study was to examine academic motivation during three different time periods within a semester in order to determine if changes occur. Given the extreme time demands placed on high profile NCAA Division I football players, and the fact the researcher did not have open access to the team, finding time to collect data was difficult. Thus, instead of the respondents completing the CSAAM-S for each month during the applicable semester, they were required complete the CSAAM-S at one point in time during the applicable semester and reflect back on their academic motivation for each month. Being able to get real time academic motivation levels for each month during the applicable semester rather than collecting the data at one point in time may have yielded different results. Also, memory bias effect may have taken place that would hinder the student athletes to effectively recall their academic motivation properly for each month.

A final limitation of the study was the CSAAM-S. This questionnaire was developed for this study and created by the researcher. Although, the questions were derived by combing questions from four separate instruments found to impact academic
motivation among college student athletes namely the SAMSAQ, (Gaston, 2005); Achievement Goal Questionnaire, (Elliot & McGregor, 2001); Sense of Social Connectedness Scale (Brew et al., 2004); and the Athletic Commitment Relationship Scale (Simons & Rheenen, 2000), it has not been used by any other researchers to determine student athletes’ academic motivation.

Implications for Educational Leaders

The results from this study indicate that academic motivation can change throughout football players’ competition and non-competition semester and shows that academic motivation can be influenced by several variables such as race/ethnicity, athletic standing, and scholarship type. Due to these findings and the knowledge surrounding academic motivation, it is important to understand the implications for student athletes and college athletic administrators.

For student athletes, being able to recognize times when academic motivation is low may help to curb low academic performances. As a student athlete, particularly a Division I football player, it is easy to be distracted by outside influences, sport activities, and social pressures which tend to cause a decrease in academic responsibilities. Trying to stay motivated academically is a challenge for anyone in college, but it is exaggerated for a student whose main focus in college is a sport. It is important for athletic administrators to acknowledge and adequately address this phenomenon and to create support services that facilitate academic motivational stability throughout the year. For years, athletic administrators at NCAA Division I institutions have combated poor academic performance problems by building extravagant standalone academic facilities that house tutorial centers, study hall rooms, and computer labs. I am not proposing to
get rid of these or to stop these services, since in fact they are proving to work and increase academic performance; however, I am proposing to add a psychological approach emphasizing academic motivation. For example, Francis et al. (2004) suggested that academic motivation stems from having a sparked interest which is developed from a ‘love of learning and confidence in their own intellectual abilities’ (p. 8). Building a student athletes’ confidence in their own intellectual abilities is a great way to increase academic motivation and is feasible to achieve. In fact, this concept is similar to the Self-Worth theory which has been examined with Division I student athletes. According to Simons et al., (1999), “self-worth is determined by an individual’s own, and others’, perceptions of one’s ability, perceptions that are mainly tied to successful achievement” (p. 152). Creating programs that work on building the student athlete’s self-confidence and self-perception may increase academic motivation that could yield better academic performances.

Additionally, as Francis et al., (2004) suggested, developing a love of learning may also help with academic motivation. As mentioned throughout this dissertation, student athletes are unique, and many times NCAA Division I football players find themselves at institutions solely for the reason of playing football. Hyatt (2003) found that many NCAA Division I football players would not have attended college in the first place if not for being recruited to play football. If this is the case, football players might not have the “love for learning” that is needed to stay academically motivated. In fact, Berkowitz et al., (2008) suggested that student athletes choose or are pushed into easier majors, known as “clustering”. Clustering happens when student-athletes are “clustered” into easy majors in order to provide an easier path to accomplish the NCAA’s academic
requirements. It is reasonable to believe that a football player who did not personally choose his major does not have the same desire to learn as a football player who personally chose a path. This assumption is formed on the basis that “students are motivated by a desire to increase their knowledge on a subject or by enjoyment from learning the material (Francis at al., 2004, p. 13). Equally, if this desire or enjoyment is not present, than neither is their motivation. This is a concept that athletic administrators need to embrace. It is in this concept that will enable student athletes to not only stay academically motivated throughout the semester, but also reach even higher levels of academic motivation than before. Freshman football players and student athletes in general, need support services that will assist them in finding an academic interest and help them discover a major that will keep them engaged.

**Conclusion**

For this study, NCAA Division I football players were analyzed due to their continual history of performing worse academically than their NCAA student athlete counterparts in terms of GPA, retention, and graduation rates (Adler & Adler, 1991; Bailey & Littleton, 1991; Knight Foundation, 2001; Lapchick, 1996, 1997, 2006; NCAA Research Staff, 2009, 201; Reyes, 1997; Ryan & Deci, 2000b; Sellers, 1992; Suggs, 2003). Moreover, because academic performance has shown to be intertwined with academic motivation, it was important to understand what variables may influence both of these. Though past research has studied this particular population of student athletes in context to academic performance, research over the years has generated conflicting results in terms of how their competition and non-competition semesters influences their academic performance. Furthermore, no research has been generated as to how academic
motivation is affected by these two semesters, until now. According to the data results, football players competing at Clemson University showed higher levels of academic motivation within their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012). These results coincided with the researcher’s hypothesis which stated that the overall academic motivation within the NCAA Division I football player’s competition semester (Fall 2012) will be lower than the overall academic motivation within the NCAA Division I football player’s non-competition semester (Spring 2013).

Secondly, differences were found in academic motivation for each month within the competition semester as well as within the non-competition semester. In fact, for both semesters, academic motivation was lower for the first two months than it was for the last month of the respective semester. The results differed from the researcher’s hypothesis that stated that academic motivation levels would be significantly different for each month indicating a decreasing directional pattern within the NCAA Division I football players’ competition semester.

When discussing academic motivation in association with race/ethnicity, results revealed that there were no differences in academic motivation among the football players during both the competition and non-competition semesters. However, several differences were discovered when looking specifically at a race. For example, as a whole, African American football players indicated higher levels of academic motivation during their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012). Additionally, results found significant differences in the academic motivation among African American football players for each month during the both of
the Fall 2012 and Spring 2013 semester. Specifically, their academic motivation was highest during the last surveyed month of each semester (October and April) compared to the earlier months.

When discussing academic motivation and athletic standing the football players indicated a higher level of academic motivation during the Spring 2013 (non-competition) semester compared to the Fall 2012 (competition) semester. For sophomores and juniors specifically, data revealed their academic motivation to be higher during their non-competition semester (Spring 2013) compared to their competition semester (Fall 2012). Freshman and sophomores both produced significant differences in academic motivation for each month within the Fall 2012 and Spring 2013 semesters. However, all three athletic standings including juniors yielded the highest levels of academic motivation during the last survey month of each semester.

The data analyzing academic motivation and scholarship type indicated a significant difference in academic motivation among non-scholarship football players who indicated to have higher levels of academic motivation within the competition semester (Fall 2012) compared to the non-competition semester (Spring 2013). Oppositely, scholarship football players indicated higher levels of academic motivation within the non-competition semester (Spring 2013) when compared with the competition semester (Fall 2012)

Results from the study will help to provide more information to campus leaders and athletic department administrators in order to develop, implement, and better time motivational programs for NCAA Division I football players; particularly, those football players who have shown lower levels of academic motivation (i.e. juniors and scholarship
recipients) and specific times when academic motivation is lower (i.e. competition semester and early on in each semester). It is in these motivational programs that would help to increase academic motivation and prevent poor academic performances among college student athletes. Additionally, investigating academic motivation through moments of time rather than a single moment of time can lead to a better understanding of the concept of academic motivation and add a new dimension to the way academic motivation is be studied in the future. The results from this study will add to the existing body of literature on NCAA Division I football players’ academic motivation, competition and non-competition semester affects on academic motivation, and ultimately allow for inferences on the academic performance of all college student athletes.
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MA: Allyn and Bacon.


APPENDICES

APPENDIX A.

COLLEGE STUDENT-ATHLETES’ ACADEMIC MOTIVATION-SURVEY

(FALL 2012)
COLLEGE STUDENT ATHLETES’ ACADEMIC MOTIVATION SURVEY (CSAAM-S)

Thank you for agreeing to participate in the College Student Athletes' Academic Motivation Survey. The purpose of this questionnaire is to assess your academic motivation throughout your competition semester as well as throughout your non-competition semester. Each statement will require you to reflect on your motivational level at each point in time during this semester. Your honest responses to the statements will help athletic administrators better predict the times when NCAA Division I football players’ academic motivation is high and/or low throughout their college careers and will help them to provide more effective support services to you as a learner.

Directions: Please read each statement carefully. Each statement will require you to reflect back on your motivational level during a certain point in time throughout your competition and non-competition semesters. Indicate the extent to which you experienced 1) low motivation, 2) motivated, or 3) high motivation for each month. Please refer to the legend below which will help to explain each response in more detail.

Please know that you do not have to use every number for each statement, rather you can use the same number for all three months if appropriate.

For example:

1 = Low Motivation  2 = Motivated  3 = High Motivation

1. Level of motivation to perform better in my sport than my school work.
   1 August  1 September  2 October

You indicated that for the month of August and September your motivation was low compared to October when it was high.

Legend:

Low Motivation means that you have limited desire to achieve in your learning. Your level of motivation towards school is less than what you would expect of yourself.

Motivated means that you have a desire to achieve in your learning. Your level of motivation towards school is consistent with what you would expect of yourself.

High Motivation means that you have a high desire to achieve in your learning. Your level of motivation towards school is higher than what you would expect of yourself.
Please respond to all of the items on this survey. The first page of the survey contains demographic information that will assist us when looking at additional variables that may also be associated to academic motivational levels. Please know that all responses and information from this survey will be kept confidential. Your name is necessary so the data can be tracked to a specific student over the two times the survey is administered. Specific names will not be used in reporting the data results.

Thank you for your participation and honesty when completing this survey.

Demographic Information

Participant Name: ____________________________

1. What is your race/ethnicity?
   _____ Black/African American    _____ White/Caucasian
   _____ Asian/Pacific Islander    _____ Hispanic
   _____ American Indian          _____ Other (specify) ______________________

2. Are you on athletic scholarship?   _____ Yes   _____ No

3. What is your athletic standing?
   _____ Freshman                  _____ Sophomore
   _____ Junior                    _____ Senior

4. What is your date of birth?
   Month _____ Day _____ Year _____
COLLEGE STUDENT ATHLETES’ ACADEMIC MOTIVATION SURVEY (CSAAM-S)

Indicate the extent to which you experienced 1) low motivation; 2) motivated or 3) high motivation for each month. Again, please know that you do not have to use every number for each question; rather you can use the same number for all three months if appropriate. Please refer to the legend on the cover page which will help to explain each motivational level in more detail.

1 = Low Motivation  2 = Motivated  3 = High Motivation

1. Level of motivation to put in the time to earn excellent grades.
   ___ August ___ September ___ October

2. Level of motivation to achieve a high level of academic performance in my classes.
   ___ August ___ September ___ October

3. Level of motivation to put in the effort to earn excellent grades in my courses.
   ___ August ___ September ___ October

4. Level of motivation due to the fear of performing poorly academically.
   ___ August ___ September ___ October

5. Level of motivation to learn as much as possible in my classes.
   ___ August ___ September ___ October

6. Level of motivation to learn what is taught in my courses.
   ___ August ___ September ___ October

7. Level of motivation to earn better grades than most of the other students.
   ___ August ___ September ___ October

8. Level of motivation to put energy into sports because I know I have got the rest of my life to earn a degree.
   ___ August ___ September ___ October

9. Level of motivation to succeed in sports rather than do well in school.
   ___ August ___ September ___ October

10. Level of motivation to complete homework or assignments.
    ___ August ___ September ___ October

11. Level of motivation to utilize extra time towards academics.
    ___ August ___ September ___ October
12. Level of motivation to feel like a part of the university.
   _____ August _____ September _____ October

13. Level of motivation to study hard enough to stay eligible to play my sport.
   _____ August _____ September _____ October

14. Level of motivation to learn all that I possibly could in my classes.
   _____ August _____ September _____ October

15. Level of motivation to ask instructors questions about things that I did not understand.
   _____ August _____ September _____ October

16. Level of motivation to earn an “A” on a test or major assignment over winning a game.
   _____ August _____ September _____ October

17. Level of motivation to achieve a high grade point average (3.0 or above).
   _____ August _____ September _____ October

18. Level of motivation to perform better academically than others from my team.
   _____ August _____ September _____ October

19. Level of motivation to earn a college degree.
   _____ August _____ September _____ October

20. Level of motivation to participate in my sport even if it interferes with my progress towards a degree.
    _____ August _____ September _____ October

21. Level of motivation to perform better in my sport than my school.
    _____ August _____ September _____ October

22. Level of motivation to care about what I am doing in my classes.
    _____ August _____ September _____ October

23. Level of motivation to feel a sense of belonging to the university.
    _____ August _____ September _____ October

24. Level of motivation to concentrate on what I am doing in my classes.
    _____ August _____ September _____ October
APPENDIX B.

COLLEGE STUDENT ATHLETES’ ACADEMIC MOTIVATION SURVEY

(SPRING 2013)
COLLEGE STUDENT ATHLETES’ ACADEMIC MOTIVATION SURVEY (CSAAM-S)

Thank you for agreeing to participate in the College Student Athletes’ Academic Motivation Survey. The purpose of this questionnaire is to assess your academic motivation throughout your competition semester as well as throughout your non-competition semester. Each statement will require you to reflect on your motivational level at each point in time during this semester. Your honest responses to the statements will help athletic administrators better predict the times when NCAA Division I football players’ academic motivation is high and/or low throughout their college careers and will help them to provide more effective support services to you as a learner.

Directions: Please read each statement carefully. Each statement will require you to reflect back on your motivational level during a certain point in time throughout your competition and non-competition semesters. Indicate the extent to which you experienced 1) low motivation, 2) motivated, or 3) high motivation for each month. Please refer to the legend below which will help to explain each response in more detail.

Please know that you do not have to use every number for each statement, rather you can use the same number for all three months if appropriate.

For example:

1= Low Motivation  2= Motivated  3= High Motivation

1. Level of motivation to perform better in my sport than my school work.
   _1_ February  _1_ March  _2_ April

You indicated that for the month of February and March your motivation was low compared to April when it was high.

Legend:

Low Motivation means that you have limited desire to achieve in your learning. Your level of motivation towards school is less than what you would expect of yourself.

Motivated means that you have a desire to achieve in your learning. Your level of motivation towards school is consistent with what you would expect of yourself.

High Motivation means that you have a high desire to achieve in your learning. Your level of motivation towards school is higher than what you would expect of yourself.
Please respond to all of the items on this survey. The first page of the survey contains demographic information that will assist us when looking at additional variables that may also be associated to academic motivational levels. Please know that all responses and information from this survey will be kept confidential. Your name is necessary so the data can be tracked to a specific student over the two times the survey is administered. Specific names will not be used in reporting the data results.

Thank you for your participation and honesty when completing this survey.

Demographic Information

Participant Name: _______________________

1. What is your race/ethnicity?
   
   _____ Black/African American   _____ White/Caucasian
   _____ Asian/Pacific Islander   _____ Hispanic
   _____ American Indian   _____ Other (specify) ____________________

2. Are you on athletic scholarship?   _____ Yes   _____ No

3. What is your athletic standing?
   
   _____ Freshman
   _____ Sophomore
   _____ Junior
   _____ Senior

4. What is your date of birth?
   
   Month _____ Day _____ Year _____
COLLEGE STUDENT ATHLETES’ ACADEMIC MOTIVATION SURVEY (CSAAM-S)

Indicate the extent to which you experienced 1) low motivation; 2) motivated or 3) high motivation for each month. Again, please know that you do not have to use every number for each question; rather you can use the same number for all three months if appropriate. Please refer to the legend on the cover page which will help to explain each motivational level in more detail.

1 = Low Motivation  2 = Motivated  3 = High Motivation

1. Level of motivation to put in the time to earn excellent grades.
   ___ February   ___ March   ___ April

2. Level of motivation to achieve a high level of academic performance in my classes.
   ___ February   ___ March   ___ April

3. Level of motivation to put in the effort to earn excellent grades in my courses.
   ___ February   ___ March   ___ April

4. Level of motivation due to the fear of performing poorly academically.
   ___ February   ___ March   ___ April

5. Level of motivation to learn as much as possible in my classes.
   ___ February   ___ March   ___ April

6. Level of motivation to learn what is taught in my courses.
   ___ February   ___ March   ___ April

7. Level of motivation to earn better grades than most of the other students.
   ___ February   ___ March   ___ April

8. Level of motivation to put energy into sports because I know I have got the rest of my life to earn a degree.
   ___ February   ___ March   ___ April

9. Level of motivation to succeed in sports rather than do well in school.
   ___ February   ___ March   ___ April

10. Level of motivation to complete homework or assignments.
    ___ February   ___ March   ___ April

11. Level of motivation to utilize extra time towards academics.
    ___ February   ___ March   ___ April
12. Level of motivation to feel like a part of the university.
   _____ February _____ March _____ April

13. Level of motivation to study hard enough to stay eligible to play my sport.
   _____ February _____ March _____ April

14. Level of motivation to learn all that I possibly could in my classes.
   _____ February _____ March _____ April

15. Level of motivation to ask instructors questions about things that I did not understand.
   _____ February _____ March _____ April

16. Level of motivation to earn an “A” on a test or major assignment over winning a game.
   _____ February _____ March _____ April

17. Level of motivation to achieve a high grade point average (3.0 or above).
   _____ February _____ March _____ April

18. Level of motivation to perform better academically than others from my team.
   _____ February _____ March _____ April

19. Level of motivation to earn a college degree.
   _____ February _____ March _____ April

20. Level of motivation to participate in my sport even if it interferes with my progress towards a degree.
   _____ February _____ March _____ April

21. Level of motivation to perform better in my sport than my school.
   _____ February _____ March _____ April

22. Level of motivation to care about what I am doing in my classes.
   _____ February _____ March _____ April

23. Level of motivation to feel a sense of belonging to the university.
   _____ February _____ March _____ April

24. Level of motivation to concentrate on what I am doing in my classes.
   _____ February _____ March _____ April
APPENDIX C.

STUDENT ATHLETE INFORMED CONSENT FORM

COLLEGE OF EDUCATION

DEPARTMENT OF LEADERSHIP, TECHNOLOGY, AND HUMAN DEVELOPMENT

INFORMED CONSENT FORM

Dear participants,

My name is Ian Potter and like you, I participated as a collegiate athlete at Clemson University. I continue to work in the field of collegiate athletics and have a passion working with student athletes. I have continued my education and I am now working on my doctorate at Georgia Southern University. This opportunity has allowed me to combine two things I am passionate about: student athletes and education. Moreover, I have been allowed to conduct a research project on you and your team which will add to the existing research on college football players and bring a new dimension when looking at academic motivation. The following guidelines will provide you with the particulars of the study and your involvement.

Purpose of Study:
The purpose of this study is to investigate academic motivational levels among college football players during the competition and non-competition semester in order to help identify times when your academic motivational levels are high or low.

Benefits of the Study:
The results of this study will benefit you because you will gain an understanding of your academic motivation and times when your academic motivation is high or low. Knowing this information will help you be cognizant of when you start feeling less academically motivated which may help to curb low academic performance in your classes. Additionally, the results will enable your campus leaders and athletic department administrators to better understand football player’s academic motivation. For example, results from the study will be noteworthy in providing more information to campus leaders and athletic department administrators in order to develop and implement motivational programs for football players who are identified as having low levels of academic motivation. These motivational programs will perhaps help prevent poor academic performances among the football players. Additionally, the results of this study may help other athletic departments with similar characteristics to better understand their football player’s academic motivation. Knowing this information will allow each athletic department to tailor motivational strategies in order to increase academic motivation during periods when it has shown to be low.

Participation / Duration/Time required
Your participation in this research will include completion of the College Student Athlete Academic Motivation Survey (CSAAM-S), which was designed by the researcher. The CSAAM-S used questions derived from four reliable instruments found to impact academic motivation, all based on different theoretical lenses (SAMSAC, Gaston, 2005; Achievement Goal Questionnaire, Elliot and McGregor (2001)); Sense of Social Connectedness Scale (Brew et al., 2004; School Belonging theory (Mueller, 2008); Athletic Commitment Relationship Scale (Simons and Rheenen, 2000).

During two team meetings, one in October 2012 and the other in March 2013, I will introduce the study. I will answer any questions that you may have, and then you will voluntarily complete the CSAAM-S. The average time to complete the survey will be approximately twenty minutes. The survey will be the same for both meetings as this will help gauge your academic motivation at these two different points in time.

Risks:
Risk is no greater than risk associated with daily life experiences. There is a possibility that after the study is completed and you receive your individual results (if requested) you may find that you academic motivation was lower than expected which may have psychological effects.

Statement of Confidentiality:
Your name will not be used in the study and the results will be anonymous. All data will be reported in aggregate form so individual answers will not be identifiable; however, if you would like your individual results, after the completion of the study and a completed defense the CSAAAM-S results will be available to you if requested by March 2016. Only you may request your results and your results will be emailed to you directly. You will not be able to retrieve other participant’s results. All data files will be maintained in a locked file cabinet in the researcher’s office. At the conclusion of March 2016, all CSAAAM-S results will be shredded. Anticipated destruction date will be April 2016.

Right to Ask Questions:
You have the right to ask questions and have those questions answered. If you have questions about this study, please contact Ian Potter or the researcher’s faculty advisor, whose contact information is located at the end of the informed consent. For questions concerning your rights as a research participant, contact Georgia Southern University Office of Research Services and Sponsored Programs at 912-478-0843.

Voluntary Participation:
As a participant you should know that you do not have to participate in this research and may end your participation at any time by expressing that to Ian Potter (the researcher). Also, you should know that you do not have to answer any questions they do not want to answer. However, please be aware that by not answering a single question will result in an invalid survey and cannot be used in the overall results.

Penalty:
There is no penalty for deciding not to participate in the study. You may decide at any time that you do not want to participate further and may withdraw without penalty or retribution.

You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below.

You will be given a copy of this consent form to keep for your records. This project has been reviewed and approved by the GSU Institutional Review Board under tracking number 1113108.

Title of Project: Investigating academic motivation among NCAA Division 1 football players during their competition semester and their non-competition semester.

Principal Investigator: Ian Potter, 678-542-6837, ip00088@georgiasouthern.edu
Faculty Advisor: Dr. Devon Jensen, 912-489-1143, devonjensen@georgiasouthern.edu

Participant Signature

Date

I, the undersigned, verify that the above informed consent procedure has been followed.

Investigator Signature

Date
APPENDIX D.

PERMISSION STATEMENT FROM DR. JANIE HODGE

September 26, 2012

Human Subjects - Institutional Review Board
Georgia Southern University
P.O. Box 8005
Statesboro, GA 30461

To Whom It May Concern:

Ian Potter has requested permission to collect research data from students at Clemson University through a project entitled Investigating academic motivation among NCAA division 1 football players during their competition semester and their non-competition semester. I have been informed of the purposes of the study and the nature of the research procedures. I have also been given an opportunity to ask questions of the researcher.

As Clemson University’s Faculty Athletics Representative, I have received verbal approval from Coach Dabo Swinney through Woody McCorvey to grant permission to have the researcher recruit research participants from our Clemson University. Ian Potter is permitted to collect research data during the times specified by the Clemson Football Coaching staff. The researcher has agreed to the following restrictions: group-administered survey that takes approximately 30 minutes to be administered during Clemson’s fall break and again in spring during a specified meeting time to be determined by the football staff.

The researcher is also aware that Clemson’s IRB must review and approve the project prior to initiation of the research.

If you have any questions, please contact me at 864-656-1613.

Sincerely,

Janie Hodge
Clemson University Faculty Athletics Representative
APPENDIX E.

GSU HUMAN SUBJECTS COMMITTEE APPROVAL MEMORANDUM

Georgia Southern University
Office of Research Services & Sponsored Programs

Institutional Review Board (IRB)

Phone: 912-478-0843
Fax: 912-478-0719

Venez Hall 2021
IRB@GeorgiaSouthern.edu
P.O. Box 8085
Statesboro, GA 30460

To: Ian Potter
    Dr. Devon Jensen

CC: Charles E. Patterson
    Vice President for Research and Dean of the Graduate College

From: Office of Research Services and Sponsored Programs

Administrative Support Office for Research Oversight Committees
(IACUC/IBC/IRB)

Initial Approval Date: 10/08/12
Expiration Date: 05/31/13
Subject: Status of Application for Approval to Utilize Human Subjects in Research

After a review of your proposed research project numbered H13108 and titled “Investigating Academic Motivation Among NCAA Division I Football Players During their Competition Semester and their Non-Competition Semester,” it appears that (1) the research subjects are at minimal risk, (2) appropriate safeguards are planned, and (3) the research activities involve only procedures which are allowable. You are authorized to enroll up to a maximum of 125 subjects.

Therefore, as authorized in the Federal Policy for the Protection of Human Subjects, I am pleased to notify you that the Institutional Review Board has approved your proposed research.

If at the end of this approval period there have been no changes to the research protocol, you may request an extension of the approval period. Total project approval on this application may not exceed 36 months. If additional time is required, a new application may be submitted for continuing work. In the interim, please provide the IRB with any information concerning any significant adverse event, whether or not it is believed to be related to the study, within five working days of the event. In addition, if a change or modification of the approved methodology becomes necessary, you must notify the IRB Coordinator prior to initiating any such changes or modifications. At that time, an amended application for IRB approval may be submitted. Upon completion of your data collection, you are required to complete a Research Study Termination form to notify the IRB Coordinator, so your file may be closed.

Sincerely,

[Signature]

Eleanor Haynes
Compliance Officer
APPENDIX F.

Clemson University Human Subjects Committee Approval Memorandum

From: Laura Moll
To: Jan Potter
Cc: Nalinee Patin; Jan Hodge
Subject: Your dissertation research through Georgia Southern University entitled "Investigating Academic Motivation among NCAA Division I Football Players during their Competition Semester and their Non-Competition Semester"
Date: Wednesday, September 26, 2012 3:35:27 PM
Attachments: image001.png

Dear Mr. Potter,

The Clemson University Office of Research Compliance (ORC) has determined that the study identified above does not engage Clemson University (CU) in research involving human subjects [45 CFR 46.103(a); “Guidance on Engagement of Institutions in Human Subjects Research,” Office for Human Research Protections (OHRP), October 16, 2008]. Therefore, this protocol is not subject to Clemson University IRB review. You may begin the study here at Clemson once you have received approval from the Georgia Southern University IRB.

Based on the information you provided Nalinee Patin about the manner in which this study will be carried out, Clemson’s participation in this study does not engage the University in research involving human subjects [45 CFR 46.103(a); “Guidance on Engagement of Institutions in Human Subjects Research,” Office for Human Research Protections (OHRP), October 16, 2008]. Therefore, this study is not subject to review by the CU IRB. Specifically, I’ve determined that no member of the CU community will be obtaining informed consent from participants, obtaining research data through intervention or interaction with individuals, or receiving identifiable private information that is collected through this research study. Collection of these data from CU students may proceed without local review and approval of this study.

It is the responsibility of the Clemson University Office of Research Compliance (ORC) to determine whether any specific research project requires review by the CU IRB. Please contact this office again if there are any changes to this study that might bring it under the purview of the CU IRB.

Thank you for contacting us to check on whether local IRB review was needed for this project. Please feel free to contact me again if you have any further questions. Good luck with your study.

Best,

Laura Moll :-)