# Student-Athlete or Athlete-Student: An Examination of the Relationship between Academic Performance and Athletic Participation in Division III Female Athletes

By

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**Abstract**

Does athletic participation factor into the academic performance of female NCAA Division III intercollegiate student-athletes? This study involved the participation of 35 female student-athletes ranging from 18 to 22 years of age. The study was directed towards determining the relationship between athletic participation and academic performance—specifically, if GPA changed between playing seasons, if the extent to which one identifies as an athlete affects GPA, and if GPA changes over the course of time spent in college. This was examined with a questionnaire consisting of two parts. Participants answered the Athletic Identity Measurement Scale (Brewer & Cornelius, 2001) and demographic questions. Results suggest that athletic participation at the Division III level produces little impact on academic performance. Specifically, GPA in season did not differ from GPA out of season, the GPAs of those identifying more as athletes did not differ from the GPAs of those identifying less as athletes, and GPA did not differ from freshman to senior year.

*Keywords:* academic performance, athletic identity, athletic participation, Division I, Division III, National Collegiate Athletic Association (NCAA), student-athlete

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# Chapter 1

# Introduction

## Background

Athletics have remained at the core of American culture for centuries and continue to receive a significant amount of attention in today's society: from newspaper articles and television channels to sports paraphernalia and movies. Recently, attention has shifted somewhat from focusing solely on athletics to also looking at academics, which leads one to question terminology: student-athlete or athlete-student (Dilley-Knoles, Burnett, & Peak, 2010).

It has been proposed that the increased concern being placed on academics might be a result of the public's need for accountability (Gaston Gayles & Hu, 2009). A fairly widespread negative attitude toward athletes and their academics can be found in society. Many blame participation in athletics for poor academic performance. This perception is only reinforced when an athlete fails to act appropriately or does not put forth effort in the classroom. These actions represent just a few of the reasons why the public may view athletic participation more as a detriment than as a benefit. According to Gaston Gayles and Hu (2009): "Finding the proper balance between intercollegiate athletic participation and the goals of higher education remains a pressing issue for colleges and universities" (p. 101).

Some suggest that the public's negative perception has resulted in a growing interest by the National Collegiate Athletic Association (NCAA). A few of the ways in which the NCAA responded to the negative perception include the following: restricting time spent on anything related to athletics, limiting how many athletes can be housed

together, providing academic resources for Division I student-athletes, and developing the Academic Progress Report (APR) (Comeaux, Speer, Taustine, & Harrison, 2011; Dilley-Knoles et al., 2010; Gaston Gayles & Hu, 2009). The NCAA believed that the APR would encourage prospective student-athletes to consider an academic career in addition to an athletic one and this would subsequently result in the most successful academic institutions attracting the most successful athletes. In turn, the NCAA thought that over time this would help create a more positive view of the relationship between athletic participation and academic performance (Dilley-Knoles et al., 2010).

To maintain positive optics between athletics and academics, the NCAA has created strict standards to motivate colleges and universities to improve the academic standing of their athletes. These standards create a rise in competition between institutions to provide quality academic services and resources to all student-athletes. The pressure placed on the coaches and athletes to maintain these academic standards represents one of the reasons for the development of resources specifically tailored to athletes, including tutoring, academic advising, and learning effective study skills. (Dilley-Knoles, et al., 2010; Monda, et al., 2015). This one-size-fits-all approach leads one to question just how successful these academic programs might be and do they accommodate all types of student-athletes (Dilley-Knoles, et al., 2010).

Despite the increased interest in improving athletes' academic performance, athletic departments still pressure athletes to keep athletics as their main focus (Dilley-Knoles et al., 2010). Student-athletes represent a unique group of individuals, because they attend college to be not only students but also athletes. Collegiate athletes experience a significant amount of pressure in this dual-performance role, and it is this

pressure that often results in athletics being prioritized over academics (Jayakumar & Comeaux, 2016; Monda, Etzel, Shannon, & Wooding, 2015; Parsons, 2013).

The growing interest in an athlete's academic performance brings up the importance of the influential factors affecting this relationship. Potential factors and questions include the following: What year is the most rigorous (e.g., freshman, sophomore, junior, senior)? Is there a difference between sports (as some sports are well-known for the athletes who struggle academically)? Is there a difference between male and female student-athletes? Does in-season academic performance differ from out-of-season performance (Dilley-Knoles et al., 2010)? Do the current measures meet the needs of the athletes? The "old adage 'one size fits all' may not be an appropriate method for helping today's athlete to make the grade," which makes the area an even greater topic of concern (Dilley-Knoles et al., 2010, p. 5). By identifying athletic-related factors that influence academic performance, measures can then be created to target at-risk student-athlete populations and assist in better preparing them academically by implementing more individualized methods (Dilley-Knoles et al., 2010).

**Problem Statement**

Most of the existing literature focuses on the academic performance of NCAA Division I high-profile athletes, such as football and men's basketball players (Parsons, 2013). The majority of this research measured academic performance by analyzing grade point averages (GPAs), credits earned, and personal accounts from the players themselves of their experiences as student-athletes (Jayakumar & Comeaux, 2016; Parsons, 2013; Scott, Paskus, Miranda, & McArdle, 2008). Findings revealed that many factors play a role in affecting academic performance; therefore, it is important to identify

these factors at different levels of athletics (e.g., NCAA Division I, II, III) and different types of institutions (e.g., large, small, public, liberal arts) to help target at-risk groups and address the issues in a proactive manner (Monda, et al., 2015; Scott, et al., 2008).

Findings have been relatively consistent across studies, showing that a large number of athletes tend to exhibit lower levels of academic performance related to in-season and out-of-season time demands, internal and external pressures, types and number of classes they enrolled in, and academic preparedness, to name a few (Scott, et al., 2008). Therefore, creating a foundation on which collegiate athletes can achieve success—on the court and in the classroom—continues to be an important topic in higher education (Monda, et al., 2015).

As larger, Division I institutions—where most research in this area has been conducted to date—tend to be thought of as more athletically focused, one could reasonably conclude that smaller, Division III institutions that pride themselves on their academic mission might provide revealing findings regarding their student-athletes' academic performance (Emerson, Brooks, & McKenzie, 2009). As stated by Emerson, Brooks, and McKenzie (2009), "A survey by the NCAA Division III Presidents Council finds that 95% of Division III institutions agree that student-athletes should be recruited with, and perform at, the same academic standards as the general student body" and "athletes should be 'representative' of their own student bodies" (p. 66, 68). Little research exists that studied smaller, more academically-focused institutions, particularly female athletic programs, to determine whether the student-athletes uphold the institution's academic mission and values.

**Purpose**

The purpose of this study was to gain a better understanding of the relationship between academic performance and athletics for female student-athletes at the Division III level by examining potential factors that might affect female student-athletes' GPAs. In particular, this study examined the connections between athletic identity and GPA using Brewer and Cornelius' (2001) Athletic Identity Measurement Scale (AIMS). The study also investigated whether there is a change in GPA over time (e.g., freshman year to senior year), as well as between seasons (e.g., in season versus out of season).

**Guiding Questions**

The following questions guided this research study:

- Is there a difference in the academic performance of student-athletes exhibiting a high athletic identity compared to those expressing a low athletic identity, as measured by Brewer and Cornelius's (2001) Athletic Identity Measurement Scale (AIMS)?
- Do GPAs vary between sport's different seasons, in regards to in-season and out-of-season academic performance?
- Does academic performance change from a student-athlete's first year in college to her final year? Does performance improve or decline with time?

**Hypotheses**

In the present study, the researcher investigated five hypothesis sets, each hypothesis examined different factors that could affect subsequent academic performance. More specifically, the researcher investigated the effect, if any, athletic participation had on GPAs.

The first null hypothesis analyzed the effect of athletic identity on academic performance. The null hypothesis states that female student-athletes scoring higher on the Athletic Identity Measurement Scale (AIMS), meaning those students identifying more as an athlete would have a greater than or equal GPA than those student-athletes who identified themselves lower on the AIMS. The research hypothesis was that athletes reporting higher scores on the AIMS would have a lower GPA.

$H_0$: $X_{\text{HIGH AIMS}} \geq X_{\text{LOW AIMS}}$

$H_1$: $X_{\text{HIGH AIMS}} < X_{\text{LOW AIMS}}$

The second null hypothesis analyzed the effect playing season had on academic performance. The null hypothesis indicates that the average GPA would be equal "in season" compared to "out of season". The corresponding research hypothesis was that the GPAs in season would be different than the GPAs out of season.

$H_0$: $X_{\text{IN}} = X_{\text{OUT}}$

$H_1$: $X_{\text{IN}} \neq X_{\text{OUT}}$

The third, fourth, and fifth null hypotheses analyzed the effect of time in college on academic performance. The third null hypothesis states that GPAs during freshman year would not change or would decrease from freshman year to sophomore year. The research hypothesis states that GPAs during freshman year would be lower than GPAs during sophomore year.

$H_0$: $X_{\text{SOPHOMORE}} \leq X_{\text{FRESHMAN}}$

$H_1$: $X_{\text{SOPHOMORE}} > X_{\text{FRESHMAN}}$

The fourth null hypothesis states that GPAs would not change or would decrease from freshman year to junior year. The research hypothesis states that GPAs during freshman year would be lower than GPAs during junior year.

$H_0$: $X_{JUNIOR} \leq X_{FRESHMAN}$

$H_1$: $X_{JUNIOR} > X_{FRESHMAN}$

The fifth null hypothesis states that GPAs would not change or would decrease from freshman year to senior year. The research hypothesis states that GPAs during freshman year would be lower than GPAs during senior year.

$H_0$: $X_{SENIOR} \leq X_{FRESHMAN}$

$H_1$: $X_{SENIOR} > X_{FRESHMAN}$

**Definition of Terms**

**AIMS**: Athletic Identity Measurement Scale, higher scores indicate identifying more as an athlete and lower scores indicate identifying less as an athlete

**APR**: academic progress rate, "based on eligibility and retention of student-athletes" (Dilley-Knoles et al., 2010, p. 3), meant to encourage athletic departments to invest more in the academic performance of student-athletes

**GPA**: grade point average

**NCAA**: National Collegiate Athletic Association

**Chapter Summary**

Academic performance of student-athletes continues to be a topic of debate in higher education; therefore, it is important to identify factors that impact the academic performance of student-athletes. To date, researchers have focused primarily on studying male athletes in revenue-producing sports at large, Division I institutions. The purpose of

the present study was to expand the current research by investigating female student-athletes at a smaller, more academically focused Division III institution. The first hypothesis examined the relationship between the extent to which a student-athlete identified as an athlete and her academic performance, measured by GPA. The second hypothesis analyzed if being in season or out of season impacted academic performance. In addition, the third, fourth, and fifth hypotheses investigated whether or not time influenced academic performance from freshman year to senior year (e.g., if performance improved over time).

# Chapter 2

# Review of Related Literature

## Historic Overview

In 2014, 2.9 million students graduated high school, of those approximately two million (68%) attended college the following fall (USDE-NCES, 2016). The college search process can be both exciting and stressful; it represents a time in which high school seniors start out on one of the most important journeys of their lives. While some have a relatively quick and simple decision to make, others embark on a long process full of evaluations and cross-comparisons of various colleges and universities (Comeaux, Speer, Taustine, & Harrison, 2011; Kankey & Quarterman, 2007). As stated by Comeaux, Speer, Taustine, and Harrison (2011):

> Transitioning from high school to college can be refreshing for some students and a daunting task for others. Many students are able to adjust and meet the social and intellectual challenges of their first college year, and may even excel in an entirely new environment. Some students, however, find that the transition into college is at best demanding and stressful. (p. 35, 36)

With just under 5,000 higher education institutions to choose from, high school seniors must take into account a wide variety of factors, including the areas of: academics, athletics, finance, and campus life (USDE-NCES, 2016). For high school seniors, deciding whether or not to continue playing sports in college can be one of the most difficult decisions of the college search process. Not only must high school athletes choose if they want to be a collegiate athlete, they must choose what institution to play for.

Before choosing a college or university to attend, high school seniors must complete a decision-making process. Ryan, Groves, and Schneider (2007) conducted a study in which they examined that process. They wanted to use research to create a model of the thought process behind how an athlete ultimately chooses which college or university to attend. Their research uncovered six influential themes, including "academic, coach, [sport] program, personal, geographical, and financial" reasons (Ryan, Groves, & Schneider, 2007, p. 534). Each theme or category had a number of sub-categories with a common theme. Academic factors shared the commonality of degree completion and career opportunities after graduation. Coaching factors tended to relate to the relationship between the coach and the player, specifically in terms of what effect the coach has on the development of the whole student-athlete. Subcategories of the athletic program (e.g., win-loss record, toughness of the conference, traditions) shared the theme of wanting to participate in a successful program (Ryan, et al., 2007). Personal factors related to the extent to which a prospective student might go to others, such as family or high school coaches for advice in making a decision. Geographic factors involved whether a student wanted to be closer or farther from home. Finally, financial influences revolved around the way in which a student-athlete wanted to live—in terms of lifestyle as well as the worth of the cost-benefit (Ryan et al., 2007).

**College Decision Factors**

Research looking into reasons why student-athletes choose a particular institution dates back to the 1970s. Most of this research focused on NCAA Division I student-athletes. Findings have remained relatively consistent over time, with some slight variations depending on characteristics of the population being studied. In 2007, Kankey

and Quarterman developed a survey to study the reasons why softball players chose to attend an NCAA Division I college or university. Kankey and Quarterman (2007) based the survey off the work of Forseth (1987), Mathes and Gurney (1985), and Reynaud (1998). The researchers distributed the survey to multiple Division I softball programs. The findings revealed the most influential factors affecting college choice to be "availability of a major or academic program, head coach, career opportunities after graduation, social atmosphere of the team, and amount of financial aid" (Kankey & Quarterman, 2007, p. 35). The least influential factors were found to include "friends, affiliation of the university (religion, public, private), media coverage, softball team website, softball team sponsorship, high school coach, and ethnic or gender ratio" (Kankey & Quarterman, 2007, p. 35). Findings from the Kankey and Quarterman (2007) study support the idea that influential factors tend to fall in the categories of academics (e.g., major availability, career opportunities), finance (e.g., financial aid), and athletics (e.g., head coach, team atmosphere).

Why choose a smaller college when they do not grant athletic scholarships, what is the appeal? Recently, literature on college decision factors for student-athletes has expanded to include Division II and Division III institutions. Choice factors parallel those of Division I; however, the extent of the influence varies. A study by Pauline (2010) focused on a single sport and compared selection factors at all NCAA Division levels and included both male and female athletes. The study looked at the extent to which different factors influenced choosing a college and their perceived importance to the athlete. It also looked to uncover any potential differences between division level or gender (Pauline, 2010).

Pauline issued the Influential Factors Survey for Student-Athletes-Revised to male and female lacrosse players at Division I, II, and III colleges and universities. The Influential Factors Survey categorizes factors into five areas: academic, athletic, social, coaching, and finance. Survey results revealed the top ten important and influential factors for all divisions to be, listed in order with the first being the most influential:

> Career opportunities after graduation, academic reputation of the university, overall reputation of the university, availability of academic program or major, reputation of academic major or program, social environment at the university, social atmosphere of the team, campus, head coach's personality or style, and academic facilities. (Pauline, 2010, p. 65)

The least influential factors included "knowing athletes at the university, ethnic/gender ratio at the university, media coverage of the team, knowing someone on the lacrosse team, and number of alumni in professional lacrosse" (Pauline, 2010, p. 65). The majority of the influential factors fell into the academics category, suggesting it represents one of significance to prospective student-athletes. All three divisions ranked academics as the most influential category followed by the coaches, campus life, finances, and athletics. Academics ranking at the top in terms of influence supports previous research, athletics being ranked last does not align with other studies that found athletics as a close second to academics (Pauline, 2010).

Overall the divisions showed similar findings, though, revealed some differences. Gender differences found that men took into greater account athletic-related and coaching factors and women focused more on financial factors than men did. Factors' weight varied across the divisions: academics were ranked more important for Division II and III

student-athletes than for Division I student-athletes. Pauline (2010) expected this finding because as he stated, “The importance of academics is consistent with the NCAA Division II and Division III philosophy” (p. 67). The coaching staff influenced Division II more so than Division III. Division II athletes typically attend this level of institution with the intention that they will improve their play, since the athletes and coaches spend more time together, the compatibility of the coach and player’s personalities is important. Finally, Division II students perceived financial aid—athletic scholarships, in this case—as more important than Division I students, and Division I more than Division III. Financial aid does not impact Division III student-athletes as it does Division I or II because Division III institutions do not award any athletic-based scholarships. Overall, the study supports other literature by showing the most significant decision-making factor to be related to academics (Pauline, 2010).

**Societal View of the Student-Athlete**

So often individual views and opinions of certain ideas, information, places, and people get shaped by society or, at the very least, help form one’s initial opinion. Society, by way of different media outlets, can manipulate individual opinions simply in the manner of portrayal. In the case of athletics and higher education, society portrays various iconic images and myths of the student-athlete, one of the most common and pervasive being the dumb-jock stereotype. Some have described the stereotype as “assum[ing] a lack of academic ability and motivation” and “the belief that athletes are not as capable of performing well academically as their non-athlete counterparts” (Parsons, 2013, p. 402; Wininger & White, 2008, p. 227). These portrayals result in biased preconceptions—dumb, lazy—and lowered expectations of student-athletes

(Parsons, 2013; Simons, Bosworth, Fujita, & Jensen, 2007).

The athletic stigma of intercollegiate student-athletes occurs not only from media's depiction of the dumb jock; "experiences with underprepared athletes whose behavior conforms to the stereotype" also contributes to the stigma (Parsons, 2013; Simons et al., 2007, p. 253). When people are sensitive to a groups' characteristics or behaviors, it heightens their awareness of them. Once they witness the behavior, it reinforces their view of the individual. For example, if an athlete arrives late to class, it reaffirms the opinions that athletes ale little effort. Simons et al. (2007) stated, "Whether athletes' negative academic behaviors may not occur any more frequently than with non-athletes, they become more salient to faculty members because of negative expectations" (p. 253).

Stigmatization or stereotyping occurs when someone possesses an identifying trait or characteristic that links them to a specific group (e.g., an athlete) and that trait or characteristic is one that society depreciates (Parsons, 2013; Simons et al., 2007; Wininger & White, 2008). However, the stigmatization is context dependent. For example, "Athletic identity is stigmatized in the academic domain but highly valued in the athletic domain" (Simons et al., 2007, p. 253). Due to the context-dependent nature of the athletic stigma, some intercollegiate student-athletes might try to hide the fact that they are athletes. The athletic stigma is unique in nature because the stigma is voluntary: "Unlike most other stigmas, they chose to be athletes, whereas most stigmatized individuals have little choice in their stigma" (Simons et al., 2007, p. 253). Despite the argument against athletes being considered a stigmatized group, much of the current research supports the idea that the societal image of the student-athlete fosters a negative

perception of athletes in the academic domain.

Another response to being the recipient of stigmatization includes internalizing the stigma, thereby conforming to the expectations of others (e.g., not putting forth effort on academic work and increasing focus on athletics). However, while the stereotypes can result in negative behaviors, they can also promote positive ones. For example, some student-athletes want to prove others wrong by performing well academically, so the stigma serves as a source of motivation (Simons et al., 2007).

A group of researchers decided to look into the way in which student-athletes saw the presence of the athlete stigma in their institutions (Simons et al., 2007). Division I intercollegiate athletes (*N*=538) participated in the study. Participants ranged in class year, gender, and athletic teams. The researchers interviewed and surveyed the student-athletes about the ways in which they believed others—faculty and non-athletes—saw and treated them and how they reacted to the treatment (Simons et al., 2007).

In regards to overall feelings of how others saw them, one-third of the participants felt others' perceptions were negative, less than 15% believed the perceptions were positive, and the remainder reported neutral perceptions. Researchers asked students about faculty treatment of athletes, specifically in regards to biased grading, accusations of honor code violations, and special accommodations. Results show that 27% of participants believed faculty intentionally gave them lower grades, 9% described having been accused of cheating, 41.9% were denied an academic accommodation, and 57.3% experienced difficulty when requesting accommodations (Simons et al., 2007).

Researchers also asked participants for specific comments made by faculty and non-athletes that might suggest a preconceived bias, negative or positive, toward athletes.

Results from the closed-ended questions show more negative comments (62.1%) than positive comments. Most of the negative comments involved "expect[ing] special treatment", "only interested in sports", and "not academically qualified" (Simons et al., 2007, p. 256). Open-ended responses also yielded more negative comments than positive comments, revealing the following themes: "lack of intellectual ability", "lack of academic motivation", "special treatment", and "discrimination-unequal treatment" (Simons et al., 2007, p. 257-259). Despite the many negative comments experienced by student-athletes, some did report having positive experiences. Positive experiences resulted from faculty who wanted to help athletes because they respected their commitment and ability to perform the dual role of being a student-athlete (Simons et al., 2007).

In addition to being asked about faculty and non-athlete perceptions and treatment of student-athletes, researchers also examined the ways in which the athletes coped with the stigma. Researchers presented the participants with a variety of responses to treatment, with the percentages representing the number of participants who selected that behavior: "work harder" (35%), "stop participating" (32%), "stop attending" (5%), "drop the class" (15.8%), "complain to the professor" (3%), or "complain to a higher power" (7.1%) (Simons et al., 2007, p. 261). Additionally, participants were asked the extent to which they tried to conceal the fact that they were athletes, with 44.5% of participants reporting trying to hide to avoid stigmatization. While the study by Simons et al. (2007) is revealing, it is limited because the reports are from the athletes themselves, so there is a chance of exaggeration or misinterpretation of faculty comments or treatment.

A study by Parsons (2013) also examined faculty perceptions of student-athletes

from the perspective of student-athletes themselves. The study sought to reveal how student-athletes felt the faculty saw and treated them. A survey was administered to student-athletes (*N*=252) at an NCAA Division II institution to determine whether they reported having experienced the dumb-jock stereotype. Parsons modified the survey used in Simons et al.'s (2007) study. The two questions Parsons intended to answer included how do student-athletes believe faculty see and treat them and do the findings support those found by Simons et al.'s 2007 study at the NCAA Division I level (Parson, 2013)?

The survey included both closed- and open-ended questions, each revealing trends in the data. The first theme, academic success or interest shown by athletes, revealed that one-third of the participants stated having been encouraged to take courses that would help them (e.g., easier classes or athlete-friendly classes), with the majority of the encouragement coming from teammates as opposed to coaches. The participants also reported taking advantage of office hours (48%), attending classes (97%), and turning work in on time (77%). The last item related to how the participants responded to negative treatment from faculty. Some (66%) reported that they increased their efforts to prove the faculty's assumptions wrong. The others (34%) responded negatively—stopped attending class, stopped participating, or dropped the class entirely (Parsons, 2013).

The athletic identity theme examined the extent to which the student-athletes tried to hide the fact that they were athletes from their professors. Very few (16%) reported trying to disguise their athletic identity. Oftentimes revealing the athletic identity is inevitable because of travel; however, many (73%) responded that they seldom encountered trouble when exposing their identity for athletic travel (Parsons, 2013). The third and final closed-ended question involved professor perceptions and treatment of

athletes. Most of the participants (75%) did not experience preferential treatment as a result of being an athlete. Very few reported having received lower or higher grades because of their athletic status, 36% and 15% respectively. Overall, over half (58%) reported having issues with faculty regarding accommodations, while the others (42%) reported having never experienced any issues. According to the closed-ended questions, the experiences of Parsons's participants differed from those in Simons et al.'s (2007) study, in that faculty in the current study appear to have been much more understanding and accommodating for student-athletes compared to those in Simons et al.'s study (Parsons, 2013).

The open-ended questions provided the student-athletes the opportunity to express their experiences in their own words. Participants described their experiences both negatively and positively in terms of remarks made by the faculty. Negative remarks centered around the following three themes: accommodations for missed classes due to athletics, the dumb-jock stereotype of athletes being inferior students, and finally that athletes prioritize athletics above academics. The positive remarks involved the faculty appreciating and commending the ability to balance athletics and academics as well as the life skills that the student-athletes develop as a result of athletic participation (Parsons, 2013).

The findings of Parsons's (2013) study both support and contradict previous research. Support of previous research can be found in the experience of the dumb-jock stereotype by way of negative faculty remarks; however, very few (11.5%) of the participants reported having had this negative experience. The majority of the participants reported having had positive encounters with their professors regarding athletics. Parsons

(2013) also found, similar to Simons et al. (2007), that the student-athletes self-reported positive academic habits, such as turning in assignments, participating and attending class, and valuing academics.

Similar to Simons et. al (2007) and Parsons (2013), Wininger and White (2008) wanted to further understand the dumb-jock stereotype. They too looked at the perspective of student-athletes and the way in which they felt others, primarily faculty and non-athletes, viewed and treated them. Wininger and White surveyed NCAA Division I student-athletes (*N*=118) ranging in class year, gender, ethnicity, and athletic teams. The survey focused on what the student-athletes' beliefs were regarding faculty and non-athletes "awareness that the student is a student-athlete", "academic expectations", and "willingness to offer help" (Wininger & White, 2008, p. 230-231). Results revealed an overall belief that faculty and non-athletes are cognizant of the fact that they are athletes, with the faculty being more aware. Findings in relation to held expectations differed from the study by Simons et al. (2007). Wininger and White found that faculty were believed to have higher expectations for student-athletes, whereas non-athletes had lower expectations. Results also revealed a feeling that faculty and non-athletes wanted to help; however, as stated by Wininger and White (2008), "Is it preferential treatment or sympathy because the student-athletes are viewed as less capable academically" (p. 231).

In addition to Wininger and White's examination of how student-athletes experienced the dumb-jock stereotype, they also looked at the possible effect of the dumb-jock stereotype as a self-fulfilling prophecy. The idea behind the self-fulfilling prophecy in athletics is defined as when "an initially erroneous social belief leads to its

own fulfillment" (Wininger & White, 2008, p. 229). In other words, athletes internalize the stereotype and thereby conform to the expectations of others by behaving in expected ways. Results suggest that the lowered expectations felt by student-athletes directly correlates with the self-fulfilling prophecy. When student-athletes see these negative images reinforced in the media and hear the negative comments on the academic campus, they may internalize those beliefs and encounter the self-fulfilling prophecy (Simons et al., 2007; Wininger & White, 2008).

Simons et al., Parsons, and Wininger and White examined the faculty and non-athlete viewpoint of the student-athlete from the perspective of the student-athlete—which could lead some to question the accuracy or legitimacy of their responses. However, regardless of whether or not faculty and non-athletes actually view athletes in the way student-athletes describe, the importance is that student-athletes believe that this is how others see them. It is this belief that can be so detrimental to the athlete.

Another study examining the dumb-jock stereotype took an interesting approach. The qualitative study examined non-athletes' perceptions of student-athletes by having them write a narrative about a day in the life of a collegiate athlete (Lawrence, Harrison, & Stone, 2009). The researchers had the participants assume the identity of either Tyrone Walker ($N$=44) or Erik Walker ($N$=43) and write about what a typical day for them would look like. It is important to note that the authors wanted to study the perceptions and stereotypes the narratives conveyed, not whether what the narratives depicted was accurate.

Analysis of the narratives revealed both minor and major themes. The minor themes included the following negative stereotypes: dumb, lazy, no study time, and time

spent partying (p. 598). In order to be a minor theme, less than 51% of the narratives had to include the theme. Of the participants in the Erik narrative, 51% (*N*=43) applied negative stereotypes, while only 32% of participants in the Tyrone narrative (*N*=44) negatively stereotyped Tyrone. Overall, 41% of the total participants (*N*=87) in both the Erik and Tyrone narrative stereotyped student-athletes.

Findings revealed four major themes including: Tyrone's "Balancing Life All Day", Tyrone's "Big Man on Campus", Erik's "Busy Day", and Erik's "Being an Athlete is Great" (Lawrence et al., 2009, p. 601, 604). In order to be a major theme, over 55% of the narratives had to include that theme. "Balancing Life All Day" referred to the extent to which participants acknowledged the competing time demands of being a student and an athlete. Specifically, they mentioned having to attend daily workouts and practices, in addition to going to class and finding time to complete homework, and then other daily activities, like eating, sleeping, and hygiene. Of the participants, 95% expressed elements of this theme in their narrative. The "Big Man on Campus" theme related to the extent to which the participants felt athletes were held in high regard, received special privileges (e.g., athlete-friendly courses, academic support services), and were well-known in the campus community—65% of the participants applied the "Big Man on Campus" stereotype in their narrative. The "Busy Day" theme compares to Tyrone's "Balancing Life All Day" in that the participants acknowledged the difficult balancing act that student-athletes must manage. Of the participants in the Erik narrative, 93% included the "Busy Day" theme. Finally, similar to Tyrone's "Big Man on Campus", Erik's "Being an Athlete is Great" also referenced the perceived privileges and special treatment of student-athletes; 58% of the participants responded with comments relating to this theme.

Overall, the study supports past research showing that: “due to the dumb-jock stereotype, athletes are stigmatized in the academic arena” (Lawrence et al., 2009, p. 592).

**Athletic Participation and the College Experience**

A variety of factors influence the experience of an intercollegiate athlete, one of the most impactful being the culture of the athletic department. With more attention being placed on academics, athletic departments have stressed the message of academics being an athlete’s top priority. Although the outward message appears to support the importance of academics, inconsistent messages create a significant amount of pressure for the athletes to balance the dual role of being expected to perform as an athlete and as a student (Jayakumar & Comeaux, 2016). The purpose of Jayakumar and Comeaux’s study was to examine the impact an institution’s culture and messages have on an athlete’s academic, athletic, and social experiences. Specifically, the study wanted to answer the following question: “What role does the organizational culture play in shaping college athletes’ academic success via influencing role conflict and resolution?” (p. 494)

Researchers used both grounded-theory and case-study methodologies. They collected data through observations, document analysis, and interviews at a single NCAA Division I institution. Observations occurred at a recruiting event and other athletic-related settings. Document analysis included NCAA and compliance documents as well as recruiting and marketing materials. Researchers interviewed one former student-athlete, three academically successful current athletes, the head coach, an academic coach, and an academic advisor. Each of these interviews concentrated on experiences, expectations of the head coach, and what academic success meant to the athlete.

A few consistent themes came from the data: “maintaining the idealized image”, “recognition of the sources of implicit tension”, and “implicit tensions undermining the ideal” (Jayakumar & Comeaux, 2016, p. 498). Maintaining the idealized image referred to how coaches outwardly harped on striving for the overall well-being of the athlete and the ability to balance the dual role. Coaches claimed that they foster an environment where their players can succeed in athletics and academics. Observations of recruiting events demonstrated the coaches’ messages. As stated by one of the observational researchers, “Athletes are told that they have control over their academic and athletic obligations; and moreover, that the organization supports the prioritizing of academic success […] The coach was emphatic and explicit that academics come first and athletics are always second” (Jayakumar & Comeaux, 2016, p. 500).

“Recognition of tension sources” raises the following question: Do coaches want players to do well in school for academic reasons and their well-being or to maintain eligible? On the surface it seems that coaches are encouraging academics, but if one delves deeper, they might find coaches have ulterior motives. An interview with the institution’s academic coach revealed that he left the coaching profession because he felt as though rather than helping the student-athletes achieve success and balance in both identities, the coaching staff focused on athletics, contrary to their statements to the public (Jayakumar & Comeaux, 2016).

“Implicit tensions undermining the ideal” was described by a former athlete this way: “They say academics come first, but the reality is that athletics come first” (Jayakumar & Comeaux, 2016, p. 505). The same athlete went on to say that the athletic schedule determines the class schedule. Another example from the same athlete referred

to voluntary athletic-related activities, like workouts. Rather than using free time for academic purposes, they must attend the voluntary activities, again demonstrating athletics taking priority. As seen in these examples, the mixed messages athletes receive create tension and pressure related to maneuvering the dual role of the student-athlete (Jayakumar & Comeaux, 2016).

One final piece of the cover-up lies in the deflection and lack of accountability from the athletic department regarding when a student-athlete does not succeed academically. In the current study, the athletic department and coaching staff mentioned on numerous occasions that the student-athletes have access to a multitude of academic resources; therefore, their success is now in their hands. Jayakumar and Comeaux (2016) concluded:

> [Academic] support services, coupled with state-of-the-art facilities and stated organizational commitment to academics, taken at face value, suggest that the institution is strongly committed to supporting college athletic success. This messaging lends itself to the perception that athletes do poorly in school because of inadequate time management and study skills, rather than the excessive time demand required by their sport and of a culture that actually pushes them toward athletics over academics. Again placing the onus on students themselves for academic failure or failure to achieve the ideal balance. (p. 501)

Although the authors of this study helped reveal some factors behind the academic-athletic battle, the study does have its limitations the most obvious being that it cannot be generalized to all institutions. A multitude of factors influence an institution's culture,

making all institutions unique. Although it cannot be generalized, it does bring to light a pattern that to some degree exists at many institutions (Jayakumar & Comeaux, 2016).

Society holds a common belief that student-athletes' college experiences fall short of non-athletes, in that student-athletes miss out on non-athletic related opportunities. Specifically, society often believes that student-athletes are "treated as athletes first and students second" (Potuto & O'Hanlon, 2007). Potuto and O'Hanlon conducted a study to test this belief by asking the athletes themselves about how they perceived their college experience. The researchers surveyed Division I athletes from 18 institutions. The primary question Potuto and O'Hanlon wanted to answer involved the college experience from the student-athletes' perspective. Specifically, they wanted to know if student-athletes believed there to be any trade-offs that come with playing intercollegiate athletics and how they felt about those trade-offs (Potuto & O'Hanlon, 2007).

The findings contradict society's belief about the student-athletes' college experience. Participants in Potuto and O'Hanlon's study reported viewing their overall college experience in a positive manner the majority of the time (>90% of the time). Even in response to the question, "Do you believe you are having a well-rounded educational experience?" the majority of the student-athletes answered that they were. The researchers found the responses to this question to be interesting considering the time commitment required for Division I athletics. Participants also responded to questions regarding their commitment to education. Overall, the student-athletes held graduating in high regard (93%). Participants also reported on how important they believed their families, coaches, and professors thought their graduating to be. Results show that 90% felt their families saw graduating as very important, while only 66% felt their coaches

and 47% felt their professors saw graduating as important. However, when asked about the extent to which they felt their academics were supported by their coaches and professors, the participants responded positively. Specifically, 85% of the participants reported that their coaches supported their academics, and 90% reported support from professors. The final question Potuto and O'Hanlon wanted to answer in regard to overall academic experience involved the extent to which the student-athletes felt that participation in athletics aided in their development. Over 95% of responses revealed that the student-athletes felt as though they gained many skills and traits (e.g., work ethic, interpersonal communication skills, time management) that they would be able to carry on to areas outside of athletics as a result of athletic participation (Potuto & O'Hanlon, 2007).

**Effect of Athletic Participation on Academic Performance**

Athletics continue to hold a central role in American society; however, in recent years the focus has shifted from being not only on athletics but now to also include academics. The shift to shared attention between the two creates a discrepancy behind the idea of the athlete-student to now include the student-athlete (Dilley-Knoles et al., 2010). The discrepancy and the pressure to excel and maintain eligibility in both areas can produce stress. The student-athlete must find a way to balance the two. The struggle to maintain balance has led many athletic programs to put into place academic support programs for their student-athletes, including such services and resources as tutoring and study halls (Dilley-Knoles et al., 2010; Parsons, 2013).

A study by Dilley-Knoles, Burnett, and Peak (2010) investigated the extent to which academic programs for student-athletes are successful. The researchers measured

academic success by studying the GPAs of 14 male and female athletic teams (*N*=251) at an NCAA Division II institution. Head coaches provided the researchers with the GPAs of their players. Prior to analyzing the data, the researchers determined academic success to be a GPA of 3.0 or higher (Dilley-Knoles et al., 2010).

The primary research questions the researchers wanted to answer included whether there would be a difference in GPA between different athletic teams and whether male and female student-athletes would differ in GPA. Results revealed significant differences for both research questions. Dilley-Knoles et al. found significant differences in GPA among different athletic teams. In particular, they found female athletic teams (e.g., basketball, cross-country, golf, tennis, track, softball, volleyball) to differ from male athletic teams (e.g., baseball, basketball, cross-country, football, golf, track, wrestling). When compared to male student-athletes, female athletes earned significantly higher GPAs (Dilley-Knoles et al., 2010). Findings from the study support the idea that a gap exists between male and female academics. Results from the study suggest that female student-athletes benefit from academic programs; however, they do not appear to have the same effect on male student-athletes. According to Dilley-Knoles et al. (2010), "The old adage 'one size fits all' may not be an appropriate method for helping today's athlete to make the grade".

While Dilley-Knoles et al. based their findings on actual student records, Potuto and O'Hanlon (2007) wanted to examine the relationship between GPA and athletic participation by asking the athletes themselves. Research by Potuto and O'Hanlon also found that student-athletes perceived their GPAs to be affected by athletic participation. Specifically, 65% of the participants believed their GPA would be higher if not for

athletics, while 11% believed it would be lower. In addition to athletic participation impacting GPA, it also has the potential to affect choice of major or class schedule. Potuto and O'Hanlon also examined what they called the perceived "trade-offs" of athletic participation. The survey they administered asked the student-athletes if athletic participation influenced the major they chose and, if so, how they felt about it. The survey also asked the same question regarding course selection. In response to the choice of major, 11% ($N$ =102) of the participants reported that they could not pursue their preferred major because they were student-athletes. However, of these participants, just under half (42%) reported that the trade-off resulted in more positives than negatives, because of the other benefits that come as a result of being an athlete. Similar to the question on major selection, 69% of the participants reported that athletic participation very often, often, or sometimes affected the courses they scheduled. However, they too felt as though the trade-off was sufficient (Potuto & O'Hanlon, 2007).

Not only is it important to look at the end result of academic performance, such as GPA, but academic-related efforts also need to be considered (e.g., time spent on academics, use of academic support services, participation in the classroom). Gaston Gayles and Hu (2009) conducted a study to examine the "cognitive and affective outcomes" of time spent outside of athletics. Specifically, they wanted to discover what, if any, impact non-athletic-related activities had on development and feelings about one's overall college experience. Gaston Gayles and Hu (2009) began by referencing Astin's Theory of Involvement, which they summarized this way:

> Among the most important factors in student learning and personal development during college is student engagement, the quality of effort students themselves

> devote to educationally purposeful activities that contribute directly to desired outcomes [...] Students learn by becoming involved." (p. 102)

Gaston Gayles and Hu used the data from the NCAA's Basic Academic Skills Study (BASS). BASS measures many different items; however, the ones Gaston Gayles and Hu were interested in involved measurements of student engagement (e.g., "interactions with faculty", "interaction with students other than teammates", "participation in student groups, organizations, and other service activities", and "participation in academic-related activities") (2009, p. 104).

Findings revealed that the most common type of student engagement that student-athletes participated in was interactions with non-athletes. The least common type of student engagement was participation in non-athletic-related activities. The researchers were not surprised with these two findings because of the time demands that come with athletic participation. The data analysis also revealed a few predictors of "learning and communication skills" including major, interaction with non-athletes, and taking part in academic-related activities (p. 104). Overall, the findings support previous research that stated that the more students engage, the more advancements they will have in learning. Specifically, the more students invest their time and energy into academic-related activities and interactions, the more successful they will be in academics (Gaston Gayles & Hu, 2009).

Research by Comeaux, Speer, Taustine, and Harrison (2011) also referenced Astin's (1984) Theory of Student Involvement, which they summarized as follows: "Students experience positive gains in learning and personal development by becoming involved on campus" (p. 38). Comeaux et al. wanted to examine the extent to which

student-athletes involved themselves in academically-related activities by surveying student-athletes (*N*=147) at four NCAA Division I institutions. Specifically, the participants they chose were first-year student-athletes who had just undergone the transition from high school to college. The participants were divided into two groups: revenue-generating student-athletes and non-revenue-generating student-athletes. The researchers referenced Astin's (1984) Theory of Student Involvement and Chickering and Gameson's (1987) Seven Principles of Good Practice in Undergraduate Education when creating their survey.

Findings show a difference between revenue-generating athletes and non-revenue generating athletes in terms of perceived identity. Specifically, revenue athletes identified more with the athlete and less with the academic identity compared to non-revenue athletes who exhibited the opposite identification (Comeaux et al., 2011). Monda, Etzel, Shannon, and Wooding (2015) summarized the findings of Comeaux et al. (2011): "Academic success among Division I athletes is most likely the product of multiple influences including: 1) pre-college characteristics (individual attributes, family background, high school educational experiences); 2) commitment (goal, sport, institutional commitment); and 3) environmental characteristics (the degree of integration into the academic/social systems of college)" (p. 117). As in Gaston Gayles and Hu's research, Comeaux et al. also found the benefit engagement has on academic performance for student-athletes.

Monda, Etzel, Shannon, and Wooding (2015) wanted to learn more about the factors affecting academic performance by examining the experiences of academically successful and academically unsuccessful freshmen Division I football players. They

wanted to examine what types of experiences these athletes had in regard to academics, what types of factors these athletes believed affected their academic performance, and how academically successful and academically unsuccessful athletes differed in terms of experiences (Monda et al., 2015).

Researchers implemented a qualitative research design with a phenomenological approach to questioning. Participants were separated into two groups: group one (*N*=6) included students who "experienced positive academic outcomes", meaning they earned a GPA greater than 2.75 and received all passing grades. Group two (*N*=6) represented those who experienced "negative academic outcomes", meaning they possessed a GPA equal to or less than a 2.0 and were considered "academically at-risk". Researchers asked the guiding question, "Tell me about your experiences as a student-athlete over the past semester at this university?" (Monda et al., 2014, p. 117-118) Results identified a few repeating themes in terms of first-year experiences, including academic preparation, motivation, and engagement.

Academic preparation referred to "high school preparation, expectations of college, level of self-efficacy, and familial support" (Monda et al., 2015, p. 119). The level of perceived preparedness contributed to the smoothness of the transition to college. Findings revealed that both the academically successful and the academically unsuccessful groups reported great difficulty in balancing the dual role of being an athlete and a student; however, level of perceived preparedness contributed to the transition to college and the ability to balance the dual roles. Specifically, student-athletes who felt more prepared, the academically successful group, reported having experienced a smoother transition and better ability to balance being a student-athlete than those who

felt less prepared, the academically unsuccessful group (Monda et al., 2015).

Academic motivation dealt with prioritizing, athletics and academics, and reasons behind those decisions. While both groups acknowledged that academics should be the top priority, those who treated it as such varied. Specifically, the academically successful group reported prioritizing academics before athletics. The academically successful group also reported being academically motivated and setting "high personal standards for themselves and clear academic goals" (Monda et al., 2015, p. 120). In contrast, the academically unsuccessful group prioritized athletics before academics and reported feeling unsure of their academic plan. For the academically unsuccessful group, "Academics were perceived to be a means to an end, a chore to complete in order to play football" (Monda et al., 2015, p. 120).

Academic engagement related to how invested they were in academics. The academically successful group expressed being actively invested in their academics and took the initiative to seek out resources should they need guidance or help. The academically unsuccessful group reported being minimally invested in academics. Rather than using their time outside of athletics for academic purposes, the unsuccessful group chose to engage in social activities. This group also reported not taking advantage of the academic support services available to them (Monda et al., 2015). In addition to these recurring themes, participants indicated that it was difficult to balance being an athlete and a student. Researchers did find that those who were aware of what would be expected of them as student-athletes, those who created goals, and those who had support systems had a greater chance to be "motivated and engaged" in academics (Monda et al., 2015, p. 115).

**In Season versus Out of Season**

Many members of the athletic community believe that the structure created from being in season promotes academic success; however, little research exists to test this idea. Scott, Paskus, Miranda, Petr, and McArdle (2008) tested this belief by examining the possible differences in GPAs and credits earned in season compared to out of season of student-athletes at the NCAA Division I, II, and III levels. The researchers divided the study into three parts, a pilot study at the Division III level and two additional studies at the Division II and Division I levels. Questions the researchers wanted to answer included the following: "Do credit attainment and grade point average fluctuate in season to out of season for college student-athletes?" and "Are student-athletes in certain sports or with certain academic backgrounds more prone to seasonal academic effects?" (Scott et al., 2008, p. 203)

The pilot study of Division III student-athletes examined data collected by different institutions' faculty athletics representatives (FARs). The FARs worked with various institutional resources to compile data about their student-athletes (*N*=3,143). Of the data received, researchers did not include that of student-athletes participating in multiple sports or winter sports. Results of the pilot study revealed contradictions of the commonly held belief of members of the athletic community. Specifically, the researchers found the difference in GPA across semesters to be statistically significant, such that GPA in season (GPA=2.93) was lower than GPA out of season (GPA=3.00). Gender-specific differences revealed the overall GPAs of females to be significantly higher than that of males (3.17 and 2.78). Sport-specific differences showed men's lacrosse and women's volleyball players to experience the most change between in-

season and out-of-season GPA. The pilot study also revealed student-athletes take fewer credits in season compared to out of season, with men's football and women's volleyball showing the largest difference in credit hours earned in season compared to out of season. As stated by Scott et al. (2008), "At least for a small group of Division III institutions, student-athletes tended to have lower grade point averages even though they were taking fewer credits during their playing season" (p. 206).

Study 1 found similar results as the pilot study, but with student-athletes at the Division II level. The researchers gathered data on student-athletes (*N*=11,815) from the Academic Tracking System (ATS). Multiple-sport athletes were not included; however, winter sports were considered spring sports in Study 1, due to the bulk of the competitive season falling during the spring semester. Findings also revealed Division II athletes to have significantly lower GPAs in season (GPA=2.83) compared to out of season (GPA=2.87) and to earn significantly fewer credits (0.4 credits less) in season compared to out of season (Scott et al., 2008, p. 207). Sport-specific differences revealed that high-profile student-athletes in baseball, basketball, and football and women's softball, soccer, and volleyball completed less credits in season compared to out of season. However, two sports, women's golf and swimming, showed the opposite, such that they completed more credits in season than out of season (Scott et al., 2008).

Study 2 also revealed similar findings but for Division I student-athletes (*N*=50,099). Data came from the Academic Performance Program (APP). As in Study 1, multiple-sport athletes were not included, but winter sports were considered with spring sports. Findings also showed GPAs to be significantly lower in season compared to out of season, with a 0.3 difference. Sport-specific differences revealed athletes in high-profile

sports, like men's baseball, basketball, football, and soccer, and women's softball and volleyball to have lower GPAs in season compared to out of season. However, two sports teams, ice hockey and swimming, revealed the reverse. Study 2 also revealed a 0.4-credit difference between credits earned in season compared to out of season, with in season earning significantly fewer (Scott et al., 2008).

The researchers were also able to conduct longitudinal analyses at the Division I level. Specifically, they wanted to examine "whether students in certain sports or from particular backgrounds are more prone to seasonal academic effects" and "whether grade point averages change over the course of a student-athlete's time in college" (Scott et al., 2008, p. 218). Longitudinal analyses revealed that GPAs and earned credits do change over time; specifically with GPAs increasing by 0.03 points each semester and credits earned decreasing by 0.19 credits each semester. Yearly trends revealed that, on average, student-athletes' GPAs in season are 0.06 less than out-of-season GPAs and student-athletes earn approximately 0.5 credits less in season compared to out of season. Of the student-athletes who experience these in-season effects, high-profile athletes are the most likely to be affected (Scott et al., 2008, p. 220). As stated by Scott et al., (2008):

> Clearly the sports that seem to have the most significant in-season/out-of-season performance differences are those with the highest demands during the competitive season. This 'time demands' effect is not as clearly detectable in sports with a competitive season spanning large proportions of both fall and winter semesters as it is in sports more compressed into one semester." (p. 224)

Overall, across NCAA divisions student-athletes earn lower GPAs and fewer credits in season compared to out of season, contradicting what many members of the athletic

community believe (Scott et al., 2008).

**Athletic Identity and the Academic Experience**

College years represent a crucial time in the development of one's identity, and for the student-athlete this developmental stage is quite unique. Student-athletes struggle with two competing identities: "Student-athletes have multiple social identities, yet one identity may be more preferred or dominant [...] likewise, the student and athlete role demands, and ultimately identities, may compete with one another" (Antshel, VanderDrift, & Pauline, 2016, p. 311). The competing roles can lead to a balance struggle that oftentimes results in one assuming priority (Sturm, Feltz, & Gilson, 2011). As stated by Monda et al. (2015), "Athletes who have doubts about their academic abilities and who own strong athletic identities, are likely to redirect their energy to activities where they have a greater sense of proficiency and identification" (p. 125). It is critical that these individuals learn to balance the competing demands of academics, athletics, and social life (Comeaux et al., 2011; Jayakumar & Comeaux, 2016). The extent to which a college student identifies with one or the other, student-athlete or athlete-student, can create cognitive dissonance and can have a significant impact on his or her academic performance (Bimper, 2014; Chen, Snyder, & Magner, 2010; Jayakumar & Comeaux, 2016; Monda et al., 2015; Scott et al., 2008).

Before delving into the effects athletic identity can have on academic performance, it is important to examine the effects of athletic participation on athletic identity. A study by Chen, Snyder, and Magner (2010) did just that. Chen et al. began by stating some of the proposed benefits of athletic participation:

Physical educators and sport experts would agree that athletic participation brings

> numerous physiological, psychological, education, and social benefits to the participants. These general benefits of athletic participation and spectatorship may include: (1) improving health and exerting students' surplus energies; (2) obeying the competition or societal rules and constraining delinquent behaviors; (3) promoting societal values, integrity and building character; (4) enhancing confidence, motivation, sense of empowerment and self-esteem; (5) providing social interaction, fun and enjoyment; (6) offering opportunities for education and career in sports; (7) expanding life experiences and making more friends; (8) knowing how to deal with failure and difficult situations; and (9) developing life skills. (p. 176-177)

However, despite the research supporting the benefits of athletic participation, there is a similar amount of research with contradictory findings. Some research shows the opposite effect, where athletic participation is detrimental to student-athletes. For example, Chen et al. state:

> Additional negative consequences and psychosocial problems were found to be associated with collegiate athletic participation. Those problems included (1) violence on and off the court; (2) eating disorders; (3) poor academic performance and low graduation rates among major revenue-generating sports; (4) alcohol and performance-enhancement substance abuse; (5) depression and burnout; (6) hazing; (7) gambling; and (8) lack of social life and experience. (p. 178)

Chen et al. wanted to expand on the existing literature by doing research of their own on the effects of athletic participation. Specifically, they wanted to learn from the student-athletes themselves about how they viewed their athletic identity, commitment to

athletics, and whether they believed athletic participation to be beneficial (Chen et al., 2010). Chen et al. hypothesized that while athletic participation likely produced consequences, the athletes would also be able to glean the benefits, such as life skills, teamwork, character development, and work ethic. Both student-athletes (*N*=163) and non-athletes (*N*=112) from a Division I institution were surveyed. The researchers merged four surveys to create their own: the Athletic Identity Measurement Scale (AIMS), the Sport Commitment Model (SCS), the Life Roles Inventory-Values Scale (LRI-VS), and the Athletic Involvement on the Social Life. The hybrid survey grouped responses into the following areas: athletic identity, commitment to athletics, and the effects of athletic participation (Chen et al., 2010).

Findings from Chen et al.'s study revealed that the majority of the student-athletes wanted to identify as athletes but also recognized that there was more to life than athletics. The participants also exhibited having experienced some of the proposed benefits of athletic participation, including "improve[ed] health, overall development, and opportunities to meet others" (Chen et al., 2010, p. 183). Overall, the participants in the study held high regard for their athletic identity and reported having experienced more benefits than harm from athletic participation. While the results of this study present positive experiences as a result of athletic participation, research by Simons et al. (2007) presented more negative experiences related to athletic identity.

A 2014 study by Bimper examined the relationship between perceived athletic identity and academic performance and the extent to which athletic identity predicts academic performance. He hypothesized that one's perceived identity as an athlete would impact academic performance; however, he did not specify whether they would have a

positive or negative correlation. Bimper studied African-American football players (*N*=255) from seven NCAA Division I institutions across the United States. Each student-athlete completed a questionnaire that included a demographics section as well as the Athletic Identity Measurement Scale (AIMS). Results revealed a significant negative correlation between self-reported athletic identity and academic performance, such that the more participants identified as athletes, the lower their academic performance, as measured by GPA. In this study, the majority of the student-athletes reported as identifying highly with the athletic identity, perhaps because the athletic identity is salient and highly internalized at an NCAA Division I football institution. Findings support previous research that also found a higher athletic identity to be linked to a lower GPA. Despite the significant findings by Bimper, it is important to note that the study only included participants of a single revenue-producing sport at an elite institution, thus reducing the generalizability of the findings.

Researchers Sturm, Feltz, and Gilson (2011) also studied athletic identity; however, they wanted to determine if an institution's level of athletics (e.g., Division I, II, or III) influenced perceived athletic identity. Specifically, they compared the athletic identities of student-athletes at more athletically focused Division I institutions and more academically focused Division III institutions (Sturm et al., 2011). The purpose of the study was to determine whether student-athletes from Division I and Division III athletic programs differed in perceived athletic identity in addition to whether athletic identity varied across class year. The researchers surveyed student-athletes from one NCAA Division I institution (*N*=66) and one NCAA Division III institution (*N*=122). Similar to

Bimper's study, Sturm et al. (2011) utilized the Athletic Identity Measurement Scale (AIMS) as well as the Measure of Student Identity scale.

The researchers hypothesized that Division III student-athletes would identify more with the student identity compared to Division I student-athletes. They also hypothesized that there would be a negative correlation between athletic identity and student identity, such that if a participant identified more as an athlete then they would identify less as a student and vice versa (Sturm et al., 2011). The findings support past research. Females differed from males in perceived identity. Specifically, females identified more as students, and males identified more as athletes. This particular finding relates to the conclusions from Dilley-Knoles et al.'s (2010) study that suggests females have the ability to better balance the dual role of student and athlete. The findings also supported the hypothesis that athletic identity and student identity would be negatively correlated but did not support the hypothesis that more athletically focused Division I student-athletes would relate more highly to the athletic identity and more academically focused Division III student-athletes would report similar levels of athletic and student identities. Instead, both Division I and Division III student-athletes reported significant negative correlations between the two identities—the more a student-athlete identifies with one identity the less he or she identified with the other. As stated by Sturm et al. (2011): "[We] concluded that our data suggest that the environment of Division I schools does not promote athlete identity any more so than does the environment of Division III schools, and Division III schools do not promote a student identity more than a Division I institution" (p. 302).

Potuto and O'Hanlon (2007) found a similar relationship between athletic identity and student identity that Sturm et al. did. The study by Potuto and O'Hanlon not only examined the overall college experience of Division I student-athletes, but it also looked at the perceived athletic identity of the participants. The study compared males versus females and team sports versus individual sports. Comparison of males and females supported other research in that males identified more as athletes and females focused more on academics. Research by Gaston Gayles and Hu (2009) supports the findings of Potuto and O'Hanlon that females tend to be better at balancing the dual role of student and athlete than males. Overall, when asked whether they identified more as students or athletes, more than 60% of the participants reported identifying more as athletes than as students. Despite identifying as athletes, females still prioritized academics. Comparison between team sports and individual sports revealed that team and individual student-athletes were similar in some areas; however, findings revealed some statistically significant differences. Team-sport student-athletes identified more as athletes compared to individual-sport student-athletes. Team-sport student-athletes thought that athletics negatively impacted their GPAs and that it would be higher if not for athletics. Finally, team-sport student-athletes felt as though their professors had negative perceptions of athletes. It is important to acknowledge that the student-athletes in this particular study played for high-profile athletic programs at the Division I level where the athletic identity can be very salient and time commitment to athletics can be significantly greater than at other levels of play (Potuto & O'Hanlon, 2007).

Academic performance can also be adversely impacted by difficulty thinking or concentrating. Some studies have found student-athletes to exhibit difficulty thinking or

concentrating and proposed that the stress and time demands of the competing student and athlete identities to be the cause. Antshel, VanderDrift, and Pauline (2016) wanted to test the relationship by examining the potential moderating effect identity might have on difficulty thinking or concentrating and GPA. Additionally, they wanted to see whether the extent to which the student-athlete participants had difficulty thinking or concentrating affected their use of academic resources. The researchers hypothesized that the more difficulty thinking or concentrating, the lower the GPA. The second hypothesis expected that the more a student-athlete identifies with the athletic identity, the less likely he or she will utilize academic resources. The final hypothesis predicted that for participants identifying less as athletes, GPA would mediate the relationship between difficulty thinking or concentrating and use of academic resources (Antshel et al., 2016).

The study utilized pre-existing data from the NCAA Growth, Opportunities, Aspirations and Learning of Students in College (GOALS) 2006 study. Student-athletes (*N*=19,786) from approximately 1,000 NCAA Division I, II, and III institutions participated in the study. The survey questions covered academics, athletics, and social life (Antshel et al., 2016). Findings revealed the following subgroups reported having the most difficulty thinking or concentrating: females and sophomores followed by juniors then freshman. The findings associated with the relationship between athletic identity and perceived difficulty thinking or concentrating supported the hypothesis. Specifically, participants who identified more as athletes reported having more difficulty thinking or concentrating. Student-athletes reporting having more difficulty thinking or concentrating also reported having significantly lower GPAs and being less likely to use academic resources. Finally, results supported the final hypothesis, such that for those who

identified less as athletes, GPA significantly mediated the relationship, and for those who identified more as athletes, GPA did not influence academic resource use (Antshel et al., 2016).

Much of the literature on athletic identity focuses on coeducational institutions, while little exists on athletic identity at women's colleges. Contradicting ideas have been proposed regarding the athletic identity at these institutions. The first theory is that female student-athletes at women's colleges would identify more as athletes than females at coeducational colleges due to an increase in "role exploration" (Mignano, Brewer, Winter, & Van Raalte, 2006, p. 458), while the second theory predicts that female student-athletes at women's colleges would identify less as athletes than females at coeducational colleges because of increased involvement in other areas.

Researchers Mignano, Brewer, Winter, and Van Raalte (2006) wanted to study which of the two theories could be supported by research. The study included female student-athletes ($N$=145) from NCAA Division III liberal arts colleges: half of the participants were from coeducational institutions and the other half were from women's colleges. Participants came from a variety of varsity teams including basketball, field hockey, lacrosse, soccer, and volleyball (Mignano et al., 2006). Participants completed a questionnaire including a demographics section and the Athletic Identity Measurement Scale (AIMS). In addition to the more common demographic questions, it also included questions about the amount of time spent per week on athletics, in addition to time spent on academics and student involvement activities, such as extracurriculars, clubs, and employment (Mignano et al., 2006, p. 459).

The researchers compared the results of women's college student-athletes and coeducational student-athletes to determine whether the time spent on different areas varied by type of institution in addition to whether the importance placed on the three areas differed by type of institution. Importance placed on an area was determined by the amount of time spent on that area (e.g., the more time spent in athletics correlated with more importance placed on athletics). The findings revealed that student-athletes at women's colleges identified significantly more as athletes than those at coeducational colleges and put significantly more importance on academics than did student-athletes at coeducational colleges. Results related to time spent on different areas revealed that student-athletes at women's college committed more time to academics than did coeducational student-athletes; however, they did not differ in time spent on athletic-related activities or student involvement (Mignano et al., 2006).

The researchers drew the following conclusions from their study: women's colleges might provide an environment that fosters having multiple identities—the ability to simultaneously be a student-athlete and an athlete-student—and yet while women's colleges do encourage the dual identity, they continue to focus more on academics than on athletics. According to Mignano et al. (2006), "At women's colleges, athletes seem to be able to highly identify with the athlete role, yet maintain a strong commitment to their education, a feature that most educational institutions strive to achieve" (p. 463).

**Chapter Summary**

Societal messages portraying student-athletes as dumb-jocks have become so pervasive that researchers want to discover whether there is truth behind the stereotype. For decades, researchers have examined the relationship between athletic participation

and academic performance. Specifically, they have investigated the effects of the athletic culture, trying to balance competing roles, academic engagement, in season versus out of season time demands, and level of athletic identity, to name a few. The findings of these studies reveal athletic participation to have both positive and negative effects on academic performance. The existing research primarily focused on male student-athletes at Division I institutions; however, little focused solely on female student-athletes at Division III institutions where the academic mission remains at the core of the institution. The purpose of the present study was to expand on the research and examine a group that has received little attention thus far—female Division III student-athletes.

# Chapter 3

# Methodology

## Participants

The sample consisted of approximately three dozen participants (*N*=35). Eligibility requirements included being a female intercollegiate athlete between the ages of 18 and 22. The mean age of participants in this study was 19.4 years (SD=1.29 years) and the modal response for class year was freshman (42.9%), followed by sophomores (22.9%), seniors (20%), and juniors (14.3%). For the purpose of being able to better generalize results, participants played for a variety of athletic teams. Self-reported athletic team membership was as follows: 20% Basketball (*N*=7), 20% Field Hockey (*N*=7), 2.9% Golf (*N*=1), 14.3% Lacrosse (*N*=5), 14.3% Soccer (*N*=5), 14.3% Tennis (*N*=5), 8.6% Track and Field (*N*=3), 22.9% Volleyball (*N*=8), and four teams—Cross Country, Softball, Swimming and Diving, and Water Polo—did not participate. The modal report of the semester in which the sport is considered traditionally in season was the fall semester (65.7%), followed by the spring semester (34.3%) and winter term (17.1%). For the purpose of this study, the researcher combined winter and spring athletics because the majority of the competitions for winter athletics occur in the spring. Additionally, the mean self-reported GPA of the participants was 3.42 on a 4.0 scale.

## Instruments Used

The investigator used a version of the Athletic Identity Measurement Scale by Brewer, Van Raalte, and Linder (1993). Brewer et al. created the first version of the Athletic Identity Measurement Scale (AIMS). Multiple revisions and updates of the scale have been developed, including the one used in the current study, the 7-item Athletic

Identity Measurement Scale by Brewer and Cornelius (2001; see Appendix A). The AIMS measures the extent to which an individual identifies as an athlete. The scale consists of seven items rated on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Two sample items are "I consider myself an athlete" and "I spend more time thinking about sport than anything else". Higher scores on the AIMS indicate identifying more as an athlete, while lower scores indicate identifying less as an athlete. Researchers frequently use the AIMS to measure athletic identity due to the reliability and consistency of the data from this instrument. A study examining test-retest reliability of the questionnaire showed the AIMS to have good reliability with an alpha score of 0.89 (Sturm, et al., 2011). Past research provides evidence that the scale is reliable as seen in the Cronbach's alpha score of 0.81 (Brewer & Cornelius, 2001). It has also been shown to have internal consistency as seen in Bimper's (2014) alpha of 0.86. As stated by Sturm, Feltz, and Gilson (2011):

> "The AIMS is a valid and reliable measure that has consistently been used to assess one's level of athlete identity. Using this scale, researchers have found that a high level of athlete identity is associated with low levels of career maturity, very little focus placed on academics, difficulty balancing other life roles, and low career decision-making self-efficacy. Overall, the more that student-athletes identify with the role of an athlete on this measure, the less focus they place on academics during their college years." (p. 297-298)

**Procedure**

The present study used a typical sampling method. Typical allows for a greater chance of generalizing findings because the sample is representative of a larger group. In

order to be typical, the study gathered data from a range of class years (e.g., freshman, sophomore, junior, senior) and twelve athletic teams (e.g., basketball, cross country, field hockey, golf, lacrosse, soccer, softball, swimming and diving, tennis, track and field, volleyball, water polo). By expanding the participant sample to include this variety of athletes, the current study's findings have the potential to be generalized to female student-athletes at other Division III institutions. Eligibility criteria for the current study included that the participants be female intercollegiate student-athletes between the ages of 18 and 22 who attended a specific small, Division III liberal arts institution in the Midwest.

The researcher gained permission from the Athletic Director of the institution prior to making contact with the coaches of the women's varsity athletic teams. Each coach that agreed to participate recruited participants by administering the Survey Monkey questionnaire to his or her team. Survey Monkey allowed for participants to remain completely anonymous and all their data to be confidential. Participants had direct access to the voluntary ten-minute questionnaire. The questionnaire consisted of two parts including the Athletic Identity Measurement Scale (Brewer & Cornelius, 2001), as well as a demographics section (see Appendix B). The AIMS is a 7-point Likert-type scale for which participants ranked statements from 1 (*strongly disagree*) to 7 (*strongly agree*) as it applied to them. Demographics gathered the following information: age, class year, academic major, athletic team(s), semester the sport is considered "in season", and GPA for each semester of enrollment.

**Data Analysis**

For all hypotheses, data was analyzed using Microsoft Excel 2016 and

significance was defined as $p<0.05$. Hypothesis one stated that athletic identity would impact academic performance. Specifically, the researcher expected to find that student-athletes reporting higher scores on the AIMS would have lower GPAs than those who reported lower scores on the AIMS. The researcher defined a high score to be a 5.0 or above and a low score as 4.9 or below. To test this hypothesis, the researcher averaged each participant's score on the AIMS and grouped the scores based on whether they were high AIMS, 5.0 and higher, or low AIMS, 4.9 or lower. A two-sample t-test assuming equal variance allowed the GPAs of each group to be compared.

Contrary to previous research on Division I student-athletes, Hypothesis two stated that season (e.g., in season compared to out of season) would not affect GPA. To test this hypothesis, a series of two-sample t-tests assuming equal variance were used. The researcher conducted a t-test for each academic year (e.g., freshman, sophomore, junior, senior) comparing GPA in season to GPA out of season.

Hypothesis three, four, and five stated that GPAs would change over time, such that GPAs during freshman year would be lower than GPAs during sophomore, junior, and senior year. To test these hypotheses, a series of two-sample t-tests assuming equal variance were conducted. The researcher found the average GPA of each participant's freshman, sophomore, junior, and senior year and then ran t-tests comparing freshman to sophomore, freshman to junior, and freshman to senior year to determine whether GPA changed over time.

**Chapter Summary**

Women's varsity athletic coaches administered the present study questionnaire to their team. Student-athletes ($N$=35) participated voluntarily through the Survey Monkey

system that guaranteed anonymity and confidentiality. The survey consisted of two parts including the 7-item AIMS and a demographics section. The researcher analyzed data with Microsoft Excel 2016 using descriptive statistics and t-tests and used the significance level of $p<0.05$.

# Chapter 4

## Results

Hypothesis one stated that the extent to which one identifies as an athlete affects GPA. Specifically, those reporting higher scores on the AIMS would have lower GPAs than those reporting lower scores on the AIMS and vice versa. To test this hypothesis, the researcher grouped participants based on AIMS scores. Group one included participants whose average score on the AIMS was 5.0 or higher and group two consisted of participants whose average score was 4.9 or lower. The GPAs of each group were then compared using a one-tailed t-test assuming equal variance. The data analysis results are presented below in Table 1. In order for the null hypothesis to be rejected the t value needed to be greater than 1.69 but was a -1.54. Thus, null hypothesis one was accepted because the t value of -1.54 was lower than the t critical of 1.69 needed, thus there was not enough evidence to reject it.

Table 1
*Data Analysis Comparing High AIMS GPA and Low AIMS GPA*

| Hypothesis | t critical | t value | p-value | Decision |
|---|---|---|---|---|
| High versus Low AIMS GPA | 1.69 | -1.54 | 0.07 | Accept null |

(See Appendix D for Data Analysis)

Hypothesis two stated that playing season would not affect GPA; therefore, GPA in season would equal GPA out of season. To test this hypothesis, a series of two-tailed t-tests were conducted. As expected, in all cases—freshman in season to out of season, sophomore in season to out of season, junior in season to out of season, and senior in season to out of season—the GPA did not change between playing seasons. In order for the null hypothesis to be rejected, a t value needed to fall outside of the t critical range. Of the four t-tests conducted, all t values landed between the t critical ranges as described

in Table 2 below. Thus, null hypothesis two was accepted meaning that GPA in season equaled GPA out of season because there was not enough evidence to reject null hypothesis two.

Table 2
*Data Analysis Comparing GPA In Season to GPA Out of Season*

| Hypothesis | t critical | t value | p-value | Decision |
|---|---|---|---|---|
| Freshman: in versus out of season | +2.01 and -2.01 | 0.14 | 0.89 | Accept null |
| Sophomore: in versus out of season | +2.04 and -2.04 | -0.31 | 0.76 | Accept null |
| Junior: in versus out of season | +2.12 and -2.12 | 0.25 | 0.80 | Accept null |
| Senior: in versus out of season | +2.45 and -2.45 | -0.24 | 0.82 | Accept null |

(See Appendix E for Data Analysis)

Hypothesis three, four, and five stated that year in college would impact academic performance. Specifically, it was expected that GPAs during freshman year would be lower than GPAs during sophomore, junior, and senior year. To test this hypothesis, a series of one-tailed t-tests were conducted. In order to reject the null, the t value needed to be greater than the t critical. The data analysis results reported in Table 3 show that all t values were less than the t critical; therefore, the null hypotheses were accepted because there was not enough evidence to reject them (see Table 3 below). Contrary to hypotheses three, four, and five, no difference was found in academic performance between any time span—freshman to sophomore, freshman to junior, freshman to senior.

Table 3
*Data Analysis Examining GPA over Time*

| Hypothesis | t critical | t value | p-value | Decision |
|---|---|---|---|---|
| Freshman vs. Sophomore | 1.69 | 0.46 | 0.32 | Accept null |
| Freshman vs. Junior | 1.72 | -0.36 | 0.36 | Accept null |
| Freshman vs. Senior | 1.78 | -0.02 | 0.49 | Accept null |

(See Appendix F, G, and H for Data Analysis)

**Chapter Summary**

Hypothesis one analyzed the relationship between athletic identity and GPA. In order to test the relationship, a t-test assuming equal variance was conducted. The researcher accepted null hypothesis one because there was not enough evidence to reject it. Hypothesis two compared GPA in season to GPA out of season. To test whether a difference existed, the researcher conducted a series of t-tests assuming equal variance. For each year of college, the null hypothesis was accepted that there was no difference between the two seasons. For hypotheses three, four, and five which investigated whether GPA changed over the course of time spent in college, each null hypothesis was accepted because there was not enough evidence to reject them.

# Chapter 5

## Background, Discussion, Implications

### Background

The vast majority of existing research investigated academic performance of male student-athletes at the NCAA Division I level, whereas few studies examined academic performance of female student-athletes at more academically focused NCAA Division III institutions. The purpose of the current study was to gain a better understanding of the relationship between academic performance and athletics for female student-athletes at the Division III level by examining potential factors that might affect female student-athletes' GPAs. Specifically, the following research questions guided this study:

- Is there a difference in the academic performance of student-athletes exhibiting a high athletic identity compared to those expressing a low athletic identity?
- Do grade point averages vary between sport's different seasons, in regards to in-season and out-of-season academic performance?
- Does academic performance change from a student-athlete's first year in college to her final year? Does performance improve or decline with time?

### Discussion

The researcher investigated five hypothesis sets, each hypothesis examined the effect, if any, athletic participation had on GPA. Hypothesis one investigated the first research question by examining the relationship between athletic identity and GPA. The researcher expected to find that those identifying more as athletes would have lower GPAs than those identifying less as athletes, as measured by Brewer and Cornelius's

(2001) Athletic Identity Measurement Scale. Analysis of the results found there to be no difference between the GPAs of those identifying more as athletes and those identifying less as athletes. These findings contradict past research at the Division I level which found a negative correlation between athletic identity and GPA, such that those identifying more as athletes would have a lower GPA than those identifying less as athletes and vice versa (Bimper, 2014; Sturm et al., 2011). The lack of evidence showing that athletic identity affects academic performance at the Division III level suggests that student-athletes at Division III institutions may be better able to balance the two roles of student and athlete, more so than Division I student-athletes.

Hypothesis two investigated research question two by examining the effect playing season had on academic performance. Since Division III institutions tend to be more academically focused as opposed to Division I institutions, the researcher expected to find no difference between GPA in season and GPA out of season. Analysis of the results supported null hypothesis two in that GPA in season equaled GPA out of season. These findings contradict past research at the Division I level which found in-season GPA to be lower than out-of-season GPA (Scott et al., 2008). Thus, the researcher concluded that participation in a Division III athletic program does not play a significant factor on academic performance, again suggesting that Division III student-athletes might be better able to balance the dual role of student and athlete.

Hypotheses three, four, and five investigated research question three by examining whether GPA changed over the duration of one's time in college. The researcher expected to find that GPA would increase from freshman year to senior year. Contrary to this expectation, the results did not support hypothesis three, four, or five.

Analysis of the data revealed that the difference in GPA over time was not significant. This finding was surprising because one would expect that student-athletes would gain better study habits over time, thereby increasing GPA. However, it could also be concluded that student-athletes attending more academically focused institutions come to college more prepared academically and therefore already have the study habits needed to be academically successful.

Overall, the findings from this study contradict findings from studies conducted at the Division I level. The majority of the literature on Division I student-athletes demonstrates that athletic participation does affect academic performance. For example, Division I research shows that the more a student identifies as an athlete, the lower their GPA. However, at the Division III level, as shown in this study, the GPAs of students identifying more as athletes did not differ from the GPAs of those identifying less as athletes. This difference between Division I and Division III supports the idea that Division I institutions may focus more on athletics, while Division III institutions may focus more on academics. Additional support of this idea can be found in this study's comparison of in-season GPAs and out-of-season GPAs. Existing research at the Division I level consistently shows in-season GPA to be lower than out-of-season GPA. Some suggest that the difference in GPA between seasons occurs as a result of the increased athletic time demands in season compared to out of season. This difference was not found at the Division III level. This study found in-season GPA to equal out-of-season GPA. The findings of this study of Division III student-athletes contradict studies of Division I student-athletes and support the idea that Division III institutions may be more academically focused and Division I institutions may be more athletically focused.

**Limitations**

The small sample size in this study limited the study's ability to be generalized to other institutions. However, the study did include multiple athletic teams and so could be generalized to the female student-athletes at the institution and other similar Division III colleges who did not participate in this study. The study included self-reported data, in terms of GPA which may limit the accuracy of the data. Future research should obtain GPA data from the college's Athletic Director or college's Registrar to ensure accurate results.

**Recommendations**

As mentioned in the limitations, data measuring academic performance should be obtained through a third party (e.g. Athletic Director, coach). Not only would it increase the reliability and consistency of the data, it would yield more accurate data to analyze. Having more accurate data would allow for greater generalizability and chance of uncovering trends in the data. Future research should consider examining the difference in single sport athletes and multi-sport athletes. Finally, including an item asking how often or what types of academic resources student-athletes use could reveal what factors lie behind the difference in Division III and Division I student-athletes' ability or inability to balance being a student and an athlete.

**Implications**

This study generated findings that contradict what was previously found at Division I institutions, but is consistent with upholding the academic mission at Division III institutions. Overall, the study found athletic participation to have very little impact on academic performance, suggesting that Division III student-athletes have the ability to be

both an athlete and succeed as a student. The findings from this study lay a foundation for future research that can begin to investigate reasons why Division III student-athletes can balance the two roles (e.g., academic resources, institution's focus on academics, less athletic pressure). Future research that can be developed from this study has the potential of discovering what makes Division III student-athletes successful and use those findings to help develop and tailor programs to assist Division I student-athletes in achieving both in the classroom and on the playing field.

**Chapter Summary**

The present study was designed to expand on current research of intercollegiate student-athletes' academic performance by investigating the effect, if any, athletic participation has on female student-athletes at a more academically focused Division III institution. Findings from the study reveal that the two roles, athlete and student, do not have much impact on each other. The findings contradict previous research conducted at the Division I level which showed the two to be related. The present study sets the stage for future research that can begin to investigate in depth the factors affecting why the relationship does not exist at Division III institutions and why it does at Division I institutions.

## Appendix A

## Athletic Identity Measurement Scale

*Please read each statement carefully and rate each statement as it relates to you on a scale of 1=Strongly Disagree to 7=Strongly Agree.*

1. I consider myself an athlete.
2. I have many goals related to sport.
3. Most of my friends are athletes.
4. Sport is the most important part of my life.
5. I spend more time thinking about sport than anything else.
6. I feel bad about myself when I do poorly in sport.
7. I would be very depressed if I were injured and could not compete in sport.

## Appendix B

## Demographics

*The following questions include basic demographic questions.*

1. What academic year are you?
   - Freshman
   - Sophomore
   - Junior
   - Senior
2. How old are you in years?
   - 18
   - 19
   - 20
   - 21
   - 22
3. What varsity sport(s) do you play?
   - Basketball
   - Cross Country
   - Field Hockey
   - Golf
   - Lacrosse
   - Soccer
   - Softball
   - Swimming and Diving
   - Tennis
   - Track and Field
   - Volleyball
   - Water Polo
4. Please indicate the semester your sport is considered traditionally “in season”.
   - Fall Semester
   - Winter
   - Spring Semester
5. Please fill in your GPA for the semesters that apply to you, leave all others blank.
   - Freshman Year First Semester (Fall)
   - Freshman Year Second Semester (Spring)
   - Sophomore Year First Semester (Fall)
   - Sophomore Year Second Semester (Spring)
   - Junior Year First Semester (Fall)
   - Junior Year Second Semester (Spring)
   - Senior Year First Semester (Fall)
   - Senior Year Second Semester (Spring)

6. What is your academic major?
    - Accounting
    - Art
    - Art History
    - Asian Studies
    - Athletic Training
    - Biology
    - Chemistry
    - Chinese
    - Classical Studies
    - Communication
    - Computer Science
    - Criminal Justice
    - Economics
    - Education
    - English
    - Environmental Science
    - Finance
    - French
    - Geographic Information Science
    - Geoscience
    - German
    - Graphic Design
    - Great Ideas
    - History
    - International Political Economy
    - Japanese
    - Management
    - Marketing
    - Mathematics
    - Music
    - Neuroscience
    - Nursing
    - Philosophy
    - Physical Education, Sport and Fitness Instruction
    - Physics
    - Political Science
    - Psychology
    - Public Relations
    - Religion
    - Social Work
    - Sociology
    - Spanish
    - Theatre

## Appendix C

## Hypothesis 1 Descriptive Statistics

| *HIGH AIMS* | |
|---|---|
| Mean | 5.7875 |
| Standard Error | 0.10133029 6 |
| Median | 5.86 |
| Mode | 5.86 |
| Standard Deviation | 0.45316286 1 |
| Sample Variance | 0.20535657 9 |
| Kurtosis | - 0.90642223 7 |
| Skewness | -0.1947869 |
| Range | 1.57 |
| Minimum | 5 |
| Maximum | 6.57 |
| Sum | 115.75 |
| Count | 20 |

| *LOW AIMS* | |
|---|---|
| Mean | 4.24785714 3 |
| Standard Error | 0.20681036 2 |
| Median | 4.57 |
| Mode | 4.71 |
| Standard Deviation | 0.77381351 9 |
| Sample Variance | 0.59878736 3 |
| Kurtosis | 3.86226730 3 |
| Skewness | - 2.04986694 9 |
| Range | 2.75 |
| Minimum | 2.14 |
| Maximum | 4.89 |
| Sum | 59.47 |
| Count | 14 |

| *HIGH AIMS GPA* | |
|---|---|
| Mean | 3.2938 |
| Standard Error | 0.13795536 3 |
| Median | 3.379 |
| Mode | 4 |
| Standard Deviation | 0.61695513 8 |
| Sample Variance | 0.38063364 2 |
| Kurtosis | - 0.72204810 6 |
| Skewness | - 0.03800469 5 |
| Range | 2.19 |
| Minimum | 2.33 |
| Maximum | 4.52 |
| Sum | 65.876 |
| Count | 20 |

| *LOW AIMS GPA* | |
|---|---|
| Mean | 3.58721428 6 |
| Standard Error | 0.11376605 9 |
| Median | 3.7565 |
| Mode | #N/A |
| Standard Deviation | 0.42567361 6 |
| Sample Variance | 0.18119802 7 |
| Kurtosis | 2.06981465 4 |
| Skewness | - 1.64945634 7 |
| Range | 1.406 |
| Minimum | 2.58 |
| Maximum | 3.986 |
| Sum | 50.221 |
| Count | 14 |

## Appendix D

## Hypothesis 1 Data Analysis

t-Test: Two-Sample Assuming Equal Variances

| | *HIGH AIMS* | *LOW AIMS* |
|---|---|---|
| Mean | 3.2938 | 3.587214286 |
| Variance | 0.380633642 | 0.181198027 |
| Observations | 20 | 14 |
| Pooled Variance | 0.299612924 | |
| Hypothesized Mean Difference | 0 | |
| df | 32 | |
| t Stat | -1.538298232 | |
| P(T<=t) one-tail | 0.066903211 | |
| t Critical one-tail | 1.693888748 | |
| P(T<=t) two-tail | 0.133806423 | |
| t Critical two-tail | 2.036933343 | |

## Appendix E

## Hypothesis 2 Data Analysis

Freshman Year
t-Test: Two-Sample Assuming Equal Variances

| | *In-Season GPA* | *Out-of-Season GPA* |
|---|---|---|
| Mean | 3.37065625 | 3.34652381 |
| Variance | 0.320989007 | 0.452638762 |
| Observations | 32 | 21 |
| Pooled Variance | 0.372616362 | |
| Hypothesized Mean Difference | 0 | |
| df | 51 | |
| t Stat | 0.140772228 | |
| P(T<=t) one-tail | 0.444302216 | |
| t Critical one-tail | 1.67528495 | |
| P(T<=t) two-tail | 0.888604432 | |
| t Critical two-tail | 2.00758377 | |

Sophomore Year
t-Test: Two-Sample Assuming Equal Variances

| | *In-Season GPA* | *Out-of-Season GPA* |
|---|---|---|
| Mean | 3.222777778 | 3.2846 |
| Variance | 0.284106065 | 0.357779686 |
| Observations | 18 | 15 |
| Pooled Variance | 0.317378023 | |
| Hypothesized Mean Difference | 0 | |
| df | 31 | |
| t Stat | -0.313892616 | |
| P(T<=t) one-tail | 0.377852598 | |
| t Critical one-tail | 1.695518783 | |
| P(T<=t) two-tail | 0.755705197 | |
| t Critical two-tail | 2.039513446 | |

Junior Year
t-Test: Two-Sample Assuming Equal Variances

| | *In-Season GPA* | *Out-of-Season GPA* |
|---|---|---|
| Mean | 3.563857143 | 3.497545455 |
| Variance | 0.280957476 | 0.298048273 |
| Observations | 7 | 11 |
| Pooled Variance | 0.291639224 | |
| Hypothesized Mean Difference | 0 | |
| df | 16 | |
| t Stat | 0.25396638 | |
| P(T<=t) one-tail | 0.401378186 | |
| t Critical one-tail | 1.745883676 | |
| P(T<=t) two-tail | 0.802756371 | |
| t Critical two-tail | 2.119905299 | |

Senior Year
t-Test: Two-Sample Assuming Equal Variances

| | *In-Season GPA* | *Out-of-Season GPA* |
|---|---|---|
| Mean | 3.6 | 3.75 |
| Variance | 0.7 | 0.125 |
| Observations | 6 | 2 |
| Pooled Variance | 0.604166667 | |
| Hypothesized Mean Difference | 0 | |
| df | 6 | |
| t Stat | -0.236351579 | |
| P(T<=t) one-tail | 0.410510881 | |
| t Critical one-tail | 1.943180281 | |
| P(T<=t) two-tail | 0.821021762 | |
| t Critical two-tail | 2.446911851 | |

## Appendix F

## Hypothesis 3 Data Analysis

Freshman versus Sophomore
t-Test: Two-Sample Assuming Equal Variances

| | *Freshman* | *Sophomore* |
|---|---|---|
| Mean | 3.289175 | 3.207578947 |
| Variance | 0.34942256 | 0.255056896 |
| Observations | 20 | 19 |
| Pooled Variance | 0.30351494 | |
| Hypothesized Mean Difference | 0 | |
| df | 37 | |
| t Stat | 0.462315663 | |
| P(T<=t) one-tail | 0.323281107 | |
| t Critical one-tail | 1.68709362 | |
| P(T<=t) two-tail | 0.646562214 | |
| t Critical two-tail | 2.026192463 | |

## Appendix G

## Hypothesis 4 Data Analysis

Freshman versus Junior
t-Test: Two-Sample Assuming Equal Variances

| | *Freshman* | *Junior* |
|---|---|---|
| Mean | 3.431125 | 3.50875 |
| Variance | 0.308108824 | 0.25247675 |
| Observations | 12 | 12 |
| Pooled Variance | 0.280292787 | |
| Hypothesized Mean Difference | 0 | |
| df | 22 | |
| | - | |
| t Stat | 0.359146202 | |
| P(T<=t) one-tail | 0.36145488 | |
| t Critical one-tail | 1.717144374 | |
| P(T<=t) two-tail | 0.72290976 | |
| t Critical two-tail | 2.073873068 | |

## Appendix H

## Hypothesis 5 Data Analysis

Freshman versus Senior
t-Test: Two-Sample Assuming Equal Variances

| | *Freshman* | *Senior* |
|---|---|---|
| Mean | 3.585714286 | 3.592857143 |
| Variance | 0.190595238 | 0.590357143 |
| Observations | 7 | 7 |
| Pooled Variance | 0.39047619 | |
| Hypothesized Mean Difference | 0 | |
| df | 12 | |
| | - | |
| t Stat | 0.021384973 | |
| P(T<=t) one-tail | 0.491645018 | |
| t Critical one-tail | 1.782287556 | |
| P(T<=t) two-tail | 0.983290037 | |
| t Critical two-tail | 2.17881283 | |

## References

Antshel, K.M., VanderDrift, L.E., & Pauline, J.S. (2016). The role of athletic identity in the relationship between difficulty thinking or concentrating and academic service use in NCAA student-athletes. *Journal of Clinical Sport Psychology*, *10*, 4, 309-323.

Bimper, A.Y. (2014). Game changers: The role athletic identity and racial identity play on academic performance. *Journal of College Student Development, 55*, 8, 795-807.

Brewer, B.W., & Cornelius, A.E. (2001). Norms and factorial invariance of the Athletic Identity Measurement Scale (AIMS). *The Academic Athletic Journal,* 103-113.

Chen, S., Snyder, S., & Magner, M. (2010). The effects of sport participation on student-athletes' and non-athletes students' social life and identity. *Journal of Issues in Intercollegiate Athletics, 3*, 176-193.

Comeaux, E., Speer, L., Taustine, M., & Harrison, C.K. (2011). Purposeful engagement of first-year division I student-athletes. *Journal of the First-Year Experience and Students in Transition, 23*, 1, 35-52.

Dilley-Knoles, J., Burnett, J.S., & Peak, K.W. (2010). Making the grade: Academic success in today's athlete. *The Sport Journal, 13*, 1.

Emerson, J., Brooks, R.L., & McKenzie, E.C. (2009). College athletics and student achievement: The evidence at small colleges. *New Directions for Institutional Research, 144*, 65-76.

Gaston Gayles, J., & Hu, S. (2009). Athletes as students: Ensuring positive cognitive and affective outcomes. *New Directions for Higher Education, 148*, 101-107.

Jayakumar, U.M, & Comeaux, E. (2016). The cultural cover-up of college athletics: How organizational culture perpetuates an unrealistic and idealized balancing act. *The Journal of Higher Education, 87*, 4, 488-515.

Kankey, K., & Quarterman, J. (2007). Factors influencing the university choice of NCAA division I softball players. *The Smart Journal, 3*, 2, 35-49.

Lawrence, S.M., Harrison, C.K., & Stone, J. (2009). A day in the life of a male college athlete: A public perception and qualitative campus investigation. *Journal of Sport Management, 23*, 591-614.

Mignano, A.C., Brewer, B.W., Winter, C.R., & Van Raalte, J.L. (2006) Athletic identity and student involvement of female athletes at NCAA Division III women's and coeducational colleges. *Journal of College Student Development, 47,* 4, 457-464.

Monda, S.J., Etzel, E.F., Shannon, V.R., & Wooding, C.B. (2015). Understanding the academic experiences of freshman football athletes: Insight for sport psychology professionals. *Athletic Insight, 7,* 2, 115-128.

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

Pauline, J. (2010). Factors influencing college selection by NCAA division I, II, and III lacrosse players. *Journal of Research, 5*, 2, 62-69.

Potuto, J.R., & O'Hanlon, J. (2007). National study of student-athletes regarding their experiences as college students. *College Student Journal, 41*, 4, 947-966.

Ryan, C.J., Groves, D., & Schneider, R. (2007). A study of factors that influence high school athletes to choose a college or university, and a model for the development of player decisions. *College Student Journal*, 532-539.

Scott, B.M., Paskus, T.S., Miranda, M., Petr, T.A., & McArdle, J.J. (2008). In-season vs. out-of-season academic performance of college student-athletes. *Journal of Intercollegiate Sports, 1*, 202-226.

Simons, H.D., Bosworth, C., Fujita, S., & Jensen, M. (2007). The athlete stigma in higher education. *College Student Journal, 41*, 2, 251-273.

Sturm, J.E., Feltz, D.L., & Gilson, T.A. (2011). A comparison of athlete and student identity for division I and division III athletes. *Journal of Sport Behavior, 34*, 3, 295-306.

U.S. Department of Education, National Center for Education Statistics, (2016). Educational institutions, Digest of Education Statistics.

U.S. Department of Education, National Center for Education Statistics (2016). Immediate college enrollment rate, The Condition of Education.

Wininger, S., & White, T. (2008). The dumb jock stereotype: To what extent do student-athletes feel the stereotype? *Journal for the Study of Sports and Athletes in Education, 2*, 2, 227-237.