INTERCOLLEGIATE PARTICIPATION DI VS DIII: EFFECT ON OCCUPATIONAL LIFE AFTER SPORTS

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ABSTRACT

Josh Isom: Intercollegiate participation DI vs DIII: effect on occupational life after sports
(Under the direction of Erianne Weight)

The educational value of intercollegiate athletics has been debated throughout its history, particularly related to “big time” Division I athletics. Research has postulated Division III athletes are provided with a more high quality academic experience. A survey of former athletes from one Division I institution and one Division III institution examined differences in occupational outcomes between the two groups. The results of this study suggest that there is a significant difference in educational satisfaction but not in work engagement, job satisfaction or salary between football and men’s basketball athlete graduates at the Division I and Division III institutions examined. This study will provide new and novel data, as well as offer avenues for further research on the occupational impacts of intercollegiate athletics participation. It will also present both quantitative and qualitative information to help determine if it benefits the prospective student-athlete to participate on the Division I or Division III level.
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CHAPTER I

Introduction

Several recent events have cast a controversial light on the educational value of intercollegiate athletic participation, particularly at the Division I level. Strauss and Wolverton report that as of January 2015, there were 20 universities under investigation by the National Collegiate Athletic Association (NCAA) for academic fraud (2015). Of those 20, 18 were Division I institutions while only one school was from Division III (Axe, 2015). A majority of the negative academic attention broadcasted by the media pertains to Division I. This may lead one to wonder whether Division III experiences similar levels of academic misconduct and if there are significant long-term professional benefits to participating on either level.

Stakeholders across the country have disputed the role of athletics within colleges and universities. Some have noted the positive correlation between participation in athletics and interpersonal skills, relationships with peers, and leadership development (Austin, 1993; Plunkett, Weight, Osborne, & Lancaster, 2016; Ryan, 1989; Weight, Navarro, Huffman, & Smith-Ryan, 2014); a positive effect on students’ personal and social welfare (Cantor and Prentice, 1996); a surge in students’ commitment to their academic institution (Austin, 1993; Aries, McCarthy, Salovey, and Banaiji, 2004), and enhanced post-graduation marketability (Chalfin, Weight, Osborne, Johnson, 2015; Shulman & Bowen, 2002). The fourth president of the NCAA, Myles Brand, strongly accentuated the educational value of intercollegiate athletics
participation, stating that “participation in college sports enhances the educational experience of athletes and that such educational value is the only rational reason for the continued support of intercollegiate athletic in higher education” (qtd. In Renfro, 2012, p.33). Plunkett et al. (2016) conducted a study exploring the value of intercollegiate athletics participation from the perspective of former athletes and found that student-athletes gain institutional and instructional value directly through their participation in intercollegiate athletics. In addition, through student-athlete feedback, she determined that “the values and lessons gained through participation are values and lessons that are carried into life after athletics and into the post-graduation world” (p. 15). Chalfin et al. (2015) explored the value of athletics participation from the perspective of employers who target athletes. He found that employers seek out athletes in particular because of the accompanying attributes highly valued within their organizations, including a competitive nature, goal-orientation, ability to handle pressure, strong work ethic, confidence, coachability, ability to work with others, self-motivation, mental toughness, and time management skills (Chalfin et al., 2015). Though various sources have provided data affirming the positive effects of participation in college athletics, this support has been far from unanimous.

As the benefits of intercollegiate athletics have been cited, so too have the costs. A significant issue plaguing intercollegiate athletics is the over-commercialization of college sports. The popularity of Division I football and men’s basketball has skyrocketed; as a result, so has the emergence of a “commercial/education” model for these sports (Mitten & Ross, 2014). The widespread increase in commercialization has become problematic as university leaders permit it to take priority over serving the fundamental goals of higher education. (Mitten & Ross, 2014). Authors and lawyers Amy and Robert McCormick have addressed the effects of
commercialization on student-athlete education. According to McCormick and McCormick (2008),

Many NCAA rules, including those shaping academic requirements and the grant-in-aid, are structured to further universities’ commercial interests by enabling them to field talented teams rather than by promoting the players’ academic concerns and are bald evidence of the commercial nature of Division I college sports. (p. 506)

Several researchers assert that because there’s such a heavy emphasis on fielding competitive teams, athletes tend to spend more time on their respective sports and consequently pay less attention to academics (Meyer, 1990; Parham, 1993; Smith & Willingham, 2015), making it challenging to reach their full educational potential (Cantor and Prentice, 1996; Smith & Willingham, 2015). There has been increasing instances of literature and litigation condemning the NCAA and its actors for exploiting its athletes (Elinson, 2013; McCormick & McCormick, 2006; Sack & Staurowsky, 1998; Zimbalist, 1999); excessive spending (Anthes, 2010; Drape & Thomas, 2010, Fulks, 2011); and for its collaborative role with the media in undermining the mission of higher education (Benford, 2007; Duderstadt, 2003; Sperber, 2000). Through reduced practice and playing seasons, a decreased number of contests, and other policies including the elimination of the opportunity to redshirt and spend time away from academic studies, Division III actively seeks to alleviate many of the problems prevalent in Division I (NCAA, 2015). Both the structural and philosophical differences between Division I and Division III have been well documented; however, more research needs to be done regarding whether the long-term benefits of participation differ between the divisions.
Purpose of Study

The purpose of this study is to determine whether there is a difference in educational satisfaction, job satisfaction, salary, and work engagement between Division I and Division III football and men’s basketball athlete graduates who are working full time 10 years post-graduation.

Research Questions

RQ 1. Is there a difference in job satisfaction, work engagement, or salary between Division I and Division III football and men’s basketball athlete graduates?

RQ 2. Does intercollegiate athletic participation in football and men’s basketball lead to higher levels of educational satisfaction in Division I or Division III?

Definition of Terms

1) National Collegiate Athletic Association (NCAA): A non-profit association that regulates sports and championships at over 1,200 colleges and universities in the US.

2) Division III: A division of the NCAA with a model in which no athletic scholarships are awarded and athletic departments are staffed and funded similar to any other department in the university. On this level, primary emphasis is placed on the student-athlete experience.

3) Commercialism: excessive emphasis on profit.

4) Revenue Generating Sports: football and men’s basketball. These are usually the sports that bring in the most profit for a university.
5) Arms Race: When increased operating expenditures by schools in a conference are associated with increases at other schools in the same conference (Orszag & Israel, 2009).

6) “Power Five Conferences: The five Division I FBS conferences that generate the most revenue and widespread interest. This group consists of the SEC, ACC, Big Ten, Pac-12, and the Big 12 (Smith, 2014).

7) “Group of Five” Conferences: The conferences made up of Division I FBS schools not in the “Power Five”. This group includes the American Athletic Conference (AAC), Conference USA, the Mid-American Conference (MAC), the Mountain West Conference, and the Sun Belt Conference.

8) Job satisfaction: how people feel about their jobs and their opinions on the different features of their jobs. The extent to which people enjoy (satisfaction) or dislike (dissatisfaction) their jobs (Spector, 1997).

9) Student-athlete: An individual who participated on any varsity athletic team for a minimum of one academic year while enrolled at a four-year college or university.

10) Work (employee) engagement: A positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption. Refers to a persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior (Schaufeli & Bakker, 2003).

**Assumptions**

1) Study participants completed all surveys voluntarily and had a clear understanding of each question.
2) All responders provided honest and accurate answers.

3) All surveys received from responders are representative of the population of the study.
CHAPTER II: LITERATURE REVIEW

Examination of the Divisions I and III Structures

Several structural and philosophical differences exist between the Division I and Division III levels of the NCAA that can potentially affect the quality of a student-athlete’s educational experience and professional life after sports. Leonard (1986) supports the widespread belief that Division I is best characterized by its emphasis on winning and revenue generation. The Division I model and its recent amendments have made winning a top priority amongst its members (Solomon, 2014). Division I member schools who compete in football are classified in one of two groups – the Football Bowl Subdivision, or FBS and Football Championship Subdivision, or FCS (formerly divisions I-A and I-AA respectively). Division I FBS is broken down even further into two additional subsets – the Power 5 and the Group of 5. The Power 5 Conferences consist of institutions from the Southeastern Conference (SEC), the Big Ten, the Pac-12, the Atlantic Coast Conference (ACC), and the Big 12. Each of these conferences bring in at least $250 million via bowl games, distributions from the NCAA tournament, and TV deals and field the most competitive teams in the revenue generating sports of football and men’s basketball (Alsher, 2016).

Schools in these conferences face intense pressure to win, as illustrated by Christopher Smith’s research. Smith’s study examines the all-time average coaching tenure in football for every SEC school. Over the course of 108 seasons, 21 individuals have occupied the head
coaching position at the University of Florida, marking an average tenure of only 5.1 years – the longest of any team in the conference. Smith goes through each team in the conference, ending with the University of Kentucky and its average head coaching tenure of 3.3 years – the shortest in the conference (Smith, 2015). Coaches in these conferences must bring success to the university quickly or find another job; as a result, it can be tempting to transfer the pressure to their student-athletes. Little research exists regarding length of employment for head coaches on the Division III level; however, Wong and Matt’s study examined the difference in longevity between athletic directors in Division I in comparison to those in Division III. The two found that Division I athletic directors had been on the job for an average of 6.78 years, while those from Division III had held the position for an average of 8.92 years (Wong & Matt, n.d.). They note that the lower job security for Division I athletic directors can be attributed to the pressure to produce winning programs quickly and the increase focus on revenue generation (Wong & Matt, n.d.).

Division III is structured to meet the student-athlete’s educational needs. The first sentence of its philosophy statement states: “Colleges and universities in Division III place highest priority on the overall quality of the educational experience and on the successful completion of all students’ academic programs (NCAA Division III Manual, 2015, p. vii).” Chris Pesotski, graduate and ex-player and coach at Cabrini College offers his take on the unique distinction of Division III (Blake, 2011):

The business models are just two completely separate kinds of approaches. The Division I model obviously tries to get 30,000 people in a giant building for the first round games
and the NCAA Division III tournament on the other hand is really looking to reward programs that are successful during the season and they get home games.

Institutions on this level do not award financial aid based on athletic ability; as a result, they attract recruits with different interests and goals than those seeking a Division I scholarship. Griffith and Johnson elaborate, suggesting that due to the lack of athletic scholarships awarded on the level and limited potential future athletic opportunities, Division III athletes report higher levels of scholastic importance than those from Division I (2002). Ludwig conducted a study identifying criteria that is most important to incoming freshman Division III football players when selecting a college. He divides the study into four parts: athletic, academic, social, and overall. He found that overall, the most important factor for the student-athletes are the academic aspects with the prestige of the university being the most important in that category (Ludwig, 2002). In their research, Richards and Aries looked at the costs and benefits of athletic participation, looking exclusively at Division III (1999). Prior research found that academic participation may serve as a barrier to student-athletes’ personal growth and professional development (Cantor & Prentice, 1996; Parham, 1993; Stone & Strange, 1989). Their study, however, provides evidence to the contrary by noting the positive correlation between athletic participation and academic and professional success. Another study shows that not only do students at Division III schools report higher levels of academic challenge than their Division I counterparts, but they are also more likely to participate in active and collaborative learning activities, have a qualitatively better-rounded educational experience, and report greater gains in personal/social development than athletes from Division I (Umbach, Palmer, Kuh, & Hannah, 2006). These studies examine whether Division I or Division III better fulfills the mission and values of the NCAA. This study builds upon previous research through examining the impact
each of the divisions have on their respective student-athletes in the years following their playing
days.

**Division I: Commercialism and Academic Consequences**

In Division I, football and men’s basketball generate more widespread interest and bring
in more revenue than any other sport by a significant margin (Shaffer, 2015). Administrators
depend heavily on these programs to win because of the direct correlation with increases in ticket
sales and alumni donations, the two largest sources of revenue in intercollegiate athletics (Knight
Commission, 2009; Berkowitz et al., 2016). The more affluent athletic departments usually
attract the most talented recruits because of their ability to outspend competitors in areas such as
stadiums and athletic facilities (Remillard, 2014). Bergman and Logan note the direct correlation
between recruiting and on-the-field success, pointing out that better recruits result in more wins,
better conference standings, and improved positioning for more lucrative post season bowls
(2013). The action taken by athletic departments to create superior facilities in relation to their
counterparts has led to the emergence of the arms race. Several teams are crafting unique
facilities for their athletes in attempts to reposition themselves to the forefront of the race.
Examples from the Division I level include Clemson, which has announced plans for a mini golf
course, while South Carolina has plans for a $55 million complex that will house laser tag, a
movie theater, bowling lanes, and a barber shop. After being home to the nation’s best training
facility for a mere three and a half months, Tennessee’s mega-football complex was surpassed by
Oregon and its massive Hatfield-Dowlin Complex – a $95 million gift from Phil Knight (Hobson
The intense pressure on Division I institutions to produce successful programs in two sports has given rise to a compromise in ethics and in some cases, led to fraud. The NCAA mandates that all student-athletes meet minimum academic requirements or lose eligibility. Instead of holding its student-athletes to higher standards, some institutions have resorted to questionable practices, one of which being academic clustering – a phenomena where at least 25 percent of an athletic team share a single major – the most notable being general studies (Fountain & Finley, 2011). This major usually involves a curriculum with minimal rigor, one that allows the student-athlete to pass with relative ease and therefore focus primarily on his athletic experience and avoid any academic setbacks. Some refer to this as majoring in eligibility (Trahan, 2014). Other student-athletes who are able to participate in more respected majors find it difficult to take on the heavier course load. According to data gathered from the 2011 NCAA Convention in San Antonio, Division I Men’s Basketball players spent on average 1.9 less hours per week in-season on academic activities than athletic activities and FBS and FCS players spent 5.3 and 3.5 less respectively on academic activities during the 2010 season. In comparison, Division III Men’s Basketball players spent 4 more hours per-week on academic activities than athletic activities and football players spent 4.9 more hours on academic activities. The same source revealed another significant discrepancy. In Division III, 8 percent of men’s basketball players and 5 percent of football players missed more than 3 classes during the same 2010 season. Division I men’s basketball and FBS football players more than doubled this, with 20 percent and 14 percent missing more than 3 classes, respectively (NCAA Convention, 2011). Findings from the 2016 NCAA GOALS study echoed those from the 2011 Convention. When surveyed, 59 percent of men and 61 percent of women in Division I felt confident in their abilities to keep up with classes while their sport is in season. Division III men and women were a little
more assured in their abilities, coming in at 70 percent and 73 percent respectively (NCAA Convention, 2016). These disclosures illustrate how despite the NCAA’s mission to “maintain intercollegiate athletics as an integral part of the educational program” and to promote amateurism, Division I bears close resemblance to the professional model of commercialism and heavy emphasis on winning – especially in the revenue generating sports (Zimbalist, 1999).

Several key stakeholders in intercollegiate athletics have strong opinions in regards to the current state of the collegiate model and its effect on the status of its student-athletes. Gerald Gurney, president of the Drake Group for Academic Integrity in Collegiate Sport, believes that academic fraud has become prevalent in intercollegiate athletics and that maintaining the eligibility of the star athletes has taken precedence over academic integrity. He insists, “Academic integrity in intercollegiate athletics is an illusion. The public wants to believe these are students, when in fact they are spending so much time in athletics that they have little time to spend on academic pursuits (qtd. in Sherman, 2015, para 13).” There are also head coaches that believe the current state of college athletics conflicts with the objectives accentuated by the NCAA. Former Alabama football head coach and hall of famer Paul “Bear” Bryant (Michener, 1976, p. 203) provided his opinion:

I used to go along with the idea that football players on scholarship were “student-athletes,” which is what the NCAA calls them. Meaning a student first, and an athlete second. We were kidding ourselves, trying to make it more palatable to the academicians. We don’t have to say that and we shouldn’t. At the level we play, the boy is really an athlete first and a student second.
Many student-athletes from Division I Power 5 institutions share President Gurney and Coach Bryant’s sentiments and despite the time limits placed on head coaches and programs, believe that academics take a back seat to athletics. University of Iowa student-athlete Rich Rodriguez provided his take on the current state of athletics from the student-athlete’s perspective, “Our coach even says it: We only have 20 hours, but you have to put in more than 20 hours to be where you want to be. You do a lot more than 20 hours of work” (Martin, 2013).

Shulman and Bowen examined the long-term effect of Division I participation in comparison to Division III and found that intensity of the level of play does not translate into superior later life outcomes for male athletes, as measured by earnings. In fact, their data pointed to the contrary – finding that the earnings advantage by athletes is smallest among those who played at the Division IA (now the Division I Football Bowl Subdivision – or FBS) public universities and, if anything, larger for men who played at the Division III level in coed liberal arts colleges than for those who participated in more elaborate programs in the Ivies or in the Division IA private universities (2002). It also noted the lack of correlation between the winning record of the team on which a student played and how much the student earned later in life. This study will provide a more in depth analysis on the long-term benefits from participating in one division or the other.

DIII: Academic Focus

In contrast to the commercialistic structure of Division I, several studies show Division III puts more emphasis on the academic aspect of the student-athlete experience. While conflicting studies exist on whether student-athletes prioritize athletics at the expense of academics, most studies are consistent in their affirmation that Division III student-athletes more
closely identify with the academic side of the experience (Adler, 1985; Adler 1991; Marx et al., 2008; Potuto & O’Hanlon, 2006). Psychologist and former Ohio State professor Steven Reiss disclosed his observations on Division III athletics in comparison to Division I (Tauer, 2009) writing:

I later evaluated the needs of each player on an NCAA Division I baseball team, NCAA Division I golf team, and a soccer and a tennis team playing in NCAA Division III. The results showed dramatic differences in what motivated the various teams. The Division I players were primarily motivated by competition and achievement, whereas the Division III players - i.e., those from smaller schools - were primarily motivated by social experiences. In other words, Division I athletes wanted to win, but those playing in Division III wanted to make friends.

Richards and Aries reveal that Division III student-athletes are better able to balance both ends of their workloads while maintaining GPAs that don’t differ significantly from their non-athlete counterparts. Also, they are able to fully participate in most other extracurricular activities even outside of the athletic realm (1999). Noble’s study found that faculty members at Division I institutions were less satisfied with their programs than those from Division III (2004). Also, it added faculty from schools with winning programs had more positive sentiments towards athletics than their counterparts from schools with little athletic success, suggesting that the positive attention winning brings to a program somehow offsets the negative feelings professors have towards athletics. Perhaps an explanation for greater Division III student-athlete academic success and levels of faculty satisfaction stems from access to resources. Umbach’s study found that Division III athletes had greater access to academic support programs (2006). At the
completion of their study Williams, Colles, and Allen concluded that student-athletes from all divisions experience similar difficulties in maintaining both academic and athletic commitments; however, Division III student-athletes are the most resilient and therefore should be recognized more often by their athletic departments for their academic achievements (2010).

One working theory for the increased emphasis on academics in Division III is the minute possibility of rising to the professional ranks. The estimated probabilities of competing in professional football and men’s basketball are 1.6% and 1.1% respectively and the chances of a Division III student-athlete reaching the pinnacle are significantly lower than one from the Division I level (NCAA, 2016). In fact the NCAA website informs that 256 players were selected in the 2015 NFL draft: 253 from Division I and only 1 from Division III. It’s virtually impossible to make the jump from Division III basketball to the NBA. Also, the lack of attention devoted to the Division III level possibly puts less pressure on the student-athlete to perform athletically. Pat Coleman, Executive Editor of D3sports.com and Catholic University of America alum (Blake, 2011) elaborated on his personal observations while at CUA:

It’s a division three school in a market of four pro sports teams and five Division I schools. After graduation I was the sports information director for a while and came to realize that first of all, our local media wouldn’t touch us because they had so many other options of things to cover and secondly there was just nobody covering Division III in general.

Because Division III athletic departments aren’t nearly as pressure-packed as their Division I counterparts, there’s less incentive for its student-athletes to take academic shortcuts and they are therefore able to utilize their academic resources more effectively and spend more time focusing on their professional careers (Leonard, 1986). Former Oklahoma Heisman Trophy winner Steve
Owens (1969, p. 94) provides an even deeper Division I perspective: “In high school the game was almost entirely fun. Here it’s a business. We’re supposed to fill that stadium with 60,000 fans and win…I still love the game, but there’s so much pressure, sometimes it makes me wonder.” The Division III structure, philosophy, and student-athlete experience completely contrast Owen’s sentiments.

**Educational Outcomes of Participation in Intercollegiate Athletics**

Those cynical of the effect intercollegiate athletic participation has on the educational experience of student-athletes insist there is a negative association between the two; however, numerous studies paint a different picture. Some studies have even given student-athletes an edge in performance (Aries, McCarthy, Salovey, & Banaji, 2004) while others contend the two groups show no material differences (Aries, et al., 2004; Hood et al., 1992; Pascarella and Smart, 1991; Stuart, 1985). There are also studies from the critics that show a direct correlation between athletic participation and reduced academic success (Long & Caudill, 1991; Maloney & McCormick, 1993). Because of the lack of universally accepted concrete evidence from either end, more research needs to be conducted to develop a more accurate understanding regarding the impact of intercollegiate athletics on educational outcomes.

**Academic Measures**

Maloney and McCormick conducted research specifically examining the effect intercollegiate athletic participation has on academic success. Using student-athletes who attended Clemson University as its sample, the study analyzed the institution’s academic records over a four year span (1985-1988). Grade point averages (GPA) and standardized test scores are
the most tangible means of ranking academic success. These two researchers employed the former. The results were significant, showing that the average grade for athletes was 2.379 in comparison to the 2.681 average grade for the overall student body. With the exception of women student-athletes participating in tennis and track, whose grades were not different from those of the overall student body, and swimming and volleyball, who actually had higher grades than the overall student body with 2.845 and 2.885 compared to 2.681 – the grades of student-athletes were lower across the board than the overall student body (Maloney & McCormick, 1993).

In addition to GPA, graduation rates are also used to measure student-athlete academic success. A study by Patrick James Rishe examined the graduation rates of Division I players in comparison to non-athletes. The study not only found that graduation rates for student-athletes were higher at 58.15% than the 54.62% for non-athletes, but also that athletes were superior in each individual grouping. For example, the rate for black male athletes was 43.32% compared to 37.39% for black male non-athletes. Rishe notes that the gap would be even greater in favor of the student-athletes if not for the growing trend of athletes opting to leave college early and take their talents to the professional level (2003). Data derived from this study would lead one to believe that participation in intercollegiate athletes gives the student-athlete an educational advantage over non-athlete, and that may in fact be the case; however, it provides a surface level analysis and does not include variables that may significantly affect these numbers. The study does not provide a breakdown of graduation rates by major; as a result, we do not know if clustering or any other unethical practices elevated the percentages – which would really be important information given the aforementioned commercialism in Division I. Other research also suggests that athletes’ graduation rates now surpass graduation rates of non-athletes.
(Hildenbrand, et al., 2009), but instead insist that African American athletes and those who play high-profile sports still appear to have much lower graduation rates (Eckard, 2010; Woods, 2007).

**Occupational Measures**

Income level and fields are another means of comparing former student-athletes and non-athletes. In Chalfin’s study, over half of his respondents indicated their company has a company-wide policy/strategy to target former athletes when recruiting employees – with several citing past success with the group as rationale (2015). A study observing 865 males who played a sport at UCLA, discovered that over 50% of the ex-athletes surveyed had jobs considered of high socioeconomic status (Francois, 1998, Loy, 1972). Research has hypothesized that participation in intercollegiate athletics may lead to an increase in athletes’ marketability when heading into the job search (Long & Caudill, 1991; Henderson et al., 2005; McCann, 2012; Rivera, 2011; Shulman & Bowen, 2002; US Department of Education, 1990), though there is limited literature specifically addressing this phenomenon. Bonfiglio’s research found that business was the second highest industry sector of employment reported by athletes, finance and insurance came in fourth, sales is also a common sector amongst the group (Bonfiglio, 2016). Here data supports previous studies that also found athletes make more than non-athletes in certain sectors such as the business sector (Shulman & Bowen, 2002). Though former athletes who became high school teachers earned less than their non-athlete counterparts, Bonfiglio found that the athletes who participated in her study – excluding those who went on to play professionally – make $34,484 more than the non-athletes that participated in the study (2016). This supports past studies that
showed males who participated in college athletics earned approximately 4% higher incomes than their non-athlete male peers (Henderson, Olbrecht, & Polachek, 2005, Astin, 1982; Long & Caudill, 1991).

**Occupational Outcomes**

**Job Satisfaction**

There is no universally agreed upon definition for job satisfaction. The most commonly used definition comes from Edwin Locke (1976), who believes it to be “…a pleasurable or positive emotional state resulting from the appraisal of one’s job or experiences” (p.1304). Based on Locke’s definition, job satisfaction stems directly from how an employee feels. Researchers began using anonymous surveys with regularity in the 1930s (Locke, 1976). Career satisfaction is very significant and should be incorporated into career research because of the direct correlation between subjective feelings of success and the many facets of work behavior and employee welfare (Abele & Spurk, 2009; Spurk, Abele, & Volmer, 2001).

Edwin A Locke’s Range of Affect Theory is one of the most renowned job satisfaction models (1976). It operates under the principal theme that an individual’s satisfaction stems from the discrepancy between what is desired from a job and what he or she actually receives. It elaborates by adding that how much one values a particular aspect of work – i.e. degree of independence – determines the extent to which the person is satisfied or disappointed when expectations are or are not met. Locke asserts that employees are subjective when assessing job satisfaction and have their own unique means of evaluating each facet of the job (Locke, 1976). Therefore, this insinuates that satisfaction or dissatisfaction is tied directly to whether or not an
individual’s needs are met. Locke believes researchers must dive deeper into the complex and multifaceted job dimensions in order to gain a more comprehensive understanding of job satisfaction (Roodt, Rieger, & Sempane, 2002). Locke states that the nine common aspects of job satisfaction are: work, pay, promotions, recognition, benefits, working conditions, supervision, co-workers, and company management” (Locke, 1976, p.1302). Other scholars agree with Locke’s theory that the concept of job satisfaction is multidimensional. Smith, Kendall, and Hulin (1969) recognize five aspects of job satisfaction which include the actual work, pay, supervision, promotion opportunities, and co-workers. Similarly, Reed, Kratchman, and Strawser (1994) say employees will usually be satisfied with their jobs if they are happy with the nature of their work, receive sufficient compensation, are pleased with their leader, and are optimistic about potential opportunities for growth and advancement.

Many regard career satisfaction as the chief measure of an individual’s subjective career success (Gunz & Heslin, 2005; Gunz & Mayrhofer, 2011; Morgeson, Dierdorff, & Hmurovic, 2010). One notable research finding highlights the importance of job satisfaction studies. Rain, Lane, and Steiner found there to be a direct correlation between job satisfaction and life satisfaction (1991) – one that appears to be mutual. One study suggests that people satisfied with their life usually have the same level of satisfaction with their job and vice versa (Rain et al., 1991).

Spurk, Abele, and Volmer conducted a study measuring career satisfaction 15 years after graduation. This particular point in the subjects’ careers was chosen because the authors determined it to be when occupational socialization is vastly completed. This study used the career satisfaction scale (CSS) – an instrument that measures career satisfaction areas such as
achieved success, overall career goals, goals for advancement, goals for income, and goals for development of new skills. The results indicated that the variables measured differed based on the four different occupations that were analyzed: physicians, economists, engineers, and teachers (Spurk, Abele, & Volmer, 2014).

The Job Satisfaction Survey (JSS) will be one scale utilized within this research. Paul E. Spector, the creator of the survey, states that more studies have been done on understanding job satisfaction than any other variable in organizations (Spector, 1985). Job satisfaction has an association with numerous behaviors and outcomes for employees that provide implications for individual and organizational well-being. Job satisfaction is usually evaluated as an attitudinal variable; today a majority of researchers focus on cognitive processes instead of on fundamental needs. When evaluating job satisfaction, it can be considered a global feeling about the job or as a collection of attitudes pertaining to various facets of the job. Spector’s scale employs the facet approach – one that provides a more complete picture of an employee’s job satisfaction than the global approach. It is imperative to point out that job satisfaction and its effects stem from compound interactions between individuals and organizations (Spector, 1985). Bonfiglio utilized a condensed version of the Job Satisfaction Survey in her study and found that there was a significant difference between athletes and non-athletes for seven of the nine facets measured by the JSS (2016). The biggest difference between athletes and non-athletes was Total Job Satisfaction. There was also a significant difference between the two groups for Coworkers, Nature of Work, Pay, Contingency Rewards, Promotion, Communication, and Operating Conditions (Bonfiglio, 2016). This study will follow Bonfiglio’s format but will instead compare athletes who participated in Division I athletics to those who participated in Division III.
Work Engagement

For quite some time, researchers have been conducting a more in-depth analysis of a term that has been coined positive psychology, the scientific study of human strength and optimal functioning (Schaufeli, Bakker, & Salanova, 2006; Seligman & Csikszentmihalyi, 2000). Work engagement, something considered to be the opposite of burnout, has emerged to become a very significant component of positive psychology. Work engagement has been defined as “a positive fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002b). Rather than a momentary and specific state, engagement refers to a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior.... (Schaufeli & Bakker, 2003). Schaufeli and Bakker used this definition to create the Utrecht Work Engagement Scale (UWES), a self-report questionnaire that looks at three facets that make up work engagement: vigor, dedication, and absorption. The two researchers characterize work engagement as displaying a high level of energy and strong identification with one’s work and burnout, conversely, as a low level of energy and poor identification with one’s work (Schaufeli & Bakker, 2003). In a series of structured qualitative interviews involving a heterogeneous group of Dutch employees who scored high on the UWES, Schaufeli and Bakker found that engaged employees are active workers, who take initiative at work and generate their own positive feedback (Schaufeli, Taris, Le Blanc, Peeters, Bakker, & De Jonge, 2001).

Work engagement is a construct that is usually positively correlated with job satisfaction. A group of researchers conducted a meta-analysis and found that the observed correlations of overall satisfaction and employee engagement were at an identical .22 (Harter, Schmidt, &
Hayes, 2002). A Gallup poll regarding work engagement was conducted in 2014. Engaged employees as defined by Gallop are those who are involved in, enthusiastic about and committed to their work and workplace. Gallup’s survey revealed that 31.5% of employees were engaged, 51% were not engaged, and 17.5% were actively disengaged. The number of those engaged may appear to be strangely low, but it is important to note its approximate two percentage point increase from 29.6% in 2013. Also, the 2014 number served as the highest since 2000 – Gallop’s inaugural year of tracking engagement levels of the working population (Adkins, 2015).

Senior executives have highlighted the importance of positive engagement not only for employees but also the bottom line. As a result, it is a top priority. Business leaders know that having a high-performing workforce is essential for growth and survival, especially during this rapid cycle economy. A highly engaged workforce can improve innovation, productivity, and bottom-line performance while decreasing costs related to hiring and retention. (Harvard Business Review, 2013). A number of elite companies cite a competitive advantage stemming from established metrics and practices they have in place to effectively quantify and improve the impact of their engagement initiatives on overall business performance (Harvard Business Review, 2013).

Bonfiglio employed a shortened version of the Utrecht Work Engagement Scale, the UWES-9 and found there to be a significant difference between athletes and non-athletes for three of the four areas measured (2016). The biggest difference between the two groups was Vigor – with Dedication, and Total Work Engagement also revealing a significant difference (Bonfiglio, 2016). As with Job Satisfaction, this study will also use Bonfiglio’s Work
Engagement format as a model when comparing athletes who attended Division I and Division III institutions.

**Conceptual Framework**

Astin’s (1984) theory of student involvement will serve as the conceptual framework for this study. The theory explains how desirable outcome for institutions of higher education are viewed in relation to how students change and develop in result to being involved co-curricularly.

*Astin’s Theory of Student Involvement*

The core concept of Astin’s theory stems from three elements elaborated on in prior research – inputs, environments, and outcomes (1970a, 1970b, 1991). Tabbed the I-E-O Model, these elements were utilized to determine the variables that influence community college students’ satisfaction with their academic programs. The model laid the theoretical foundation for Astin’s involvement theory. Astin (1984) defines student involvement as the “amount of physical and psychological energy that the student devotes to the academic experience” (p. 297). Highly involved students likely allot significant time and energy to studying, participation in student organizations, and frequently interacting with other students and faculty members across the campus (Astin, 1984). Astin’s involvement theory has five postulates:

1. Involvement refers to the investment of physical and psychological energy in various objects. The objects may be highly generalized (the student experience) or highly specific (preparing for a chemistry examination).
2. Regardless of its object, involvement occurs along a continuum; that is, different students manifest different degrees of involvement in a given object, and the same student manifests different degrees of involvement in different objects at different times.

3. Involvement has both quantitative and qualitative features. The extent of a student's involvement in academic work can be measured quantitatively (how many hours the student spends studying) and qualitatively (whether the student reviews and comprehends reading assignments or simply stares at the textbook and daydreams).

4. The amount of student learning and personal development associated with any educational program.

5. The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement. (Astin, 1984, p. 298)

Astin’s theory is important when addressing the research questions in this study because it provides reasoning as to why participation in one division over another may yield more success for student-athletes. Astin (1993) asserts that peers are “the single most potent source of influence on growth and development during the undergraduate years” (p. 398). Pascarella and Terenzini conducted research examining the impact of college and explained the significance of peer interactions (1991, 2005). They state that peer interactions “promote positive academic and social self-concepts, self-confidence, and leadership skills” (Pascarella & Terenzini, 2005, p.
Additional research provides evidence that active involvement with student peer groups can lead to positive cognitive, psychosocial, and affective development in students (Astin, 1996; Magolda, 1992; Foubert & Grainger, 2006; Inman & Pascarella, 1998; Kuh, 1993, 1995; Pascarella & Terenzini, 1991, 2005; Terenzini, Pascarella, & Blimling, 1996; Twale & Sanders, 1999; Whitt, Edison, Pascarella, Nora & Terenzini, 1999). Several of these skills overlap with those that employers look for in potential employees, including the abilities to work in a team, to make decisions and solve problems, to communicate verbally with people inside and outside an organization, and to sell and influence others (Adams, 2013); as a result, it would be beneficial professionally for a student-athlete to spend their collegiate years in an environment that promotes involvement and inclusion. Astin’s theory will be utilized in this research to help determine to what extent the aforementioned differences in the Division I and Division III structures affect student outcomes.
CHAPTER III: Methods

This research consisted of a study examining the life experience of former NCAA athletes. It produced a detailed analysis of the professional functioning of post-graduation football and men’s basketball Division I and Division III athletes.

Subjects

The subjects for this study were football and men’s basketball student-athlete graduates from two institutions, one from Division I and another from Division III. Both institutions were chosen because of their distinguished athletic success as indicated by their top 10 finishes in the Learfield Directors’ Cup Standings – a system of quantifying overall athletic achievement and ranking programs in intercollegiate athletics (“Fall @ldirectorscup Standings,” 2016), as well as their established record of academic success as noted by their high rankings in the U.S. News and World Report releasings. The target population contained participants who graduated from these two institutions in the cohorts including graduating classes of 2004-2006 (10 years post-graduation), 1994-1996 (20 years out), 1984-1986 (30 years out), and 1974-1976 (40 years out). Each cohort encompassed the graduating classes surrounding the target graduation year in order to boost sample sizes. For example, for the 10-year post-graduation cohort includes graduates from 2004, 2005, and 2006.

The entire population of both former Division I student-athletes and Division III student-athletes from the graduation cohorts mentioned above that had listed email addresses in the
alumni directory from the two sample schools were invited to participate in the study. This study gained access to the sample via university alumni association databases. Approximately $N = 1661$ Division I athletes and $N = 837$ Division III athletes were contacted. The study then filtered the responses to include only football and men’s basketball players that had not played their respective sport professionally. The sample size utilized came out to be approximately $n = 82$ for Division I and $n = 42$ for Division III. The response rates for Division I athletes and Division III athletes were 22.94% and 26.05% respectively.

Instrumentation

The instrument for this study was a blend of two previously developed surveys, the Job Satisfaction Survey (JSS) (Spector, 1994) and the Utrecht Work Engagement Scale (UWES), the UWES-9 (Schaufeli, Bakker, & Salanova, 2006). Two open-ended questions and ten demographic questions were also incorporated to acquire additional information regarding survey participants and to provide for a rich data set. The Job Satisfaction Survey, JSS, is a 36 item, nine-facet scale created by Paul E. Spector in 1985. It is a highly respected instrument that has been utilized in numerous research projects (eg. Astrauskaite, Vaitkevicius, & Perminas, 2011; Giri et al., 2010; Liu, et al., 2004; Watson et al., 2007; Yelboga, 2009). The JSS is a well-represented instrument with high reliability coefficients and empirically tested validity. The internal consistency reliabilities (coefficient alpha) based on a sample of 2,870 are: Pay .75, Promotion .73, Supervision .82, Fringe Benefits .73, Contingent Benefits .76, Operating Procedures .62, Coworkers .60, Nature of Work .78, Communication .71, and a Total of .91 for all nine facets (Spector, 1994). In this study, the original JSS-36 was condensed to include two rather than four questions per sub-scale. The other scale utilized was the UWES-9 question scale which includes three subscales including dedication, absorption, and vigor (Schaufeli, Bakker, &
Salanova, 2006). Internal reliability measures based on the samples within this study are presented in the results section.

Each question on the survey pertains to at least one of the two stated research questions. In addition to Likert scale questions, the survey also featured multiple choice, and open-ended questions. For example, the survey question related to industry sector requested that respondents select their industry or industry sector from a list of twenty options. The twenty industry sectors that were included on the survey came from the Bureau of Labor Statistics 2014 North American Industry Classification System (NAICS). The NAICS uses a production-based conceptual framework to group establishments into industries based on the activity in which they are primarily engaged. NAICS uses a six-digit coding system to classify all economic activity into twenty industry sectors (Bureau of Labor Statistics, 2014).

Once the instrument items were compiled into a single online instrument, a group of experts, including three professors, a biostatistician, three athletic administrators, and an expert in survey methodology from the Odum Institute for Social Science Research, reviewed the survey. The instrument was subsequently disseminated to each subject via a link in an email. The survey was completed online using Qualtrics.

Analysis

Once the data was collected and entered into Statistical Package for the Social Sciences software (SPSS), several statistical tests were run to evaluate the results. For research question one, One-way ANOVAS were run in order to test for significant variances in salary, work engagement, job satisfaction, and educational satisfaction between the Division I football and
men’s basketball athletes and Division III athletes. This study employed a Likert scale, as well as a one way ANOVA to address the second research question and to determine the extent of educational satisfaction experienced by Division I athletes and Division III football and men’s basketball athletes. Descriptive statistics were also utilized to determine the patterns present in the data.

Open-ended data was coded by trained researchers thoroughly reading and reviewing the text. Themes and patterns were identified throughout the process, and narratives were coded independently by the two individuals. Open-ended questions were also incorporated and later analyzed and compared. The results of the study were then organized into logical categories and tested for inter-coder reliability.
CHAPTER IV: RESULTS

Demographics

All of the participants in this survey were either football or men’s basketball student-athletes. Of the athletes who completed the survey, 67% (n=82) played on the Division I level, and 33% (n=41) played Division III. A majority of DI athletes (80.49%, n=66) and all but two (95.12%, n=39) DIII athletes reported their ethnicity as Caucasian. Table 1 provides a complete listing of respondent demographic information.

This study asked participants who were currently employed full time to disclose their annual salary, including commission, measured in thousands of U.S. dollars. As stated in the delimitations, athletes who played professionally were not included. At $F(1, 119) = .003, p = .959$, DIII athletes on average earned $1,039 more than DI athletes. These results are also included in Table 1.

| Table 1 |

<table>
<thead>
<tr>
<th>Demographic information</th>
<th>DI Athletes</th>
<th>DIII Athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>80.49%</td>
<td>66</td>
</tr>
<tr>
<td>African American</td>
<td>17.07%</td>
<td>14</td>
</tr>
<tr>
<td>Asian</td>
<td>1.22%</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>1.22%</td>
<td>1</td>
</tr>
<tr>
<td>Salary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$161,870</td>
<td>103.99</td>
<td>$162,909</td>
</tr>
</tbody>
</table>
Current occupation and industry sector

This study asked participants to identify the industry in which they are employed from a list of industry sectors from the U.S. Census (2014). Athletes from the DI institution reported working in the business field 22.50% (n=18) more than any other industry. Similar to business, the finance and insurance field was one heavily populated by DI athletes 18.75% (n=15), coming in second. Not too far behind was the health care industry, rounding out the top three at 12.50% (n=10). The industry makeup for DIII athletes was very similar to that of the DI athletes. Business 26.19% (n=11) was also the most common field for DIII athletes. The most notable difference between the two institutions was the DIII school’s number two. For them, education 21.43% (n=9) followed business as the second most common field. Finance and insurance 19.05% (n=8) was a very close number three. Table 2 illustrates the breakdown of the responses to the industry question.

Each participant was provided a list of thirteen options – including an “other” category – and was asked to select his occupation. Of the occupations held by DI athlete participants, 41.25% were in executive, administrative, or managerial positions (n=33), 21.25% were in sales (n=17), 12.50% selected the “other” option (n=10), 11.25% were in professional, scientific, & technical roles (n=9), and 7.50% (n=6) reported serving as an educator. Athletes from DIII were also asked to disclose their occupation. A higher percentage, 57.14%, reported employment in executive, administrative, or managerial roles (n=24). The top three rankings for the DIII school mirrored that of the DI’s with sales 14.29% (n=6) and professional, scientific, & technical 9.52 (n=4) coming in second and third, respectively. There were also a reported 4 educators for DIII, putting them at a tie for number three. Both DI and DIII responses to the occupation questions can be found in Table 2.
Utilizing the UWES-9, participants were asked to answer nine questions pertaining to how often they experience certain emotions or occurrences within their current occupation. The questions were organized into a Likert scale with options that included (0) never, (1) a few times a year or less, (2) once a month, (3) a few times a month, (4) once a week, (5) a few times a week, and (6) every day.

Dedication, Absorption, Vigor are the three sub-components of Total Work Engagement measured with the UWES-9. The results in this study reflected no significant difference at the .05 level, $F(1, 121) = 3.71, p = .056$ between DI athletes and DIII athletes for each of the three subcategories, as well as total work engagement, and in each category the DI athletes reported higher levels of work engagement than their DIII athlete peers; however, the practical
implication is minimal. When testing the reliability of the UWES-9, the Cronbach’s alpha, $\alpha$, was equal to .913.

**Table 3**

<table>
<thead>
<tr>
<th></th>
<th>DI Athletes</th>
<th>DIII Athletes</th>
<th>Mean Difference</th>
<th>$F$</th>
<th>$p$</th>
<th>$\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Work Engagement</td>
<td>5.59</td>
<td>4.97</td>
<td>0.62</td>
<td>3.71</td>
<td>0.056</td>
<td>0.913</td>
</tr>
<tr>
<td>Dedication</td>
<td>5.74</td>
<td>5.15</td>
<td>0.59</td>
<td>3.68</td>
<td>0.057</td>
<td>0.819</td>
</tr>
<tr>
<td>Absorption</td>
<td>5.51</td>
<td>4.90</td>
<td>0.61</td>
<td>3.12</td>
<td>0.080</td>
<td>0.770</td>
</tr>
<tr>
<td>Vigor</td>
<td>5.50</td>
<td>4.87</td>
<td>0.63</td>
<td>2.63</td>
<td>0.108</td>
<td>0.880</td>
</tr>
</tbody>
</table>

*p < .05 Note: Scale from (0) never to (6) every day

**Job Satisfaction**

Similarly to the Utrecht Work Engagement Scale, this study also used a condensed version of the Job Satisfaction Survey (JSS). The JSS calculates a facilitates measurement of none sub-categories each related to job satisfaction including supervision, coworkers, nature of work, pay, contingent rewards, promotion, fringe benefits, communication, and operating conditions. Participants were presented with a six-point Likert scale with the following options: (0) disagree very much, (1) disagree moderately, (2) disagree slightly, (3) agree slightly,(4) agree moderately, and (5) agree very much yielding mean scores ranging from 0-6. This study reflect no significant difference between DI athletes and DIII athletes for all nine facets, including Total Job Satisfaction. The biggest difference in DI ($M = 4.26$, $SD = 1.36$) and DIII ($M = 4.56$, $SD = 1.31$) was within the satisfaction with pay category $F(1, 120) = 1.40$, $p = 0.238$. When testing the reliability of the JSS for this study, the Cronbach’s alpha, was equal to .888. Results from the Job Satisfaction Survey can be found in Table 4.
Table 4

Job satisfaction between DI Athletes and DIII Athletes

<table>
<thead>
<tr>
<th></th>
<th>DI Athletes</th>
<th>DIII Athletes</th>
<th>Mean Difference</th>
<th>F</th>
<th>p</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Job Satisfaction</td>
<td>4.43</td>
<td>4.23</td>
<td>0.20</td>
<td>0.006</td>
<td>0.937</td>
<td>0.888</td>
</tr>
<tr>
<td>Supervision</td>
<td>4.98</td>
<td>5.02</td>
<td>0.04</td>
<td>0.033</td>
<td>0.857</td>
<td>0.856</td>
</tr>
<tr>
<td>Coworkers</td>
<td>5.12</td>
<td>4.91</td>
<td>0.21</td>
<td>1.407</td>
<td>0.238</td>
<td>0.580</td>
</tr>
<tr>
<td>Nature of Work</td>
<td>5.15</td>
<td>4.97</td>
<td>0.18</td>
<td>0.867</td>
<td>0.354</td>
<td>0.707</td>
</tr>
<tr>
<td>Pay</td>
<td>4.26</td>
<td>4.56</td>
<td>0.30</td>
<td>1.404</td>
<td>0.238</td>
<td>0.678</td>
</tr>
<tr>
<td>Contingent Rewards</td>
<td>4.27</td>
<td>4.35</td>
<td>0.08</td>
<td>0.108</td>
<td>0.742</td>
<td>0.690</td>
</tr>
<tr>
<td>Promotion</td>
<td>3.90</td>
<td>3.90</td>
<td>0.00</td>
<td>0.000</td>
<td>0.999</td>
<td>0.758</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>4.26</td>
<td>4.20</td>
<td>0.06</td>
<td>0.073</td>
<td>0.787</td>
<td>0.442</td>
</tr>
<tr>
<td>Communication</td>
<td>4.24</td>
<td>4.09</td>
<td>0.15</td>
<td>0.375</td>
<td>0.542</td>
<td>0.556</td>
</tr>
<tr>
<td>Operating Conditions</td>
<td>3.79</td>
<td>3.81</td>
<td>0.02</td>
<td>0.003</td>
<td>0.960</td>
<td>0.454</td>
</tr>
</tbody>
</table>

*p < .05 Note: Scale from (1) disagree very much to (6) agree very much.

Effect of intercollegiate athletics participation on career

Respondents were asked an open-ended question regarding the effect being an intercollegiate athlete has had on their individual careers. There were responses from 63 DI athletes and 35 DIII athletes, with answers that ranged from one word to a paragraph. Researchers coded each response and analyzed them for themes and patterns. Table 5 illustrates the twelve emergent categories. The most prevalent theme mentioned throughout many of the responses from both DI (n = 17) and DIII (n = 11) athletes is that participating in intercollegiate athletics enhances athletes’ interpersonal skills and helps them to be team players and work well with individuals from diverse backgrounds. Another common theme mentioned by both DI (n = 13) and DIII (n = 9) athletes was work ethic – particularly how college athletic participation developed that skill, allowing them to thrive in their respective professions.
Table 5

<table>
<thead>
<tr>
<th>Theme</th>
<th>DI Athletes</th>
<th></th>
<th>DIII Athletes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork (Working Well With Others)</td>
<td>17</td>
<td>26.98%</td>
<td>11</td>
<td>31.43%</td>
</tr>
<tr>
<td>Work Ethic (Hard Worker)</td>
<td>13</td>
<td>20.63%</td>
<td>9</td>
<td>25.71%</td>
</tr>
<tr>
<td>Positively (including very positively)</td>
<td>13</td>
<td>20.63%</td>
<td>5</td>
<td>14.29%</td>
</tr>
<tr>
<td>Discipline</td>
<td>12</td>
<td>19.05%</td>
<td>3</td>
<td>8.57%</td>
</tr>
<tr>
<td>Perseverance</td>
<td>9</td>
<td>14.29%</td>
<td>6</td>
<td>17.14%</td>
</tr>
<tr>
<td>Competitive Nature/Spirit</td>
<td>7</td>
<td>11.11%</td>
<td>3</td>
<td>8.57%</td>
</tr>
<tr>
<td>Opened Doors (Networking/Connections)</td>
<td>6</td>
<td>9.52%</td>
<td>4</td>
<td>11.43%</td>
</tr>
<tr>
<td>Time Management</td>
<td>4</td>
<td>6.35%</td>
<td>3</td>
<td>8.57%</td>
</tr>
<tr>
<td>Confidence</td>
<td>3</td>
<td>4.76%</td>
<td>1</td>
<td>2.86%</td>
</tr>
<tr>
<td>Goal setting</td>
<td>3</td>
<td>4.76%</td>
<td>1</td>
<td>2.86%</td>
</tr>
<tr>
<td>Focus</td>
<td>1</td>
<td>1.59%</td>
<td>2</td>
<td>5.71%</td>
</tr>
<tr>
<td>No effect</td>
<td>1</td>
<td>1.59%</td>
<td>1</td>
<td>2.86%</td>
</tr>
</tbody>
</table>

Note: Due to response overlap percentages do not add up to 100.

**Educational Satisfaction**

A question in the survey asked respondents “How would you rate your overall undergraduate educational experience?” Using a Likert scale, DI and DIII athletes were given five options – (1) poor, (2) fair, (3) good, (4) very good, and (5) excellent. Division I athletes responded significantly higher ($M = 4.19$, $SD = .765$) indicating greater satisfaction with their educational experience than the DIII athletes ($M = 3.87$, $SD = .786$) in the sample, $F(1, 123) = 4.97$, $p = 0.028$. A breakdown of the responses for the educational satisfaction question can be found in Table 6.
Table 6

“How would you rate your overall undergraduate educational experience?”

<table>
<thead>
<tr>
<th></th>
<th>DI Athletes</th>
<th></th>
<th>DIII Athletes</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td>Educational satisfaction</td>
<td>4.19</td>
<td>0.765</td>
<td>3.87</td>
<td>0.786</td>
<td>4.969</td>
<td>0.028</td>
</tr>
</tbody>
</table>

*Note: Scale ranged from (1) poor to (5) excellent*
CHAPTER V: DISCUSSION

The results of this study suggest that there are minimal largely non-significant differences between the football and men’s basketball athlete graduates from a Division I institution and a Division III institution in work engagement, and job satisfaction, and salary with a significant difference in educational satisfaction. Referring back to the two research questions, this discussion will focus on the findings pertaining to 1) salary, 2) work engagement, 3) job satisfaction, and 4) educational satisfaction.

Salary

The results of this study revealed no significant difference in salary between the Division I and Division III athlete graduates in the sample. When excluding those who played professionally, the means for Division I athletes ($M = $161,870, $SD = 103.99$) and Division III athletes ($M = $162,909, $SD = 109.75$) reflected a difference of only $1,039. The high salaries for both divisions can possibly be attributed to both the industries and occupations these athletes have occupied. A combined 41.25% (n = 33) of Division I athletes reported working in either the business or the finance and insurance industry, and a combined 45.24% (n = 19) of Division III athletes reported working in the two industries. This supports the findings of both Bonfiglio (2016) and Shulman and Bowen (2002) indicating that more athletes tend work in business, finance, and sales than non-athletes. Also, 41.25% (n = 33) of Division I athletes and 57.14% (n = 24) of Division III athletes disclosed being in executive, administrative, or managerial roles. Working in these leadership positions, especially in the business industry would likely lead to
higher pay for these athletes. The results found in Table 1 address the first research question of this study.

**Work engagement & Job Satisfaction**

Previous literature has shown that both employers and workers place high value on work engagement. Gallup conducted a poll and found employee engagement to be 31.5%, the highest since 2000 (Adkins, 2015). This study found minimal differences in three of the four areas pertaining to work engagement with the mean values higher for the Division I athlete graduates.

Engaged employees are those who are enthusiastic about and committed to their work and workplace (Citation). Division I athletes ($M = 5.59, SD = 1.11$) had higher means than Division III ($M = 4.97, SD = 0.97$) in work engagement as well as in job satisfaction ($M = 4.43, SD = 0.86$) and ($M = 4.23, SD = 0.81$), respectively. This outcome supports previous research by Harter, Schmidt, and Hayes (2002) regarding the positive correlation between job satisfaction and work engagement. In their study, the group conducted a meta-analysis that reflected a .22 correlation between job satisfaction and work engagement.

It has been said that a happy employee is a loyal employee and that keeping turnover low increases profitability (Rucci et al., 1998); as a result, there have been a plethora of studies conducted on understanding job satisfaction in organizations. It is interesting to note that while Division III athletes reported earning a slightly higher salary than Division I athletes, Division I athletes still had a higher overall job satisfaction than Division III athletes. It is also worth mentioning that Division III athletes had higher ratings for the job satisfaction subcategory, pay, than Division I athletes. This suggests that while it is certainly important, monetary
compensation alone cannot buy employees’ happiness and that workers value a well-rounded positive and fulfilling experience.

Educational satisfaction

The second Research Question of this study was “Does intercollegiate athletic participation in football and men’s basketball lead to higher levels of educational satisfaction in Division I or Division III?” Previous research has suggested that due to excess time demands that prevent the ability to pursue interests outside of athletics, intercollegiate athletes experience lower levels of educational satisfaction than non-athletes. This study sought to determine if the differences in time demands between the two divisions similarly contributed to a discrepancy in educational satisfaction between Division I and Division III.

This study found there to be a significant difference in educational satisfaction between Division I athletes and Division III athlete graduates from the sample institutions. The means for Division I athletes ($M = 4.19, SD = .765$) and Division III athletes ($M = 3.87, SD = .786$) reflected a difference of 0.32. This is interesting because prior studies have found that Division III athletes more closely identify with the academic component of the student-athlete experience (Adler, 1985; Adler 1991; Marx et al., 2008; Potuto & O’Hanlon, 2006) and that they are able to participate in most extracurricular activities even outside of athletics (Richards and Aries, 1999). This data gained from this question suggests that despite findings from these previous studies, Division I athletes are still more satisfied with their undergraduate educational experience.
Conclusion

In examining the effects of intercollegiate participation on occupational measures in athlete graduates from one Division I and one Division III institution, there were some differences observed but more research needs to be conducted to draw a firm conclusion that these differences are not simply reflective of institutional differences rather than athletics divisional differences. With educational satisfaction being the only facet of the research reflecting a significant difference, this study supports previous findings that employers don’t place emphasis on level of athletic competition when seeking employees during the recruiting process (Chalfin, 2015). As a result, based on the results of the study, Division I and Division III football and men’s basketball athletes are earning a similar salary and are just about equally as satisfied with their jobs. Previous studies have emphasized Division III’s ability to provide a more well-rounded student-athlete experience (Richard & Aries, 1999; Umbach, 2006; Leonard, 1986). This study, however, counters these findings and suggests there is no significant advantage to participating on the Division III level. This exploratory study – intended to serve a new and novel addition to current literature on the educational value of intercollegiate athletics – should be effective in facilitating more discussion surrounding the topic, as well as assisting with institutional accountability relative to the academic values emphasized in their respective NCAA manuals. The next section on future studies will elaborate on how future research with a higher volume of institutions and respondents would increase the quality of data on this topic.

Future studies

This study was one of the first to examine occupational functioning of former NCAA athletes via a comparison between multiple divisions; as a result, the findings were intended to lay a solid foundation for further research in the future and to facilitate discussion on the role
intercollegiate athletics plays within higher education. The most significant limitation of this study was the sampling error stemming from lack of representation for all Division I and Division III athletes. Because there are over 300 Division I institutions and over 400 Division III institutions across the country, it was understood at the onset that the scope of this study involving one institution from each level would be very limited, regardless of the sample size drawn from each school and institutional similarities. There are a plethora of avenues subsequent research can take to create a more comprehensive data set. Ideal follow-up research would emulate this study, aiming for a higher institutional sample size. One could examine a comparison between other schools in Division I and Division III or even incorporate Division II, junior colleges and community colleges into the fold. It would also be interesting to look solely at one division and compare subgroups – for example looking at athletes from Power Five institutions in comparison to those from the Group of Five.

Due to the limited sample size, this study was not able to analyze responses industry by industry. It would be interesting to compare Division I and Division III athletes both working in business, and make similar comparisons for other industries such as finance and insurance, healthcare, and education. With additional research and a more robust sample size, a more in-depth analysis can be conducted pertaining to each field. With a greater sample size, it would also add value to this research if one made a comparison between divisions within each of the four graduating cohorts. For example, 41.25% of Division I respondents (n=33) and 57.14% of Division III respondents (n=24) reported working in executive, administrative, or managerial roles. It would be interesting to determine if participating in one level over another allows an individual to develop quicker as a leader and reach senior staff status at a younger age.
This study involved surveys being sent out to individuals via email using Qualtrics. A sampling delimitation in this study comes from the potential lack of computer or internet access for some. Bonfiglio (2016) conducted a similar study utilizing both email and a mailer to disseminate surveys and had an individual indicate interest in taking the survey but lacked internet access. Bonfiglio was able to acquire her response via a phone call but added that she was unsure if there were others in the same position and unable to participate. To ensure everyone has equal opportunity to receive the survey and respond, it would be wise to include on the mailer an option for the survey to be taken via email, phone, or a hard copy through the mail. Similarly, the alumni databases included information on only athlete graduates…thus athletes who participated in athletics who did not graduate are not included in the sample.
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Colleges.
