A HISTORY OF THE NATIONAL COLLEGIATE ATHLETIC ASSOCIATION'S ACADEMIC REFORM MOVEMENT AND ANALYSIS OF THE ACADEMIC PROGRESS RATE IN DIVISION I-A INSTITUTIONS

by

Jill A. Singleton

A Dissertation
Submitted to the
Graduate Faculty

of
George Mason University
in Partial Fulfillment of
The Requirements for the Degree
of
Doctor of Philosophy
Education and Human Development

Committee:

_____ Chair

_____

_____

_____ Program Director

_____ Dean, College of Education and Human Development

Date: _____ Fall Semester 2013
George Mason University
Fairfax, VA

A history of the National Collegiate Athletic Association's academic reform movement and analysis of the academic progress rate in division I-A institutions

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at George Mason University

by

Jill A. Singleton
Master of Science
Georgia Southern University, 2006
Bachelors of Business Administration
Abilene Christian University, 2005

Director: David K. Wiggins, Professor
College of Education and Human Development

Fall Semester 2013
George Mason University
Fairfax, VA

ACKNOWLEDGEMENTS

Many thanks go to my loving husband, Mike. You were always there to encourage and never letting me quit. Thanks you also for letting me get on my soap box and being my sounding board on so many nights. Love always.

Thanks you also, Dr. John Nauright – this would not have happened without you. You were the first to believe that I could earn a doctorate and never doubted in my ability.

Thank you to my wonderful committee – Dr. Dave Wiggins, Dr. Chris Atwater, and Dr. Gary Galluzzo. Thanks for all your hard work and learning as we went along.

Finally, thank you to all my family and friends. You were all there at some point in this process and I thank you.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ABBREVIATIONS

Academic Progress Rate ..... APR
Bowl Championship Series ..... BCS
Federal Graduation Rate ..... FGR
Football Bowl Subdivision ..... FBS
Men's Basketball ..... MBB
Men's Football ..... FB
National Collegiate Athletic Association ..... NCAA
Rating Percentage Index ..... RPI
Women's Basketball ..... WBB

ABSTRACT

A HISTORY OF THE NATIONAL COLLEGIATE ATHLETIC ASSOCIATION'S ACADEMIC REFORM MOVEMENT AND ANALYSIS OF THE ACADEMIC PROGRESS RATE IN DIVISION I-A INSTITUTIONS

Jill A. Singleton, Ph.D.

George Mason University, 2013

Dissertation Director: Dr. David K. Wiggins

This study investigates the accuracy and institutional variables that contribute to the NCAA academic reform measure, the Academic Progress Rate (APR). The APR is the NCAA's newest measure and it is meant to be a "real time" measurement of academic progress for student athletes that takes eligibility, graduation rate, retention, and progress towards degree into its calculation (Denhart, et al., 2009). After a historical review of NCAA academic reforms from the Savage Report through Proposition 48 and finally the policies enacted through the Academic Performance Program, a non-experimental quantitative secondary research analysis study of the APR was conducted. This study examined the 117 Division I-A institutions that participated the Bowl Championship Series during the 2004–05 season. The 2004–05 academic year was chosen because it is the first time the APR was officially published—and the student cohort corresponds to the most recently published federal graduation rate. Each institution was categorically

grouped based on institutional characteristics to determine if there are differences in APR mean scores based on t-test and ANOVA analysis. Important variables that were investigated include enrollment size, admission standards, private vs. public institutions, athletic conference affiliation, athletic budgets, and teams' on-field performance. Results showed that the APR has too much error to be a viable way to determine academic success and did not increase the overall graduation rate of student athletes in revenue sports. Results from the categorically analysis warranted four major findings: admissions standards of the institutions greatly contributed to APR scores; the more money spent on athletics, the higher the APR scores; athletic performance does not matter in terms of APR scores; and football is the revenue sport that causes the most problems when it comes to academic issues and reform.

CHAPTER ONE: INTRODUCTION

College athletics has existed for decades, but it started as a purely extracurricular activity run exclusively by the sport participants – the students. The faculties and administrators of universities initially did not get involved in the sporting activities of the students, focusing solely on academics. As the sporting activities of the students became more organized, they started challenging nearby colleges teams, as well as metropolitan athletic clubs, high school, and professional teams, to compete. In 1852, the first recognized intercollegiate athletic contest was conducted between Harvard and Yale's crew teams (Davenport, 1985, pp. 6–7). This first contest was just the beginning of additional intercollegiate competitions in a number of sports, most notably baseball and football. Football would become the central sporting event and cause for a change in the student run structure.

Brutality in the game of football had been the topic of reform discussions for years, but in 1905 the brutality hit society's limit when 18 deaths and 143 major injuries were documented in the sport. This prompted President Theodore Roosevelt to call a meeting, sometimes called "The White House Conference on Football," with representatives from Harvard, Princeton and Yale to address the safety and regulations of football, and to save it from being abolished (Falla, 1981; Miller, 2011; Smith, 2010). Following this meeting, Chancellor Henry MacCracken of New York University sent out

an invitation to all the football playing institutions to discuss various issues inflicting the sport. The December 28, 1905 meeting included sixty-two schools who ultimately voted to form the Intercollegiate Athletic Association of the United States (IAAUS), the precursor to the NCAA, with the purpose of overseeing all intercollegiate sports (Falla, 1981). Shortly after the new year, the IAAUS created its first constitution and stated that its objective would be "the regulation and supervision of college athletics throughout the United States, in order that the athletics activities may be maintained on an ethical plain in keeping with the dignity and high purpose of education" (Falla, 1981, p. 21). The Association officially changed its name to the National Collegiate Athletic Association (NCAA) in 1910.

In addition to the concern for safety and regulation, academic integrity was seen early on as an issue in college athletics, most notably recognized in Howard Savage's 1929 Carnegie Foundation report, *American College Athletics*. In this report, the question was asked whether "an institution in the social order whose primary purpose is the development of the intellectual life can at the same time serve as an agency to promote business, industry, journalism and organized athletics on an extensive commercial basis?" In addition, the report asked, "can the university concentrate its attention on securing teams that win, without impairing the sincerity and vigor of its intellectual purpose?" (Watt & Moore, 2001). The report concluded that commercialization was the main problem facing college athletics and called for reform.

Although it took many years to accomplish, the first major response to the issue of academic integrity by the NCAA was its passing of the Sanity Code in 1947 which

contained six principles for the conduct of intercollegiate athletics, only to be overturned in 1951. The NCAA's next attempt at academic reform was in 1965 with the establishment of the 1.600 rule. This new rule required incoming student athletes to have a predicted freshman GPA of 1.6 and to maintain it throughout their college career in order to receive athletic financial aid (Kramer, 1966). This rule stayed in place until it was voted out by the NCAA in 1973 and was then replaced by the "2.0 Rule" that required students to achieve solely a GPA of at least 2.0 in high school studies to be eligible for play. In 1986, the NCAA passed Proposition 48, the most extensive eligibility statue up to that point (Newman & Miller, 1995). Proposition 48 required student athletes to meet three standards to be eligible to participate. They must: (a) have taken a prescribed core curriculum in high school, (b) have achieved a 2.0 GPA in high school, and (c) have earned a combined Verbal and Mathematical score of 700 on the Scholastic Aptitude Test (SAT) (Hanford, 1985). Multiple criticisms of the SAT score requirement lead to Proposition 16 being implemented in 1995. Proposition 16 created a sliding scale based on the student's GPA and SAT score, allowing for a lower SAT score if the high school GPA was at a high enough level (Owings, & McMillen, 1995).

An important consequence of Proposition 16 was that it required the admission and graduation rates of student athletes from every institution be reported in compliance with the Right to Know Act of 1990 (Newman & Miller, 1995). The Student Right to Know and Campus Security Act of 1990 requires all institutions of higher learning that participate in Federal Student Aid Programs to report basic institutional information, graduation rates, and data on students receiving athletic student aid, as well as campus

security policies and campus crime statistics (Student Right to Know Act of 1990, 1990). The NCAA hoped that making these statistics public would motivate individual institutions to pay greater attention to the academic achievement of their student athletes.

Between 1995 and 2002 not much changed in the academic reform arena besides slight changes in the number of core classes used in determining the student's high school GPA. Although some of the statistics indicated academic improvements among college athletes, there was still media pressure and concern that not enough was being done to ensure the graduation of student athletes. In 2003, the NCAA approved a new academic reform package centered on a new measure called the Academic Progress Rate (APR), with the first official results being published in 2005. The APR is "a real-time 'snapshot' of a team's academic success each semester that examines the current academic progress of every student athlete." To accomplish this, the APR takes into account "eligibility, retention, and graduation as factors in the rate calculation and provides a much clearer picture of the current academic culture in each sport" ("NCAA Background," n.d.). The NCAA maintains that eligibility and retention are the two strongest indicators of student athlete graduation (Hamilton, 2005). To calculate a team's APR, each team member who receives athletic aid is awarded one point for achieving the eligibility standards and one point for remaining at the institution. A team's APR is calculated by adding the earned points then dividing that total by the points possible multiplied by 1000. A score of 925 must be achieved in order to avoid penalties, including a public warning, restrictions on scholarships, loss of postseason competition, and ultimately restricted membership status.

This score represents an approximate Federal Graduation Rate (FGR) of 50 percent ("How APR," 2010).

Significance

Athletics is undeniably a significant part of the college culture as well as American culture in general. Athletics is often referred to as the "front porch" of the university. Dr. Allen Meadors, the president of the University of Central Arkansas, said it nicely about athletics being the front porch of the university when he stated in 2009 that, "No one thinks of the front porch as the most important part of a house, obviously….But when people drive by your house, they see your porch…That makes it very important that your porch has everything in order" (McCollum, 2009). In addition, students, alumni and other constituents like to gather on the front porch. This gathering for athletics has been going on for over 150 years and is not likely to end, making a small part of the university a big part of university life.

According to the most recent NCAA data, there are approximately 430,301 student athletes in over 1,000 institutions. Of this number, about 169,664 of these athletes participate at the Division I level. Roughly 43 percent of these athletes participates among the 117 institutions that are members of the Football Bowl Subdivision (FBS) of Division I, the highest and most recognizable level of the NCAA (Zgonc, 2010). The median total expense for these FBS athletic programs was $41,363,000 in 2008, which consisted of a 5.54 percent increase from 2007 (Fulks, 2009). According to many estimates, this amount consists of only 6 percent of these universities total institutional spending (Weiner, 2009). This is still an extraordinary amount of money spent on an

extracurricular activity and only solidifies the perceived importance of college athletics to the university.

The importance of college athletics is evident, and the goal of higher education calls for student athletes to not only perform on the field, but also in the classroom. As described above, and will be covered in-depth in chapter two, the NCAA has implemented a number of reform measures to insure that classroom performance continues to be the most important outcome for the student. In 2003, the NCAA instituted its newest reform package, which centers on the Academic Progress Rate (APR). This is the first measure created by the NCAA that holds individual athletes, their teams, and their institutions accountable for academic performance. Attached to this measure are major "disincentives" that are used to encourage an emphasis on academics if teams do not meet the minimum score required, with the most serious being expulsion from the NCAA.

Because of the importance of college athletics, the NCAA's APR is of great concern for all institutions of higher learning. However, this measure has not been evaluated properly for it to be the determining factor on athletic eligibility.

Statement of Problem

The problem with the APR is that there is no data to show if it truly does translate into a 50 percent FGR. The FGR is calculated on a six year cycle that is required by the Federal Student Right to Know Act. The first official APR report came out in 2005 and contained the 2004-2005 academic year data. This is currently the first time that the student populations from both sets of data are from the same cohort of students, making it

ideal to test the accuracy of the measure. In addition, different variables that could contribute to the overall APR score have not been explored. The diversity of higher education and the simplicity of the APR make it unclear as to whether it can to accurately predict academic success across all institutions.

Research Questions

The purpose of this study is to examine the most current NCAA academic reform measure and its effect on the academic success of student athletes among different NCAA institutions. The APR is the NCAA's newest measure and is it meant to be a "real time" measure of the academic progress of athletic teams that takes eligibility, graduation rate, retention, and progress towards degree into its calculation (Denhart, et al., 2009). This investigation will be accomplished by employing the following research questions:

1. Does the APR 925 cut score accurately translate into a 50 percent federal graduation rate in the revenue sports?
2. To what extent did the APR affect graduation rates on revenue sports?
3. Which revenue sport did the APR 925 cut score have the most effect on in terms of graduation rates?
4. Do different categorical grouping of institution based on (1) enrollment size, (2) admissions standards, (3) public or private affiliation, (4) sport conference affiliation, (5) athletic operating cost, (6) athletic recruiting cost, (7) football coach's salary, (8) and athletic performance based on the RPI differ on the APR score of revenue sports?

Definition of Terms

Academic success – an athletic team that obtains a 925 or higher APR, and a 50 percent or higher FGR

Academic Progress Rate (APR) – a team-based metric that accounts for the eligibility and retention of each student-athlete each academic term; each student-athlete receiving athletically related financial aid earns one retention point for staying in school and one eligibility point for being academically eligible. A team's total points are divided by points possible and then multiplied by one thousand to equal the team's Academic Progress Rate

BCS automatic qualifying conference – conferences in which the regular season champion earns an automatic berth to one of the participating bowl games; i.e. ACC, Big East, Big 10, Big 12, Pac 12 and SEC

BCS non-automatic qualifying conference – conference champions are not guaranteed berths to participating bowl games, but have to go through the BCS at-large process to be selected for a bowl; i.e. Conference USA, Mid-American Conference, Mountain West, Sun Belt, and the WAC

Equity in Athletics Data Analysis Cutting Tool – a database assembled from OPE Equity in Athletics Disclosure Website that consists of athletic related data that are submitted annually as required by the Equity in Athletics Disclosure Act (EADA), via a Web-based data collection, by all co-educational postsecondary institutions that receive Title IV funding (i.e., those that participate in federal student aid programs) and that have an intercollegiate athletics program

Federal Graduation Rate (FGR) – the percentage of first time undergraduate students who were enrolled in a full-time program of studies for a degree, both athletes and not, based on a comparison of the number of students who entered a college or university and the number who graduated within a six-year period

Revenue Sports – Men's Football and Basketball, and Women's Basketball

Rating Percentage Index (RPI) – a numerical rating, between 0 and 1, that is assigned to each competing team to rank athletic performance, with the higher the number equaling a better performance; the basic formula takes a team's winning percentage times .25, opponents' winning percentage times .50, and its opponents' opponents' winning percentage times .25 to calculate a team's RPI

CHAPTER TWO: HISTORIC REVIEW OF NCAA ACADEMIC REFORM

Chapter Two analyzes the history of academic reform in the NCAA from its inception to the most current reform measure. It is essential to understand the historical background of the present measure in order to realize the significance that the current APR measure, and how and why it was thought to be needed.

College Athletics and the Beginning of the NCAA

Intercollegiate athletics has existed for decades, but it started as an extracurricular activity run by the students themselves, first as intramural games before moving on to competing with teams from other institutions. The faculty and administration saw the students' athletic endeavors as 'frivolous' activities, and paid little attention to them, choosing to focus solely on academics. Walter Camp, the "Father of American Football" might have said it best when after completing his college football career at Yale: "Neither the faculties nor other critics assisted in building the structure of college athletics, it is a structure which students unaided have built" (Smith, 2010, p 8). As the sporting activities of the students became more organized, they started challenging nearby colleges to compete in various sports. In 1852, the first formally recognized intercollegiate athletic contest was held between Harvard and Yale's crew teams. Other sports soon followed with the first intercollegiate baseball game played between Amherst and Williams in 1959 and the first football game played between Rutgers and Princeton in 1869

(Davenport, 1985). Football (rugby and then American style football) became an important part of the college experience, even though it was not officially endorsed by college administrators. Students raised the money needed to travel and compete, and took it upon themselves to set rules that leveled the playing field among colleges. In the game of football, students formed the Intercollegiate Football Association to discuss and decide on participation and game time rules. At this time, making sure that there was a level athletic playing field was the student's intention in making these rules, academics were not a concern (Davenport, 1985; Smith, 2010).

Academic eligibility was not a major issue at the beginning, but ultimately became so. Tramp athletes, who moved from college to college to participate in athletics, were a major concern of the day. The legendary Fielding H. Yost was one of the most infamous 'tramp athletes', who transferred from West Virginia University to Lafayette College in Pennsylvania in 1896 for one game where he was a key contributor in Lafayette's victory over the undefeated University of Pennsylvania. Yost then transferred back to West Virginia and received his law degree six months later (Smith, 2010). Tramp athletes were just one of the issues surrounding football and other intercollegiate sports. Most schools also had no limit on how long a student could play, no rules on making progress towards a degree, and many athletes were getting paid in some form or another to participate in athletics. Ultimately, the Intercollegiate Football Association, with its alumni advisor, Walter Camp, reduced some of the uncertainty in eligibility by stating that only students that attended a certain number of courses each week and who

had not been paid to participate in athletes were able to play on their college teams (Smith, 2010).

The Football crisis of 1905. Football continued to grow in popularity among the students and alumni during the latter stages of the nineteenth and the early part of the twentieth centuries. However, the media was starting to condemn the rough play of the game. Some called the game "brutal, demoralizing to teams and players and extremely dangerous" (Falla, 1981, p. 9). The V-trick, the flying wedge, and the hurdle play, along with corresponding defensive counter attacks, all contributed to this brutality.

The media attention to the violence of these plays did get noticed by the Intercollegiate Football Association which made minor changes to the rules by banning momentum plays from being used during kickoffs, even though many people called for the ultimate ban of momentum plays during the entire game. In addition, the length of the game was shortened all in the hope of lessening the bloodshed. However, coaches and players had now used the momentum plays too long to give them up and created different variations of the original V-trick and flying wedge and other violent plays.

The violence situation came to a climax in 1905 when 18 players die and 149 serious injuries occurred that could be attributed to football. This outraged the media who called for a ban of the game once and for all, which Columbia and Northwestern had already done and the Harvard President Charles Eliot was threatening to do. Theodore Roosevelt, an avid football fan as well as the country's president, decided to call a meeting to discuss the condition and solutions to the football problem. He requested football representatives from Harvard, Princeton, and Yale to join him at the White

House on October 9, 1905 to discuss the problems in intercollegiate football (Falla, 1981; Miller, 2011).

Roosevelt started the two hour meeting with, “Football is on trial. Because I believe in the game, I want to do all I can to save it” (Miller, 2011, p. 188). He did not make threats on the sport, but did make it known that he expected leaders of the sport to take action to improve the game and its reputation. At the end of the meeting, he asked all the men to create a statement of their intentions on how this was going to be done. In the end, the following statement was created:

> At a meeting with the President of the United States it was agreed that we consider an honorable obligation existed to carry out in letter and in spirit the rules of the game of football relating to roughness, holding, and foul play and the active coaches of our Universities being present with us pledge themselves to so regard it and to do their utmost to carry out these obligations. (Miller, 2011, p. 190)

The NCAA is Formed and Football is Saved. In folklore, the White House meeting had more influence than it really did. Nothing really changed in football after the October meeting, besides knowing that the president wanted the sport not to be banned, but reformed and to make the problems of intercollegiate sport more visible to the American public. However, later that year on December 28, the Chancellor of New York University, Henry M. MacCracken called his own meeting to discuss the future of football. Although representatives from Harvard, Princeton, and Yale did not attend the meeting, sixty-eight other institutions did send representatives. During this meeting, the

institutions formed a new organization that would be called the Intercollegiate Athletic Association of the United States (IAAUS) that was set to create a new football rules committee (Falla, 1981; Miller, 2011).

The original rules committee, headed by Walter Camp, had been in place almost from the beginning of American football and was still the recognized authority. Camp, often referred to as the Father of American Football, had practically written the rules book and wanted to protect his creation. He supported only minimal change, a single rule to allow three downs to make ten yards (compared to five yards). MacCracken's group made it difficult for Camp to continue his stranglehold on football. The IAAUS sent invitations to Camp's committee to join the new group and work together on making football a better sport and the two met on January 12, 1906 and agreed to merge (Falla, 1981; Miller, 2011).

During the first few months of 1906, college football was saved from being abolished by most institutions. The committee quickly created rules that it hoped would reduce the injuries and increase the excitement of the game. It created a neutral zone at the line of scrimmage, limited the number of players in the backfield, reduced the length of the game to 60 minutes, added a referee, prohibited hurdling, and defined unsportsmanlike and personal fouls as major penalties that could result in being expelled from games (Miller, 2011). The rules seemed to work, even with 11 people dying on the field in 1906. Even one of football's biggest critics, Harvard President Charles Eliot stated that the game had improved and "was more interesting to watch and had fewer opportunities for foul play and brutality" (Miller, 2011, p. 212).

Early years of the NCAA. During the first year of the IAAUS's existence, the elected officials of the association created a constitution and bylaws for the organization. The main objective of the association was spelled out in Article 2 of the constitution which stated: "Its [IAAUS] object shall be the regulation and supervision of college athletics throughout the United States, in order that the athletic activities in the colleges and universities of the United States may be maintained on an ethical plane in keeping with the dignity and high purpose of education" (Falla, 1981, p. 21).

Two additional articles that had much forethought were Article 7 and 8 which stated that eligibility rules would not be a requirement of the institution to be a member of the association and that the institutions themselves would control and determine ways to prevent violation of the principals. This was essentially the creation of the home rule which the association would operate under for a number of years. The association created the "Principles of Amateur Sport," that prohibited athletic scholarships, recruiting, the use of professional players and players that were not bona fide students; however it had no enforcement powers of these principles. In 1910 the IAAUS's name would be changed to the National Collegiate Athletic Association (NCAA), and would continue to be a significant influence in all college sports, not just football (Falla, 1981).

The NCAA (IAAUS) started with 38 members in 1906 and grew to 83 by 1917, just before the United States entrance into World War I. The NCAA initially served as a platform for concerns about college athletics and created guidelines for good practices that institutions could choose to adopt. One of the major discussions was the continuation

of amateur sport and the curbing of commercialization (Smith, 2010). Although the War would force cuts in college athletics, a new era of sports would emerge in the 1920s.

Following the war, the growth of college athletics ensued, as did the commercialization of sport. During this time, the first national championship was held; there was an increase in hiring of professional coaches, and building of massive sports arenas. The members of the NCAA had hoped that the reforms and restrictions that were in place during the war would continue and curb the professionalization and commercialization trends of college sports that had existed prior to the war. However, the commercialization and professionalization of college athletics only increased as the men returned home and began participating in college sports. The NCAA created nine "fundamental principles" in 1922, (which included the freshman rule, rules against participating of professional players, elimination of graduate students participation, and prohibiting gambling) and encouraged its members to adopt, but most institutions only said they employed the principles while these infractions were accruing on their campuses (Smith, 2010, pp. 6–7). Criticisms continued, and individuals called for a thorough study to be conducted to assess the situation of college athletics. The NCAA recommended that the Carnegie Foundation for the Advancement of Teaching conduct such a study, and in 1926, the foundation agreed to finance and conduct an analysis of college athletics (Smith, 2010). The resulting 350 page study would be considered one of the most important examination of college athletics ever produced.

Savage Report

In 1929, the Carnegie Foundation for the Advancement of Teaching published a report titled, *American College Athletics*, which one well known sport historian claims to be the "most significant historical reform document in intercollegiate athletics," (Smith, 2010, p. 60) and became the standard for all future analysis of college athletics (Thelin, 1994, p. 13). This report, with a research team led by Howard J. Savage, an alumnus of Tufts University and a holder of a masters and PhD in English from Harvard, was conducted over a three year period and included over a hundred colleges and universities in the United States (Smith, 2010; Thelin, 1994).

The idea of a large national study of college athletics had been the topic at numerous Carnegie Foundation meetings prior to the publication of Dr. Savage's 1929 report, but each time was dismissed or set aside. It was not until 1926 that the foundation agreed to finance a study of this scale on college athletics (Smith, 2010, pp. 67–68). On January 8, 1926 the Carnegie Foundation accepted the invitation from the NCAA to "make an investigation of the whole question of intercollegiate athletics and its relation to modern education" (Thelin, 1994, p. 24). Over the course of three years, Savage and his research team visited 130 schools, spending two to six days at each, to interview personnel on recruiting, employment and subsidies for athletes, tutoring of athletes, the degree of faculty or alumni control of athletics, the salaries and hiring practices of coaches, and athletic slush funds (Sack & Staurowsky, 1998). These interviews were speculated by the research team to be more trustworthy than the questionnaires previously sent out to the same institutions because of the sensitivity of the survey

questions. In the end, a 350 page document known as *American College Athletics* was released on October 24, 1929. It attacked and condemned most of the practices of college athletics, especially its commercialism, which was seen as making the student athlete the victim of a diminished education and lesson intellectual values (Sack & Staurowsky, 1998; Smith, 2010; Thelin, 1994).

Content of report. Dr. Henry S. Pritchett, head of the Carnegie Foundation during this time and former president of the Massachusetts Institute of Technology, foreshadowed the results of the study when he opined in 1923 that athletics was organized and run like professional sports, by being seen as a business and form entertainment, and not a component of the educational experience. Pritchett blamed the paid coach, the sophisticated organization, and the large amount of money spent on college athletics for crippling the American college and its administration (Smith, 2010). Pritchett is also the author of the preface of the study in which he asks if an

> institution in the social order whose primary purpose is to the development of the intellectual life can at the same time serve as an agency to promote business, industry, journalism, salesmanship, and organized athletics on an extensive commercial basis. The question is not so much whether athletics in their present form should be fostered by the university, but how fully can a university that fosters professional athletics discharge its primary function…How far can an agency, whose function is intellectual, go in the development of other causes without danger to its primary purpose? (Savage, Bentley, McGovern, & Smiley, 1929, p. xii)

In his preface, Pritchett also lists what he considered the nine adverse results of college athletics:

1. College athletics have a deleterious effect upon secondary schools.
2. College athletics are too absorbing to allow the athlete to truly study.
3. College athletes are given a distorted sense of social values.
4. Coaches have an undesirable cultural influence upon the athletes.
5. Competition produces a system of recruiting and subsidizing which "is demoralizing and corrupt."
6. Alumni devices for recruiting winning teams "constitute the most disgraceful phases of recent intercollegiate athletics."
7. College athletics do not contribute appreciably to the health programs of colleges.
8. The current organization and the propensity for commercialization have "taken the joy out of the game."
9. "The blaze of publicity in which the college athlete lies is a demoralizing influence for the boy himself and no less for his college." (Cowley, 1930; Savage et al., 1929, pp. xiv–xv)

Pritchett obviously saw a need to reexamine the role of college athletics in higher education and, in turn, commissioned Howard Savage and his research team to conduct the study.

The final document produced by Savage and his team consisted of 350 pages and twelve chapters. Chapters one through four consist of background and historical

information, including methods used in the study, a history of college athletics, the development of amateur athletics, and a review of athletics in American secondary schools (Cowley, 1930). Chapter Five, titled "The Administrative Control of American College Athletics" is where the study begins analysis of college athletics. In this chapter, Savage and his research team point out that the "shaping of a comprehensive administrative policy for athletics has generally been neglected," and suggest that faculty control would be the optimal way for college athletics to be managed (Cowley, 1930).

Chapter six, "The Athletic Participant and Its Results" describes the characteristics of college athletes and the motives that drive them to participate. Savage considered the following to be the reasons why students participated in college athletics:

1. Inheritance of athletic characteristics
2. The requirements of physical education
3. The enjoyment of athletics
4. "College opinion which serves as a pressure to urge capable athletes into continuous competition, often to the neglect of their studies and against their personal desires"
5. Athletic participation is seen to lead to vocational opportunities
6. The payment for participation in athletics (Cowley, 1930)

Chapter seven describes "The Hygiene of Athletic Training" and analyses the effects that athletics have on student's health and wellness by looking at the "participation, physical condition, medical supervision, training, injuries and the like." Savage acknowledges that sport can have a positive impact on the health of students, but

also acknowledges that under the current system few received these health benefits and many incur injury or other negative consequences from athletics (Cowley, 1930).

Chapter eight deals with the role of the coach in college athletics. Savage comments on the trend of hiring the coach as a member of the faculty by stating, "faculty status in and of itself guarantees to the institution nothing whatsoever with respect to the ability and character of the coach" (Cowley, 1930). He provides statistics comparing the average salary of the head coach with other faculty members within the same academic institution, often indicating how much more compensation the coaches received.

Chapter nine discusses the relationship that athletics have to outside organizations and entities. Sporting rivalries, alumni influences, and athletic conferences are all discussed with the conclusion that they do not benefit intercollegiate athletics. Chapter ten analyzes the recruiting and subsidizing of athletes. It notes that 81 of the schools studied had some sort of subsidization for their athletes (Cowley, 1930).

Chapter eleven discusses the role of the media in the exploitation of athletes. It discusses the growth of sports pages in newspapers and the increased importance given to these stories. Savage accuses journalists of exploiting college athletes for financial gain and "that clearly journalism is guilty of sensationalism and petty graft" (Cowley, 1930).

In the final chapter, "Values in American College Athletics," Savage points out the positive contributions of college athletics to balance out the negative presented in the earlier chapters. However, he ultimately listed the "undesirable influences of athletics":

1. The widespread opinion among alumni that college registration and enrollment depends upon successful athletic teams

2. The evil effects of recruiting and subsidizing that probably persist into business and professional life

3. Commercialization defined as "that condition which exist when the monetary and material returns from sport are more highly valued than the returns in play, recreation, and bodily and moral well-being"

4. The lack of intellectual challenge in the young and alert mind

5. The control of athletics by imitative methods rather than through adaptive growth

6. The failure of athletics to contribute appreciably to morals and conduct (Cowley, 1930)

Savage does end with a positive note suggesting that the conditions in college athletics have improved over the years and urges the trend to continue. He notes that there is no need to abolish college athletics, but a need to establish concrete principles of conduct that all parties can agree upon. And finally, he concludes the report with the two primary needs of college athletes: a decreased role of commercialism and that colleges need to "challenge the best intellectual capabilities of the undergraduate" (Cowley, 1930).

Response to the Savage Report. When published, the *Chicago Tribune* headline reported that "Carnegie Report Hits Big Ten Athletics: Three Year Probe Indicts American College System." The story reported that only 28 of the 130 schools were found to be in compliance with NCAA rules, and that two universities refused to take part in the study (Byers, 1995). Athlete subsidization was a major finding of the study,

describing the most common methods for financing athletes including: jobs and employment, loans, athletic scholarships, money and other tangible considerations. Schools that were guilty of such subsidization were listed by name within the report. The findings of the report suggested that during this time payments to athletes were as common as the consumption of bootleg liquor (Sack & Staurowsky, 1998). Numerous newspapers continued to carry stories related to the report over the next year, with something being published at least once a week (Thelin, 1994).

Although many future reform efforts in college athletics would be based on the findings of the Savage Report, in general, there was little change to the way college athletics were run or organized after its immediate release. Many colleges denied the negative findings at their own institutions, but did not dispute the criticisms leveled at other institutions in the report. Ralph Aigler, a professor and chair of the University of Michigan Board of Athletic Control, claimed that the authors of the report had "no intention to be fair and accurate," accusing Harold Bentley, a Carnegie Foundation investigator, of secretly removing reports from his office and failing to return the originals when asked (Smith, 2010, pp. 70–71). Hugo Bezdek, the football coach at Penn State and president of the National Football Coaches Association, declared that the report "should not be taken too seriously" (Smith, 2010, p. 71). Apparently, this was the typical belief among leaders of the universities surveyed because when the Associated Press conducted its own survey on the ramifications of the report in 1931, no institutions had changed its organizational strategy or practices. The *New York Times* printed the headline, "Carnegie Report Called Fruitless" (Smith, 2010; Zimbalist, 1999).

Importantly, Savage himself never retracted anything that was in the report, instead he affirmed, “Up to the present hour we have not been apprised of any inaccuracy in the study as printed, and no one who has charged us with inaccuracy after doing us the honor of reading it, has substantiated his statements” (Thelin, 1994, p. 30).

It would be inaccurate to contend that the report was fruitless, but it did not have the impact expected by the Carnegie Foundation. On January 20, 1930, the NCAA endorsed Savage’s report and urged “all college officials to be guided by the document in curbing the evils of sports” (Thelin, 1994, p. 30). Many college presidents did try to improve the state of college athletics (Thomas S. Gates, University of Pennsylvania; Robert Maynard Hutchins, University of Chicago; John Bowman, University of Pittsburgh; and Frank Graham, University of North Carolina), but Hutchins in Chicago was the only one that saw reform success, with no scandals, professionalization, or commercialization of football for the next seven decades by banning it all together in 1939. In general, institutions continued to sponsor big time athletics in order to receive the preserved benefits and prestige that winning teams provide (Smith, 2010).

Sanity Code

The NCAA did not pass reform measures at the national level, beside basic rules of sport, until after World War II. It left eligibility and other reform initiatives up to individual conferences and schools, known as the “Home Rule”. Reforms during these early years were primarily focused on leveling the playing field, especially regarding the topic of athletic scholarships. The Carnegie Report in 1929 had increased the discussion

about reform in college athletics, but none of them came to fruition until after World War II (Smith, 2010).

In 1934, the President of the NCAA and Big Ten commissioner, Major John L. Griffith, took the opposite view of many of his colleagues by not wanting athletic scholarships, believing they were the greatest problem in college athletics. He also expressed his dislike of the NCAA becoming a governing body with "police powers." When Griffith spoke to the NCAA he stated that "the NCAA has never assumed the responsibility of trying to be a governing body. We believe in states' rights" (Smith, 2010, p. 89). In a compromise, an unenforceable code about recruiting and financing athletes was passed on the recommendation of the Committee on Recruiting and Subsidizing. The committee's conclusion was that recruiting and athletic aid went together and it was "almost impossible to consider one without considering the other" and the growth of these practices was the major problem in college athletics. The recommended code stated that all forms of recruiting and financial aid for athletics was "unjustifiable" except for on-campus employment that paid the standard wage and for a coach's reply to an athlete that inquired about the program (Falla, 1981, p. 130).

The divergent beliefs about athletic scholarships would not subside, but only increased in the following years. Many southern schools had been financing their athletes since 1935 and were not about to stop the practice. This enraged many northern schools, calling the practice similar to "gambling or prostitution," and would not let the NCAA discontinue discussions on the topic (Smith, 2010, p. 90). It was not until 1939 that the NCAA officially placed an amendment in its constitution that dealt with financial aid to

athletes. The amendment, becoming Article III, stipulated that all aid would come from regular college agencies, based on need, and would not be a condition of athletic participation or performance (*Proceedings*, 1939). However, the NCAA still left enforcement of this amendment to the individual institutions. It was not until the following year that the members added a section that a two-thirds vote by convention delegates could terminate an institution for not following these regulations on athletic aid.

When Pearl Harbor was attacked on December 7, 1941 all talks on athletic reform became a secondary concern. People were too busy with the war effort and the NCAA was more concerned as to whether college sports would survive at all. After the war ended in 1945, the officials within the NCAA was ready to pick up where they had left off on the reform issue and the NCAA formed a committee to survey institutions to determine if Article III of its constitution was being followed (Smith, 2010).

During the summer of 1946 the NCAA supported the call from over twenty conferences across the country that convened in Chicago to discuss the problems of athletic recruiting and athletic scholarships, a meeting that would became known as the Conference of Conferences. The meeting was chaired by both the incoming NCAA President Karl Leib, a former student athlete at Stanford who was a lawyer and professor at the University of Iowa, and the current NCAA treasurer and Big Ten commissioner, Kenneth Wilson. The meeting resulted in the creation of a proposed code to prohibit athletic scholarships and ban athletic recruiting off campus (Sack & Staurowsky, 1998; Smith, 2010; Watterson, 2000). Following the meeting, President Leib, boldly announced that, “Once the principles become part of the constitution it will be a case of ‘conform or

get out.'" (Smith, 2010, p. 94) An official copy of the discussed code was distributed to the NCAA membership and was scheduled to be discussed six months later at the 1947 NCAA convention (Sack & Staurowsky, 1998).

At the 1947 NCAA annual convention the draft proposal, which was then called the Purity Code, and later the Sanity Code, was distributed and discussed. This code consisted of six "Principles for the Conduct of Intercollegiate Athletics." These included statements on:

1. Amateurism;
2. Institutional Control and Responsibility;
3. Sound Academic Standards;
4. Governing Financial Aids to Athletes;
5. Governing Recruiting
6. Implementation (*1949 Yearbook*, 1949, pp. 77–78)

The intent at the 1947 convention was to approve the principles, but not to amend the constitution, since the proper procedure had to be followed to solidify any changes. However, each principle was discussed and voted on individually. The first three principles were easily passed by the delegates with little discussion, but the fourth and fifth caused some disagreement. There was confusion on what constituted aid and who could give it to the athletes as stated in the fourth principle, but it was eventually passed. The most intense debate was about the recruiting principle. Many southern universities did not want to be limited to on campus recruiting only and strongly opposed the principle. The delegate from Texas Christian University clearly proclaimed he would not

and should not be required to bring back such a request to his conference representatives in Texas. He pushed for the delegation to vote down principle five and not "point the finger of scorn too specifically at any of the rest of us" and to allow institutions to recruit in their usual manner (*1949 Yearbook*, 1949, p. 83). Others from various schools expressed their opinions for and against recruiting before it was taken to vote. This was the only principle that an actual roll call was taken. The principle passed with 76 ayes and 33 noes (*1949 Yearbook*, 1949, p. 86). At the end of voting, the Executive Committee appointed a Constitutional Revision Committee to review and propose amendments or revisions to the NCAA constitution to be considered during the 1948 Convention. These amendments would incorporate the principles accepted during the 1947 Convention (*1949 Yearbook*, 1949).

In 1948 the "Sanity Code" was voted on to be implemented fully into the NCAA constitution, and was thought to be the most important decision the NCAA had discussed and agreed upon to this point in time (Smith, 2010). The document that was approved at the convention was slightly different from the original document, primarily based on the previous year's disagreement with principle four and five. The revised document allowed coaches to recruit off campus, but they could not offer financial aid or other incentives to prospective students (*1949 Yearbook*, 1949). Aid over and above need could be provided only if it was granted on the basis of "superior academic scholarship" (Sack & Staurowsky, 1998, p. 44). Specifically, in order to be in compliance with the Sanity Code, the following rules had to be followed:

1. Athletes must be admitted under the same entrance requirements as other students.

2. Financial aid could be given as long as it was proven that it was based on need.

3. Money above tuition could be given to students if shown to have exceptional academic abilities – top 25% of their graduation high school class and maintained a B average in their college courses.

4. Money granted was guaranteed regardless if the student decided to participate in sports or not (Byers, 1995, pp. 67–68).

This last point of the code was implemented to avoid violating the principles of amateurism and be accused of paying student athletes for their physical talents. These monies were "gifts," not pay (Sack & Staurowsky, 1998, p. 44). With these changes, the Sanity Code was substituted in the NCAA constitution in place of the existing Article III (*1949 Yearbook*, 1949).

The Sanity Code also provided the NCAA with the ability to enforce its legislation for the first time in its history. Concurrent to the passage of the code, an executive regulation was issued by the NCAA that created a three member Constitutional Compliance Committee as well as a three member Fact-Finding Committee. These committees were able to interpret the constitution's language in what constituted as a violation of the code as well as to answer inquiries from institutions about certain practices. The rulings of these committees were "final and authoritative" and could only be reversed by member votes. Failure to comply with any Association rules now could

lead to "termination of membership by a two-thirds vote" (Sack & Staurowsky, 1998, p. 45). This officially turned the NCAA into a regulatory body for college athletics (Smith, 2010).

The Southern Revolt and the Sinful Seven. Almost immediately after its passage, critics started claiming that the Sanity Code would be unenforceable. *The New York Times* ran a headline "College 'Purity Code' in Athletics Certain to Fail, Experts Believe" prior to the 1948 NCAA convention. The article contended that the Sanity Code was a "noble experiment" but ultimately a "bunk." The belief was that limiting the aid to only tuition would force athletes to find other inappropriate ways, presumably assistance from alumni, to pay for their room and board ("Purity," 1947). One observer noted that, "The biggest impediment to the enforcement of the Sanity Code is the alumni. The only way it ever can work is to strangle every alumnus on graduation day" (Sack & Staurowsky, 1998, p. 45).

The University of Virginia was one institution which refused to abide by the code because of the inability to enforce it. Virginia President, Colgate Darden, was quoted as saying, "While we may agree with the spirit of the plan, it is the belief of our board that it cannot be properly enforced" ("Rejected," 1948, p. 4). This opposition to the code was a surprise to many because Virginia was not a big time football school. The athletic director of Georgetown stated his admiration when he said, "They've got guts enough to say that [they] can't live up to it, and consequently, want no part of the code" (Watterson, 2000, pp. 214–215). Virginia might have been the only school to go on record in

opposition to the code, but the thought of many coaches were: "[We] will vote for the code but are figuring out ways to beat it" (Smith, 2010, p. 95).

The Sanity Code was particularly offensive to those schools in the south. Many schools in that region, including the Southern, Southeastern and Southwestern conferences, had been giving athletic scholarships since the 1930s and were not willing to eliminate them. In May of 1949, these three conferences met to discuss the Sanity Code and "to find ways to liberalize it" (Sack & Staurowsky, 1998, p. 45). This "Three-Conference" conference was held in Atlanta and was led by the president of Georgia Tech, Blake Van Leer, and was the first stage in what has become known as the "Southern Revolt." The upshot from the conference was that the athletic leaders wanted the code to deal more directly with athletic rather than academic issues. Three items that the attendees wanted the code to include were:

1. A training table during season and practice periods;
2. Extra assistance to athletes who met the individual institution's scholarship criteria, not merely those with a B average;
3. Help with living and school expenses such as room, board and books as well as for laundry, cleaning and pressing (Watterson, 2000, p. 213)

Attendees at the conference also discussed possible secession from the NCAA if these changes were not made. Many questioned, of course, whether secession would actually be a viable option, and in the end nothing really developed besides a proposal to amend the Sanity Code to allow student athletes to get meals throughout the year rather than only during their season of play (*1950 Yearbook*, 1950; Sack & Staurowsky, 1998).

The disagreements about the Sanity Code only increased in 1949 when the chairman of the NCAA Constitutional Compliance Committee announced that twenty institutions were not in compliance with the code (Sack & Staurowsky, 1998, p. 46). The Committee stated that they had "sent private detectives into the field to investigate institutions not complying," however, in actuality they determined violators after sending questionnaires to institutions and using of institutional informers (Staples, A., 2008; Watterson, 2000, p. 212). The twenty schools not in compliance were threatened with suspension if steps to correct the problem were not implemented. By July, 1949 thirteen of the schools had successfully taken care of their violations and ruled to be in compliance. This left seven schools that were still not compliant with the Sanity Code and they faced removal during the 1950 NCAA Convention. The "Sinful Seven" were: Boston College, the Citadel, Villanova, Virginia Military Institute, Virginia Polytechnic Institute, the University of Maryland, and the University of Virginia (Sack & Staurowsky, 1998). These seven were notified by the Compliance Committee four months prior to the 1950 convention that they would be up for termination (*1950 Yearbook*, 1950).

Six hours of debate ensued on the fate of these seven schools on January 12, 1950 during the NCAA convention business meeting. Clarence P. Houston from Tufts College presented the motion to terminate the seven schools and explained the committee's process in coming to its decision. He also presented the findings of non-compliance from each of the seven schools and officially brought the motion to terminate the membership of these institutions for "failure to maintain the athletic standing in accordance with

provisions of the Constitution" (*1950 Yearbook*, 1950, p. 193). Representatives from the seven schools tried to defend themselves. Maryland's representative Curley Byrd had spent the weeks prior to and during the convention lobbying for votes to oppose expelling the seven, and started pointing fingers at other schools that he believed were not in compliance with the Sanity Code, primarily Ohio State and other Big Ten institutions (Watterson, 2000, p. 217). The military institutions argued that it was impossible to maintain a full load of classes, military drills, and sports and still have time to have a job to pay for room and board. The Citadel maintained this stance and ultimately decided not to seek renewal of their NCAA membership, not because of the ultimate goal of the code, but because they did not believe that they could "measure up to the quantitative restrictions" (*1950 Yearbook*, 1950, p. 195). President Francis McGuire of Villanova noted the hypocrisy of the code by stating, "Do you mean to tell me that there are only seven schools in America which don't live up to the NCAA code?" (Sack & Staurowsky, 1998, p. 46)

Finally, the vote was taken to expel the sinful seven from the NCAA. NCAA President Karl Lieb counted the ballot vote, which was 111 to expel and 93 not to expel, and declared that the motion had passed and that the schools would be expelled from the NCAA. Shouts of "No" were heard from the conference attendees. The NCAA constitution requires a two-third vote for a motion regarding expulsion to carry, which meant that in reality the motion had not passed. President Lieb smiled and said, "You're right, the motion is not carried" (Byers, 1995, p. 54; Sack & Staurowsky, 1998, p. 46; Smith, 2010, p. 98; Watterson, 2000, p. 217). With this vote, the Sanity Code was

essentially dead and was dropped from the constitution in 1951. By 1952, individual institutions were allowed to set their own policies for athletic financial aid (Sack & Staurowsky, 1998).

With the appeal of the Sanity Code, athletic departments began a "spending spree to buy winning teams" (Sack & Staurowsky, 1998, p. 48). Many programs were supporting over a hundred athletes on the football teams alone and some schools even went as far as advertising their scholarships. A 1957 copy of Track and Field News held the following advertisement:

> FOUR TRACK SCHOLARSHIPS. Available effective Jan. 29, 1957. Covering all necessary school expenses for sprinter, hurdler, middle distance and weightman. If interested, send complete details of self with photograph to: L. J. Olson, Track Coach, McNeese State College, Lake Charles, La. (Sheehan, 1958, p. 37)

With this type of scholarship system being practiced by the country's universities, the reality of academically unprepared students being accepted into institutions became even more prevalent which, in turn, made it difficult to justify that athletes were an integral part of the student body and that college sport was contributing to the educational experience (Sack & Staurowsky, 1998). It was becoming clear that the NCAA needed a set of academic standards for college athletes.

1.600 Rule

The first time that national academic requirements were discussed to the NCAA was in 1959. Rixford Snyder, the director of admissions at Stanford and a faculty

representative to the Pacific Coast Conference, spoke during the NCAA convention and stated that the two best predictors for academic success in college were high school grades and standardized test scores. He claimed that when weighted together, "the predication of scholarly attainment was greater." He also stated in his address to the conference, in language characteristic of the cold war period that "The age of rockets and of satellites will not accept the free ride for an athlete of limited academic potential while the physicist with only moderate physical prowess goes unaided financially"(Smith, 2010, p. 128). Although others agreed with the statement and the conversation would continue to drift towards standards, no national standards were draw up until 1962.

In 1962, the NCAA finally responded to the need for national requirements by forming a committee led by Atlantic Coast Conference (ACC) Commissioner James Weaver. The ACC had been the first athletic conference to institute minimum academic standards, a score of 750 on the SAT required for awarding its athletes aid in 1960. Weaver and his committee were tasked with determining a formula to be used to predict academic success for athletes given scholarships (Smith, 2010). During the 1962 NCAA convention, Robert Ray from State University of Iowa and a member of the Committee on Financial Aid – Academic Floor, communicated the reasons why such a formula was needed. Using statistics, he showed how the general student body at institutions of higher learning were coming into their freshman year at higher academic levels than in the past, allowing colleges to tighten their standards for admission. He commented on this in relation to athletics by proclaiming that for coaches and friends of intercollegiate athletics the ensuing trend would mean "a new concentration of recruiting effort on the

prospective athlete who will be able to compete as a representative student in the classroom as well as in athletics. There is no room for a double standard in our college classrooms. This is not a matter of policy. It is a matter of necessity" (*1692 Yearbook*, 1962, pp. 191–192).

The Big Ten conference had studied and implemented a combination of factors, including standardized test score and class rank, to determine qualification for financial aid in 1961, and its system would be used as the model for the NCAA. Big Ten representatives stated at the 1962 NCAA convention that testing is not the answer to everything but that institutions awarding financial aid should "have some sort of measure of the potential" to graduate (*1692 Yearbook*, 1962, p. 197). The test score was also viewed as the common denominator for students from a multitude of high schools.

After consulting with officials from the Scholastic Aptitude Test and the American College Testing Program, the Committee on Financial Aid – Academic Floor as well as the greater NCAA passed what was called the 1.600 rule (referred to as the "one six-hundred rule"). The prediction formula considered the student's high school rank or grade point average and his or her scores on the ACT or SAT. To be eligible based on this formula, the student's high school grades and test scores had to predict a 1.600 GPA(about a D+/C- average) during their first year of college (Byers, 1995; Smith, 2010). The predictions were based on how other students with similar test scores and grade point averages performed in their first year in college (Suggs, W., 1999). Admission into college was not the issue, only if the student could receive athletic aid and practice and play athletics during their first year of college. The student also had to

maintain a 1.600 to continue to receive aid (Byers, 1995; Smith, 2010). Based on this study and the recommendation of the Committee on Financial Aid – Academic Floor, the NCAA passed their 1.600 rule in 1965, bylaw 4-6(b)(1), which specifically stated:

> (b) A member institution shall not be eligible to enter a team or individual competitors in an NCAA-sponsored meet, unless the institution in the conduct of all its intercollegiate athletic program: (1) Limits its scholarships or grant-in-aid awards (for which the recipient's athletic ability is considered in any degree), and eligibility for participation in athletics or in organized athletic practice sessions during the first year in residency to student athletes who have a predicted minimum grade point average of at least 1.600 (based on a maximum of 4.000) as determined by the Association's national prediction tables or Association approved conference or institutional tables,… (*California State University, Hayward et al. vs. National Collegiate Athletic Association*, 1975)

The major complaint voiced of the formula was the standardized test score because many considered the test racially biased and believed that the test did not measure accurately the likelihood of success in college. The test was not able to predict motivation, encouragement, and the change that typically takes place as people mature (*1692 Yearbook*, 1962). Ken Vicker, a nationally respected college admissions officer, responded to the criticism by stating "Yes, tests are biased, they're biased against ignorance" (Byers, 1995, p. 158). The NCAA members in charge of creating the 1.600 rule justified the test score by claiming that it provided a national comparative standard. Boyd McWhorter, commissioner of the Southeastern Conference, stated: "It is a common

denominator which cuts across the differing academic quality of the nation's various high schools and, more important, it is less subject to manipulation than the other academic considerations" (Byers, 1995, pp. 158–159).

Resistance to the 1.600 rule. Although resistance came from many quarters, the strongest at the beginning was from the Ivy League. The Ivy League favored "institutional autonomy" and the "Home Rule." Essentially, it believed that the faculty of individual colleges should determine athletic eligibility (Smith, 2010). Representatives from the Ivy League believed that the rule hurt institutions with the highest admissions and academic standards because "competing against high-achieving students, Ivy League athletes might well be below the 1.6 GPA after their freshman year, though they were potentially good students" (Smith, 2010, p. 129). Dean Monro of Harvard agreed by stating, "The NCAA Council believes that the best place for a student with a grade average under 1.6 is in the library. I say, how do you know? Perhaps a sport is the one familiar thing which can help his adjustment to a strange environment" (Kramer, J. R., 1966). Ivy leaders also believed that the NCAA was hurting "late bloomers," "slum-school" students, and "disadvantaged" student with the rule. The Ivy League insisted that the 1.600 Rule be revoked and wanted the NCAA Council to "place on record…that the 1.6 rule is inapplicable to those institutions which award financial aid on the basis of need" (Sack & Staurowsky, 1998, p. 97). The Ivy League never adopted the 1.600 rule and voiced resentment of it until it was repealed in 1973 (Smith, 2010, p. 129).

The second argument against the 1.600 rule was that it discriminated against athletes of color and those from lower socio-economic classes, a common theme in many

future NCAA legislations as well. The argument was that the 1.600 rule was a barrier for African American athletes to receive aid because they scored lower on a test that they believed to be culturally biased against them. Before the establishment of 1.600 rule, an increased number of underrepresented populations, primarily African Americans, had been able to receive the benefits of a college education because of the social and legal policies that came into effect in the 1960s, most notability the Civil Rights Act of 1964 and open admission policies. This allowed more African American students, some first generation students, to have access to higher education. In 1971, Robert Tierney, president of Queens College, which was one of many schools with open admission policies, stated at the NCAA convention: "many colleges today find themselves in a position where this particular rule is not relevant, and because of sociological changes taking place throughout the country, they find they cannot conform to the 1.600 rule" (Smith, 2010, p. 130).

Repeal of 1.600 Rule. A motion to abolish the 1.600 rule was first presented by Frank Carver of the University of Pittsburgh, president of the Eastern College Athletic Conference (ECAC), at the 1968 NCAA annual convention in New York City. Adolph W. Samborski, the athletic director from Harvard and member of the ECAC, fully supported this motion by standing by Harvard's conviction that the rule gave the NCAA the final authority over eligibility, financial aid, and admissions instead of the institutions themselves (*1968 Proceedings*, 1968). Although the motion for elimination was defeated, an amendment allowed schools to "use prediction tables other than the NCAA

recommended 1.6 table if they equal or exceed the NCAA requirement" (Rasmuson, 1968).

The vote to abolish the rule came up again at the 1971 and 1972 NCAA conventions. During both conventions, many delegates voiced their opposition to the rule and its use of standardized test scores. In 1971, George A. Hansell from Pennsylvania Military College (now Widener University) cited many different academic studies indicating that standardized test scores were discriminatory towards disadvantaged students. One of the studies was completed by the Ford Foundation at Brown University and indicated that academically at-risk students, irrespective of test scores, went on to perform just as well as their more qualified classmates. The report concluded that "criteria of college admissions, namely college board scores and high grades, did not represent the whole picture" (*1971 Proceedings*, 1971, pp. 109–110). The motion ultimately failed to pass and the 1.600 rule stayed as a NCAA regulation.

In 1972, Robert Tierney of Queens College continued argued that the 1.600 rule was unfair to the unprivileged population, primarily black student athletes. He stated four primary reasons why the NCAA should remove the rule from its books. The violation of institutional autonomy and validity of the test were among the reasons, but the one emphasized most was the threat of litigation. Tierney commented, "I feel that we should abolish this legislation now before someone on the outside perhaps may do it for us" (*1972 Proceedings*, 1972, p. 167). On the other hand, John Larsen from the University of Southern California expressed the view that academic standards were even more important now that the NCAA had allowed freshmen to compete in football and

basketball at the varsity level. When the motion came to a vote, it was again decisively defeated by a 186-125 vote (*1972 Proceedings*, 1972).

It was not until the 1973 NCAA convention that the 1.600 rule would finally be abolished with the passing of Proposal No. 75. Tierney and Robert Behrman of City College of New York were two opponents of the rule who expressed their views to attendees at the convention. Tierney stated that the legislation "is a violation of institutional autonomy. It violates self-determination. It discriminates against certain types of students….I firmly believe the time has come, not to study or attack this problem piecemeal, but to take the bull by the horns and wipe it off the books" (*1973 Proceedings*, 1973, pp. 145–146). Behrman spoke shortly after Tierney and added that it was time to "end the hassling, the embarrassment, the inequities, the unfairness and the administrative complexities which relate to the rule…let's enhance the image of our organization [the NCAA] by voting to abolish the 1.600 once and for all" (*1973 Proceedings*, 1973, p. 147). To counter Tierney and Behrman's comments, representatives from Rice University and Colorado School of Mines expressed their concerns about the "disastrous" effect on college athletics that would ensue from the abolishment of the rule, especially with freshman being eligible to compete. In the end, representatives at the convention abolished the 1.600 rule by a vote of 204-187 (*1973 Proceedings*, 1973). Walter Byers, executive director of the NCAA during this time, stated later that, "Losing the 1.600 rule was the most painful experiences in the 22 years I had then served as executive director. It was a terrible day for college athletics. Supposedly responsible educators had voted for sports expediency" (Byers, 1995, p. 165). For the next ten years, the NCAA returned to

the old 2.0 rule, requiring a 2.0 grade point average in any high school curriculum in order to participate in college athletics (Smith, 2010).

Proposition 48

After the 1.600 rule was abolished by the NCAA in 1973, there was no academic eligibility requirement on a national level for the next ten years. Individual institutions and conferences were able to make and enforce requirements as they saw fit, which was typically a 2.0 grade point average in the athlete's high school curriculum. During this same time period, institutions and coaches were once again allowing academically underprepared and minority athletes into their institutions "by viewing the benefits of sports in a more win at all costs sense" (Staurowsky & Ridpath, 2005, p. 124). Many scandals that led "to some of the most egregious disregard of academics in the history of the NCAA," (Smith, 2010, p. 134) occurred during this decade that set the stage for the NCAA's next academic reform, Proposition 48, to come into existence.

Academic travesties. During the 1970s and early 1980s, the academic integrity of college athletics spiraled downward and the media reported numerous cases of academic fraud. Although many incidents came to light, two important cases changed the public and NCAA's opinions on student athlete's academic preparation – the Kevin Ross functional illiterate case and the Jan Kemp free speech civil case against the University of Georgia (Smith, 2010).

Kevin Ross was a promising basketball player at Wyandotte High School in Kansas City, Kansas in 1978. During his senior year, Ross accepted an athletic scholarship to attend Creighton University and compete on its Division I basketball team.

Creighton University, a Catholic, Jesuit University in Omaha, Nebraska, prides itself on its academics. According to its mission, Creighton "approach[es] education with a passion for learning and a zeal for making a difference in our world. In the Catholic intellectual tradition, we celebrate our diversity, we learn through dialogue, and we pursue the truth in all its forms" ("About Creighton," 2011).

In 1978, when Ross was accepted to Creighton, the student body's average composite score for the ACT was 23.2 out of a possible 36. Ross received an ACT score of 9, which was in the bottom fifth percentile of seniors taking the test that year and was considered functionally illiterate (Byers, 1995, p. 300; *Kevin Ross vs. Creighton University*, 1992, "Unable," 2002). The school admissions office initially refused to admit him, but the athletic department appealed and was able to get Ross admitted. According to court documents, Creighton was aware of Ross's lack of academic preparation, but assured him that he "would receive sufficient tutoring so that he would receive a meaningful education while at Creighton" (*Kevin Ross vs. Creighton University*, 1992).

Ross attended Creighton from 1978 until 1982, but did not graduate. When he left the university, he had earned 96 of the 128 credits needed to graduate. However, most of the courses he took to earn those credits, courses such as "Theory of Basketball" and "Marksmanship," did not count towards a degree. Ross stated later in his lawsuit against Creighton and during an interview with ESPN's Outside the Lines, that the athletic department advised him to take easy courses regardless of whether they led to a degree

and hired a secretary to do his homework. On test days, Ross explained how he was able to "pass,"

> My test papers, when I go in, they would be turned over on the desk and the teacher would say – well, Kevin, that's your desk. And I'll go there and it's already done and all I had to do was fill my name – put my name where they say your name and he said – don't rush, be cool; just think about basketball, think about the big game this weekend. ("Unable," 2002)

This and similar scenarios continued until his athletic eligibility ran out and the grade assistance stopped. Ross left Creighton in 1982 without a degree or the ability to read.

A booster of the athletic department heard about his ordeal and pressured Creighton to make good on their promise to provide Ross with a proper education. After this push, Creighton told Ross that he had three choices: take a job with the Omaha Police Department, tuition for a local vocational school, or tuition for a private elementary school in Chicago. Ross chose the elementary school and at 23 enrolled in Westside Prep Elementary School, founded by Marva Collins. When he graduated in May of 1983 from Westside Prep, after increasing 11 grade levels in reading, he was a media star. Ross met with the president, testified before congress, and made a number of television appearances ("Unable," 2002). The media called him the "victim of victory-minded coaches, teachers, and school officials who prized rebounding over reading" (Byers, 1995, p. 299).

A year after graduating, Ross was unemployed, depressed, and abusing drugs and alcohol; and then he snapped on the balcony of a downtown Chicago Quality Inn hotel.

He barricaded himself into a hotel room and started throwing furniture from his eighth floor window while shouting obscenities and telling police he had a gun ("Ex-Creighton," 1987). In an interview years later, Ross admitted that he threw everything out the window, even his own stuff, and stated,

> That's how frustrated – how upset and frustrated I was. But something in my mind said everything here is quite Creighton University. These are the people – the objects I threw off the hotel – threw out of the room. It was the people at the school. I considered jumping and something in my mind said make a phone call so I call Ms. Collins up. ("Unable," 2002)

Ms. Collins, the teacher from Westside Prep who had taught him to read, came and finally talked Ross down from the ledge and helping him get treatment for his depression and alcohol abuse ("Unable," 2002).

In 1988, Ross filed suit against Creighton on four different counts – three counts of negligence and one count on breach of contract. Ross claimed that Creighton:

1. Committed educational malpractice by not providing him with a meaningful education and preparing him for employment after college;
2. Negligently inflicted emotional distress upon him by enrolling him in a university that he was not prepared, and then failing to provide remedial programs; and
3. Committed a new tort, "negligent admission," which would allow recovery when an institution admits, and then does not adequately assist, a woefully unprepared student;

4. Committed breach of contract by failing to provide adequate tutoring, not requiring him to attend tutoring sessions, not allowing him to red-shirt, and by not allowing him a reasonable opportunity to take advantage of tutoring services (*Kevin Ross vs. Creighton University*, 1992).

The court reasoned that "because theories of education were not uniform, but different and acceptable scientific methods of academic training made it infeasible to formulate a standard by which to judge the conduct of those delivering the services," (*Kevin Ross vs. Creighton University*, 1992) and it dismissed all negligence claims brought by Ross. The court also dismissed the breach of contract claim because it stated that it was not able to assess "general quality of education" (*Kevin Ross vs. Creighton University*, 1992). The negligence claims withstood the appellate court, but the breach of contract was overturned and sent back to district court. The suite was finally settled out of court in 1992, with Ross receiving a $30,000 settlement, but Creighton admitted no liability ("Unable," 2002).

Many individuals believed that Creighton should have known that Ross would have academic difficulties and that Ross's claims were ruled incorrectly by the court. Ross's attorney stated before trial, "They should have known that it never would have worked out. It's one thing to take someone who will be in the bottom 10 percent of their class. It is another to take someone who is not even in the same ball park" (Curry, Jack, 1990). Although Ross's plight received a great deal of media attention and called for some academic reform, it failed to encourage the NCAA to "protect the student athlete's right to be educated during his or her playing eligibility" (Sherman, 1991).

Kevin Ross's case caught the attention of the media and the public at large, but Jan Kemp's case was perhaps the most important because it changed the way the NCAA viewed academic reform and initial eligibility. Kemp was employed by the University of Georgia in the Division of Developmental Studies from 1976 until she was fired in 1983. During her period of employment she was promoted several times and served as the coordinator of the English component of the department (*Dr. Jan Kemp vs. Leroy Ervin and Virginia Trotter*, 1986).

The Division of Developmental Studies is not considered a regular academic unit at the University of Georgia, but was established to assist incoming high school graduates that did not meet the regular admission requirements to gain the needed academic skills to be successful in the university (*Dr. Jan Kemp vs. Leroy Ervin and Virginia Trotter*, 1986). The courses within this unit did not count towards a degree, but were designed to teach basic skills to students. Students were required to pass a basic skills test to be allowed to enroll in a regular academic program at Georgia. Each student has four chances to pass the test before they were dismissed. During Kemp's tenure in the program, there were about 335 students in the program, 17% of these students being athletes (Nack, 1986).

Kemp recalled many conflicts with her superiors, Leroy Ervin, Assistant Vice President for Academic Affairs and Director of Developmental Studies, and Virginia Trotter, Vice President of Academic Affairs. Most of these conflicts concerned how student athletes should be treated in the Developmental Studies program and at the University more generally. The most significant incident occurred in December 1981

when nine athletes were allowed to exit the Developmental Studies program even though they had failed to earn the required C on their fourth and final try. These players then went on to play in the 1982 Sugar Bowl. Trotter actually made the decision to pass the students out of Kemp's development program, and admitted that student athletes were granted special privileges, but defended her actions and decisions by affirming, "I felt they deserved an opportunity because of the work they had done. I felt they had made great progress" (Nack, 1986). However, the one non-athlete who also failed to meet the program requirements was dismissed from the university. Kemp vehemently disagreed with the decision to promote the athletes and gathered other faculty members to protest the act. After communicating her frustration with to the universities' actions, Kemp was demoted from her coordinator position in February 1982 and was ultimately fired in August (*Dr. Jan Kemp vs. Leroy Ervin and Virginia Trotter*, 1986; Nack, 1986). She filed a civil claim against Ervin and Trotter for violating her First and Fourteenth Amendments to exercise free speech (*Dr. Jan Kemp vs. Leroy Ervin and Virginia Trotter*, 1986).

A six week trial by jury, of five women and one man, ensued. During the trial, the defendants expressed their view that Dr. Kemp was a good English teacher, but her demotion and ultimate dismissal was not caused by exercising her first amendment right, but because she did not participate in research, was insubordinate, and did not get along with her peers (*Dr. Jan Kemp vs. Leroy Ervin and Virginia Trotter*, 1986). Yet, evidence by Kemp and her legal team showed differently and made clear to the jury the preferential treatment that was given to athletes at Georgia. A transcript from a taped meeting of university officials had defendant Ervin stating, "I know for a fact that these

kids would not be here if it were not for their utility to the institution. There is no real sound academic reason for their being here other than to be utilized to produce income" (Nack, 1986). Defendant Trotter commented that "if teachers thought some of the athletes had a bona fide chance of graduating, we're talking through our hats" (Bowen, 1986). Even more damage was done to the defendants case when the university's attorney stated in his opening statement, "We may not be able to make a university student out of [an athlete], but if we can teach him to read and write, maybe he can work at the Post Office rather than as a garbage man when he gets through with his athletic career" ("Brief setback," 1986; Van Biema, 1986).

When the verdict was announced, people were astonished by the outcome: a $2,579,681.95 verdict awarded to Kemp. Punitive damages of $1.5 million allocated were to Virginia Trotter role, $800,000 allocated to Leroy Ervin role, $79,680.95 in lost wages, $200,000 in compensatory damages for mental distress, and $1 for the harm of professional reputation (Nack, 1986). The jurors were outraged at what they had heard throughout the trial and wanted to make a statement. Melanie Mim, the jury forewoman, stated, "We wanted to make a slap on the hand where they're going to feel it. There are Trotters and Ervins everywhere. There are Jan Kemps at a lot of schools" (Nack, W., 1986). Juror Darryell Howell added, "We don't want this to ever happen again" (Bowen, 1986).

Shortly after the verdict was announced, Chancellor H. Dean Propst of Georgia's board of regents announced that there would be an investigation into the academic policies of Georgia's athletic department. In addition, on the very day the verdict was

announced, Georgia President Fred Davison announced that the school would not accept any athletic that had a SAT score lower than 700 or a GPA below a 2.0, which at the time was a stricter eligibility policy than the NCAA. Eventually, Davison, Ervin and Trotter were demoted from their prior positions and left Georgia. Two years later, Kemp returned to teach in the Developmental Studies Program. In her decision to return to Georgia, the primary draw for Kemp was her wish to be involved in the changes being put into place regarding the academic preparation of student athletes (McManis, 1988).

Creation of Proposition 48. The above cases are an indication of how the decade of the late 1970s and early 1980s were characterized by academic improprieties. The Kemp case had major financial consequences that could not be ignored by the NCAA and became the stimulus needed for them to initiate national academic reform in the early 1980s. During the 77th annual NCAA Convention in January 1983, delegates passed bylaw 5-1-(j), more commonly known as Proposition 48, which was created by the Ad Hoc Committee on Intercollegiate Athletics of the American Council of Education (ACE), which, as of August 1, 1986, for an student athlete to be able to practice and compete in Division I NCAA competition during their freshman year, they must have:

> (i) Graduated from high school with a minimum grade point average of 2.00 (based on a maximum of 4.000) in a core curriculum of at least 11 academic full-year courses, including at least three in English, two in mathematics, two in social science and two in natural or physical science (including at least one laboratory class, if offered by the high school) as

well as a 700 combined score on the SAT verbal and math sections or a 15 composite score on the ACT (McKeena, 1987; Smith, 2010).

The resulting reform measure became popularly known as Proposition 48 and had a number of requirements in order for students to be eligible to compete in college athletics. Proposition 48 required students to achieve a high school grade point average of at least a 2.0 (on a 4.0 scale) in eleven core courses and a minimum of a 700 combined score on the SAT or 15 on the ACT exam in order to be eligible to receive athletic financial aid and compete during their freshman year. The eleven core courses that were required included: three units of English; two units each of math, natural/or physical science (one must include a lab), and social science; and two additional courses chosen from the above categories or from philosophy, nondoctrinal religion and computer science (*1983 Proceedings*, 1983, p. A35). When both of these requirements were met, the student was deemed a "qualifier" and could receive athletic financial aid and compete during their freshman year. When a potential student only achieved one of the requirements, either a 2.0 GPA or a 700 SAT/15ACT score, they were deemed a "partial qualifier." A partial qualifier could receive athletic related aid, but was prohibited from practicing or playing on the team during their first year. The third and final category designated by Proposition 48 was the "non-qualifier," a student that failed to meet either the GPA or test score requirement. As a non-qualifier, the student could not participate in practices or play on the team or receive athletic related aid. They could, however, receive federal aid and other need-based aid from their institution (Zimbalist, 1999). During the 1983 NCAA convention, the proposal for Proposition 48 passed with the support of 52

percent of the delegates, but would continue to be debated for many years to come (Byers, 1995).

When the bylaw was proposed to the convention, the President of Southern Methodist University, Donald Shields noted that Proposition 48 had two primary intentions:

> We have an opportunity to say to our potential student athletes, secondary schools districts and their leadership that beginning in the fall of 1986, we expect our competing student athletes to be able to demonstrate basic minimum academic competencies as evidenced first by satisfactory completion of a very modest and yet well balanced high school core curriculum, and secondly, by reasonable, minimum performance standards in essential verbal and mathematics skills on nationally administered examinations. (*1983 Proceedings*, 1983, p. 103)

As Dr. Shields pointed out, Proposition 48 was not only meant to ensure that high schools were placing more emphasis on educating athletes, but also to discourage the recruiting of athletes who had little chance of succeeding in college.

The intent of the bylaw has never really been argued. However, the possible consequences of its enactment were vigorously debated during the convention. The debate centered on the question as to the bylaw's effect on historically black colleges and universities. Representatives from historically black colleges and universities were particularly enraged because there was no representation from the 114 predominantly black institutions in the creation of Proposition 48. Joseph Johnson, the representative from Grambling State, made his disappointment known by stating at the 1983 NCAA

convention that "the committee dramatized its lack of sensitivity to and the knowledge of the contributions of these institutions of intercollegiate athletics and the potential impact of this proposal to those programs" (*1983 Proceedings*, 1983, p. 104). An attempt by the ACE to rectify this situation was to appoint the president of Delaware State University to the committee, however, it was merely a week before the 1983 convention and the proposal for Proposition 48 was already completed and finalized. This token gesture was not taken seriously by the black community and they continued to insist that their opinion was not considered (Shropshire, 1997). Joseph Johnson continued to display his anger and accused the NCAA and the ACE of lacking sensitivity regarding the impact of Proposition 48 on black athletes. He spoke to the NCAA convention delegates and called the SAT cut score of 700 an arbitrary number that discriminated against student athletes from low-income and minority families (Smith, 2010). Johnson was not the only representative from a black institution to voice his outrage; other members representing Delaware State University, North Carolina A&T, Southern University and Tennessee State University also took the floor to oppose the proposal (McKeena, 1987; *1983 Proceedings*, 1983). To these individuals and many others, there was no data to indicate that the adoption of Proposition 48 would enhance the academic achievement of student athletes. In fact, they believed that the opportunity for a higher education was being taken away from black students. Jesse Stone, the representative from Southern University alluded to the idea that black athletes were intentionally being tested out of the opportunity for higher education. This was not a guarantee of success, but a "promised

opportunity for us all" that is being taken away by the legislation being discussed (*1983 Proceedings*, 1983, p. 108).

The second argument presented at the conference was the inclusion of a SAT cutoff score. Luna I. Mishoew, president of Delaware State University, declared that the SAT penalizes students on their socioeconomic background and that exclusion from athletics based on these external factors should not occur. Edward Fort of North Carolina A&T also cited studies that challenged the validity of standardized tests, including the Allan Nairn and Ralph Nader 1980 report, *The Reign of ETS: The Corporation That Makes Up Minds*, which concluded that the SAT on average "predicted grades only eight to fifteen percent better than random prediction with a pair of dice" (McKeena, 1987; Nairn & Nader, 1980).

Notwithstanding the opposition to the proposition, many representatives voiced their support for the measure. Joe Paterno, the head football coach at Penn State University, was a strong supporter of the measure and was disturbed that the debate had turned into a race issue. He particularly disliked the way black educators were discounting their students' abilities:

> I am really surprised that so many black educators have gotten up here and kind of sold their young people down the river. You have sold them short. I think you have underestimated what great competitors the young black people are today in all areas, football, basketball, athletics and other areas. If it takes 700 in the SAT to compete and we give them time to prepare, they will be prepared. (*1983 Proceedings*, 1983, p. 115)

Reverend Edmund P. Joyce of the University of Notre Dame was also a strong supporter of Proposition 48 and had a difficult time believing that the creators of the measure would deliberately discriminate against any student. He urged representatives to "bite the bullet" and pass the measure for the betterment of student athletes (*1983 Proceedings*, 1983, p. 122).

A total of 23 of the over 100 delegates in attendance, including 15 university presidents, spoke at the convention and debated the proposal over a two hour period. Ultimately, the measure passed with a hand vote, but no official count was taken. The delegates also passed a supplemental proposition Rule 49-B that specified that Proposition 48 would not go into effect until the 1986-87 academic year and would only effect institutions competing in Division I. In addition, the supplemental rule created the "partial qualifier" status. Specifically, this proposal allowed students that had a 2.000 overall high school grade point average, but did not receive the 700 SAT cut score, to receive athletic financial aid. However, the student would forfeit one season of eligibility. Students that were non-qualifiers – achieving neither the required grade point average or SAT score, could be admitted and attend classes but could not participate in athletics. If a non-qualifier showed satisfactory academic progress during their freshman year, they would be allowed to compete as a sophomore and would receive four years of eligibility (*1983 Proceedings*, 1983; Sailes, 1998).

Immediately after the passage of Proposition 48, opponents of the measure, many of them prominent African Americans, expressed their displeasure. Among those who disapproved was Reverend Jesse Jackson, who at the time was President of the People

United To Serve Humanity (or Operation PUSH), and head of the National Association for the Advancement of Colored People (NAACP) and Reverend Benjamin Hooks, and Reverend Joseph Lowery the President of the Southern Christian Leadership Conference (S.C.L.C) (Edwards, 1984). Their major complaint was the inclusion of the SAT, ACT or any standardized test in the determination of athletic eligibility. They argued that the cut off scores were arbitrary and that the tests were culturally biased towards blacks. Several presidents of predominantly black colleges and universities expressed their outrage by threatening to leave the NCAA and even the ACE. Dr. Jesse N. Stone, then president of Southern University, was one of the most outspoken critics of Proposition 48 and expressed his belief that it was put into place because of the success of African Americans on the playing field. He stated, "If it is followed to its logical conclusion, we say to our youngsters, 'Let the white boy win once in a while" (White, 1983).

Although many within the black community agreed with these prominent black leaders, there were those that did not. Harry Edwards, sociologist from the University of California, Berkeley and leader of the proposed boycott of the 1968 Mexico City Olympic Games, was a strong supporter of Proposition 48. Although he did agree that the test score minimums were chosen arbitrarily, he believed they were not set too high, but too low. Dr. Edwards was supportive of the measure, not as a solution, but as "a very small and perhaps even inept step towards" dealing with the academic issues of college athletics (Edwards, 1984, p. 17). But most importantly, he supported Proposition 48 because if he did not, he would be communicating to Black athletes that he did not

believe they could achieve the minimum SAT requirement with the proper preparation (Edwards, 1984).

Standardized testing and the education system. Educators were not quick to accept the usefulness of intelligence and multiple choice test on children. They feared that multiple choices would "encourage guesswork and reduce independent thinking" and would limit the child's development of complete understanding of the material (Monahan, 1998). Teachers attempted to maintain control of educational policy and pedagogy; however the simplicity of testing helped tremendously in dealing with the increase in enrollments, diverse student populations, and educational laws. The creation of an objective universal standard that "modern scientific practices" supported help alleviate the tension these new events were creating. Testing of school children became the norm by the 1920s and increased in significance when the College Entrance Examination Board added the Scholastic Aptitude Test (SAT) as a criterion for student selection (Monahan, 1998).

Major criticism of standardized tests would begin in the 1970s, when the advocates of social justice claimed the test to be racially and class biased. The role of testing in education was debated and critics encouraged schools to place a higher emphasis on the student's body of work, especially because they believed the predictability of academic success was uncertain (Butcher, 1973). Others stressed that success in academics and tests had more to do with socioeconomic status than ability and argued for the discontinuation of testing in public schools. The opponents of the tests defended their stance by stating, "Although it is difficult to ascertain the positive value of

intelligence test as used in the public schools, it is not difficult to suggest possible negative consequences that follow from the use of these test" (Brody & Brody, 1976, p. 210).

The creators of tests, especially Educational Testing Service (ETS), defended their position during the 1970s by claiming that their tests were completely objective and rational and did indeed measure achievement and intelligence. ETS noted that they created the test to capture existing student talents and are continually researching and providing advisory services to their clients. They asserted that their "tests are built to meet the needs of education" (Monahan, 1998).

But time had passed since the ETS had stood behind their test and during the passing of Proposition 48 by the NCAA, George H. Hanford, President of the College Board, spoke vehemently against the use of the SAT to determine athletic eligibility. The College Board was created in 1900 by 12 institutions with the goal "to expand access to higher education and to democratize the application process for students" ("College Board," 2011), but is best known for its creation and administration of the SAT. According to the College Board's guidelines for the use of SAT scores, the scores should be used only as one factor in making admissions decisions. Essentially, "under the NCAA rule, the SAT would be used for the purpose which it was neither intended nor designed to serve – determining athletic eligibility rather than college admissions" (Hanford, 1985, p. 368). The test is supposed to be used by each institution, based on their own admissions decisions and the predictive powers it has at their own institution. The NCAA standard score of 700 makes the decision national, not institutional as

intended and Hanford believes that there has been no demonstrated rationale for this cut score (Hanford, 1985). Another complication about the SAT is that a 700 score is not as simple as the NCAA believes. Because of the standard error of measurement, each student's SAT score is within 50 points one way or the other of the "true score" (the score he or she would display if the test was taken an infinite number of times), providing another good reason why test scores should be used in combination with other criterion (Hanford, 1985).

Jack McArdle, a NCAA research consultant, agreed with Hanford that Proposition 48 was hurt when the SAT score was implemented as a way to equalize schools across the nation. He expressed his concern by noting that the SAT was designed for the Ivy League. He continued by saying, "the thought that the NCAA could use it at the bottom and, of course, the thought was they could use the same score for everybody without consideration of other things. This tainted the entire system call Prop. 48" (Pickle, 2008).

Hanford also argued that the SAT is not biased against minority students. He did not dispute that on average minorities score lower on the SAT than whites, but explained that this was because many minorities were less educationally and socioeconomically privileged than whites. He supported this by citing a study done by the National Academy of Science which concluded that the gap in scores does not occur because of the test predictive ability but because of the educational disparity in the United States (Hanford, 1985).

The controversy of testing and its role in athletic eligibility would continue for years and was the major issue discussed during the passing of Proposition 48. In the end,

the proposition passed after hours of debate at the 1983 NCAA Convention. To alleviate some of the tension between delegates, the NCAA created a Special Committee on Academic Research and agreed to finance its own research on the controversy.

NCAA Special Committee research on Proposition 48. Two major studies commissioned by the NCAA were conducted to examine the claims of Proposition 48's negative effects on black athletes. The first was conducted by Advanced Technology, Inc. for the NCAA's Special Committee on Academic Research. Titled *Study of Freshman Eligibility Standards*, it examined the effects of different eligibility rules on black and white student athletes. In 1982, the authors of the study requested information from 276 Division I institutions about their admission standards, the academic readiness or preparation of entering freshman, and retention and graduation of students in the 1977 and 1982 cohorts. A total of 206 institutions responded (75 percent response rate) to the request, which included over 16,000 student athletes receiving athletic aid. The goal was to examine the test score criterion and determine to what extent the score predicted graduation, dropping out in bad standing, and who graduated when they would have been declared non-qualifiers under the regulations of Proposition 48 (Bartell, Kessling, LeBlanc, & Tombaugh, 1984).

The results showed that the test standard of 700/15 did predict graduation rates among Black students, especially males, but contributed little to predicting the graduation rates of whites. The test standard was also useful in predicting whites and Black females that left an institution in bad academic standing, but was not so useful in predicting Black males who left in bad standing. Finally, the analysis showed that the test criterion would

have disqualified a large number of Black students who ended up graduating (52 percent vs. 7 percent) (Bartell, et al., 1984).

The authors also compared the outcomes of different proposed rules for eligibility. The first was the proposed rule, Proposition 48, where both a specific core curriculum and test score were strictly required. Three alternative rule scenarios were also compared and examined, these included: students would be eligible if they were able to achieve either the GPA standard or the test score standard; test scores would be used for eligibility only if the required GPA was not met; and finally, eligibility would be determined with an index that weighted both curriculum and test score. As mentioned earlier, the proposed rule would have disqualified more than two-thirds of Black students who eventually graduated, while only disqualifying 18 percent of whites. The GPA or test score rule would increase the number of students deemed eligible and predicting students who would leave in bad standing, but the discrepancy between Black and white students declared ineligible and still graduate would continue to be large. When the test score was only used when the GPA minimum was not met (third rule discussed), the discrepancy between Blacks and whites was the lowest of all the scenarios examined. However, the number of students disqualified in both groups was substantial (40 percent and 30 percent respectively). Finally, the indexing rule was difficult to compare to others because of the weighting of criteria and the need for SAT scores (there was no formula to use for students that took the ACT) (Bartell, et al., 1984).

In conclusion, the study found that the use of standard test scores were helpful in predicting graduation or leaving in bad standing, but there was a large difference in the

percentage of Black and white students that were declared ineligible for athletics and did graduate. The researchers noted that:

> Requiring that both components be satisfied simultaneously (as Bylaw 5-1-(j) does now) results in a standard that would have very negative impact on all student-athletes, but would be particularly harmful to Blacks. By allowing students to meet either one or the other requirement to be eligible, the rate of eligibility goes up considerably, and the discrepancy in rates of declaring graduates to be ineligible is reduced. (Bartell, et al., 1984, pp. 21–23)

With the data generated from the Advanced Technology study, a number of amendments to Proposition 48 were proposed at the 1986 NCAA convention. Proposal number 14 was submitted by the NAFO Committee on Athletics and called for a complete elimination of the SAT/ACT score in the eligibility calculation. Joseph Johnson from Grambling State again stood before the convention in support of this proposal. Pointing the finger at the "elitist institutions and their supporters" he asked if Proposition 48 was going to be "the NCAA apartheid." Continuing, he augured "The legislation has nothing to do with what these tests attempt to measure but instead how they are used to exclude and to discriminate…I am a proponent of excellence and quality in education but only when it is fair and will not deter opportunity" (*1986 Proceedings*, 1986, p. 66). Others at the convention spoke in support of number 14, but it ultimately failed to pass by a 47-289 vote. Proposal number 15 also did not pass, which was a motion to eliminate the SAT/ACT score but increase the core GPA to a 2.4 (*1986 Proceedings*, 1986). However, Proposal number 16 that was presented by the NCAA Council and Presidents

Commission, and I.M. Heyman from the University of California, Berkeley was approved by a vote of 207-94 (*1986 Proceedings*, 1986, pp. 77–79). This amendment would use an indexing of GPA and test score requirements for students in 1986 and was to be phased out by the time students matriculated in 1988 (Summers, J. G., 1991). Minimum thresholds were lowered to 1.800 GPA (instead of 2.00) and 660 SAT and 13 ACT test scores the first year and were adjusted to 1.900, 680 and 14 for the following year. Accordingly, students that entered following August 1, 1986 and prior to August 1, 1987 had to obtain core GPA and test scores based on the index in Table *1* (McKeena, 1987):

Table 1

GPA/Test Score Index for Student Athletes Entering Before August 1, 1986 and prior to August 1, 1987

GPA	SAT	ACT
2.200-above	660	13
2.100-2.199	680	14
2.00-2.099	700	15
1.990-1.999	720	16
1.800-1.899	740	17

Another consequence of the Advanced Technology research was that the Special Committee on Academic Research suggested the need for further studies on the academic performances of student athletes. As a result, the NCAA commissioned a longitudinal study that started in 1985 and concluded in 1991, putting out reports intermittently to discuss certain topic areas and to inform the public on its research progress. The research

method and goal of the project was similar to the Advanced Technology research, but extended some of the analysis and collected its own data (Summers, 1991).

A total of 284 Division I institutions were randomly assigned to five cohorts and were stratified by the three different Division I subdivisions, Division I-A, I-AA, and I-AAA. The institutions were also stratified by geographical location, the public or private status of the institution, and historically black colleges (Summers, 1991). Each of the cohorts were given a different academic year, 1984 through 1988, to submit academic and demographic information about incoming freshman and transfers with equivalent credits to the members of the cohort. These dates allowed for two cohorts to be under the 2.0 regulation for participation and the other cohorts to be required to implement the new bylaw, Proposition 48. Surveys were sent out to representatives of each institution who were asked to disclose academic and demographic information about their student athletes (Summers, 1991).

In 1991, the first cohort of data, from 1984-85 was used to analyze the implementation and use of Proposition 48 among NCAA institutions. This cohort was used because the students had a full five years to complete their degree, which was considered the key outcome variable. In addition, these students were not subject to the initial eligibility regulations of Proposition 48, so students that would have been ineligible for athletic participation were not in sample. The analysis of the data had five goals:

1. To determine if any high school academic variables predict college graduation,

2. To compare demographic and sport teams,

3. To compare different colleges,

4. To compare the use of different variables for initial eligibility rules,

5. And what was the optimal GPA/test score cutpoints to be used to determine eligibility (Benson, 1991)

After filtering out incomplete reports, more than three thousand student athletes' records from 80 different colleges were used. The average high school GPA for these students was 2.86 and the average test scores were SAT 875 and ACT 18.7, both slightly below the national average for students entering college in 1984-85 (Benson, 1991).

Armed with this data, the researchers and the NCAA were able to answer their five research questions. GPA and test scores significantly predicted college graduation, with the test score a slightly stronger indicator, but the GPA and test scores together offered the best predictor of graduation. Female athletes graduated at a higher rate when all variables were held constant, and black students graduated at a significantly lower rate than all other groups. These differences can be attributed to the students' high school academic variables. There were large initial differences in high school academic preparation variables which parallels college graduation. However, more blacks graduated with lower test scores – only 4.8 percent of white student athletes that scored at or below SAT 690 graduated, whereas 40.6 percent of blacks with these scores graduated. But the single best predictor of graduation was the graduation rate of the entire student body (Benson, 1991).

This study makes clear that there was no empirical basis for Proposition 48's 700 SAT cut score and confirmed Advance Technology's study that the regulations of Proposition 48 would be less accurate than others. More adverse effects are associated with the double cut rule (GPA and Test score) and have a negative and disproportionate impact on minority students. A more accurate regulation would be to average, or index, the GPA and test score. Presently, the 700 test score is one standard deviation below the mean, while the GPA standard is two standard deviations below the mean; placing a higher dependence on the test score than the GPA (Benson, 1994).

In the end, the determination of goals associated with eligibility rules must be clearly stated in order to get the best results. A goal of graduating the most student athletes would require an increasingly rigorous SAT and GPA scores. Yet, a goal of graduating the most minority students would lead to the elimination of cut scores all together. Based on this data, to realize the best results, a GPA of 2.35 and a SAT score of 630 would be the critical benchmark. This goal may be different for each individual institution, so the conclusion of the researchers were that "the principle of a single "national rule" in use at all colleges is probably limited in accuracy, and rules based on specific academic characteristics of the colleges are likely to be more accurate" (Benson, 1991, p. 11).

Effects of Proposition 48. During the 1983 NCAA convention, delegates opposed to Proposition 48 claimed that the proposal would eliminate a third of the student athletes from being eligible to compete and receiving aid. On August 8, 1986 (the day that Proposition 48 became active), a total of three hundred and ninety-seven athletes

that had been awarded scholarships were confirmed to be ineligible because of the requirements. Of these athletes, 224 were football players, 120 were basketball players, and 53 competed in different sports (Mulligan, 1986). These were the athletes that were offered a scholarship, a total of 561 high school football and basketball prospects that had not been offered a scholarship at the time, but were planning on playing, were ineligible under Proposition 48 during the first year of its existence (Nelson, 1987). It was unclear if this was a third of the athletes, but it was still a striking number. Even more striking is that an Associated Press survey determined that 81 percent of the ineligible football athletes were Black ("Blacks Hit Hard," 1988); and the two conferences with the most historically black colleges, the Mid-Eastern Athletic Conference and the Southwestern Athletic Conference, had 37 and 35 recruits classified as non-qualifiers, the most of any Division I conferences (Mulligan, 1986). The majority of the ineligible students met the core course requirement, but failed to meet the test score minimum, allowing for additional arguments about the appropriateness of standardized test scores (Temkin, 1987). However, 376 (94.7 percent) of these Proposition 48 athletes chose to accept scholarships to attend college and forfeit a year of eligibility in order to concentrate on academics. These students had a chance to prove they were worthy of being in college by receiving a 2.0 grade point average and still have three years of athletic eligibility remaining (Mulligan, 1986). Of these students, 68.3 percent became eligible the following year ("Blacks Hit Hard," 1988).

The numbers did improve during the second and third years of the legislation. During the second year, 1987, an Associated Press survey of all 291 Division I schools

found that 33.7 percent fewer athletes were deemed ineligible because of Proposition 48. Yet, many coaches made clear that this number decreased because they had stopped recruiting marginal students. In 1987, University of Nebraska football coach Tom Osborne was quoted as saying: "Obviously, it has caused us to back off of a few people that we normally would have offered scholarships to. A fair number of them have been black" (Nelson, 1987). But it also forced coaches to communicate more clearly to recruits and high school coaches the importance of academics and taking the test as early as possible (Temkin, 1987).

In the end, the NCAA viewed Proposition 48 as a success. The stated goal was to increase graduation rates of all student athletes, and the statistics show that this was the result. In the mid-1980s, the graduation rates for basketball and football players were 33 and 37.5 percent respectively. After Proposition 48, the five year graduation rates of black athletes rose from 30 percent to 40 percent, the graduation rates of white athletes rose from 54 percent to 60 percent, and the graduation rates of female athletes, regardless of race, rose from 56 percent to 69 percent (Swift, 1994). Even with this success, the NCAA was about to propose legislation that would increase the requirements of Proposition 48, which would in turn increase the controversy about the standards and access to higher education.

Proposition 42

In spite of the aforementioned percentages, controversy over initial eligibility rules implemented by the NCAA would continue. Each side of the controversy was, of course, convinced they represented the correct position. But instead of creating less

tension, more was created in 1989 when the NCAA passed its latest amendment, which banned partial qualifiers from receiving financial aid (Renfro, 1989).

Partial qualifiers were at the center of the Jan Kemp scandal of 1986 and were seen as a way to get around Proposition 48 for wealthy schools that could stockpile athletes for future use. After the Kemp scandal, the University of Georgia banned admitting these students and urged the Southeastern Conference to do the same. In turn, the Southeastern Conference, sensing a disadvantage in recruiting against other conferences, petitioned the NCAA to also ban partial qualifiers (Smith, 2010). The Southeastern Conference Commissioner, Harvey W. Schiller, advanced the motion, Proposition 42, at the 1989 NCAA Convention: "This proposal will eliminate athletically related financial aid for those who do not qualify under the guidelines of Bylaw 5-1-(j). It does not preclude nonqualifiers nor does it preclude other allowable financial aid. It does apply a standard for all of our student athletes" (Renfro, 1989, p. 246). He argued that many high school coaches and counselors were advising students not to take the SAT because if they were able to maintain a 2.0 GPA, they could still attend college on athletic scholarships and be ready to play in a year. Associate Athletic Director L. Douglas Johnson of the University of Miami also showed support for the proposal, noting the mixed messages the partial qualifier status sent to perspective student athletes, noting that if the student was good enough on the athletic field an institution would offer a scholarship regardless of their academic readiness. At the end of the day, the convention went with the Academic Requirement Committee and the Presidential Commissions

recommendation to not pass the proposal, and to continue to monitor the effects of Proposition 48, with a vote of 151-159 (Renfro, 1989).

On the following day, however, Alan Williams the faculty athletic representative from the University of Virginia moved for the reconsideration of Proposition 42. He concluded that he and others had "responded to the request of the Presidents Commission not to make any changes in Bylaw 5-1-(j); but upon further reflection and getting a better reading on the degree to which the Presidents Committee really discussed this, we are prepared to vote in favor of Proposition 42" (Renfro, 1989, p. 279). The motion to reconsider passed and discussion resumed by the delegates on Proposition 42. Again, Commissioner Schiller announced his support of the proposal, and so did Tom Yeager the commissioner of the Colonial Athletic Association and Chancellor Joe Wyatt from Vanderbilt University, again stating the need to show parents, teachers, and coaches that the NCAA was serious about "diligence in study" (Renfro, 1989, p. 281). Charles Theokas, the athletic director from Temple University, vigorously opposed the proposal and let the convention know his feelings:

> If this passes, in my opinion, the entire concept of Bylaw 5-1-(j), Proposition 48, is thrown out the window. We penalize the student athlete…We are talking about a young man or woman who would end up ten points shy, and we say you can't get a college education because you can't afford it and we are not going to do it. Please consider this very, very seriously. (Renfro, 1989, p. 281)

However, the convention ended up approving Propositions 42 during the second vote with a count of 163-154. With this decision, partial qualifiers were not allowed to receive financial aid beginning in 1990 (Byers, 1995; Renfro, 1989; Smith, 2010).

The protests against the new legislation came immediately and were the loudest from coaches. Temple's basketball coach, John Chaney called Proposition 42 "a racist rule approved by racist presidents" and Georgetown's John Thompson called the NCAA a racist organization (Robbins, 1990; Smith, 2010). Thompson, the first African American coach to win a national championship, took it one step further when on Saturday, January 14, 1989 he walked off the court before his team played against Boston College at the Capital Centre in Landover, Maryland. As he walked off the court, leaving the coaching duties to his assistants, the crowd of 15,379 gave him a standing ovation (Reed, 1989). Thompson stated that he would not coach again until the members of the NCAA reconsidered Proposition 42, and did not go with his team to their following game at Providence (Rhoden, 1989). It did not take long for the NCAA to consider the protest of Thompson, and the organization's Presidents' Commission agreed to discuss the issue at their next meeting. Some believed this discussion resulted from the fear of financial loss if there was a disruption of NCAA basketball, not about the actual rule itself (Smith, 2010).

Coach Chaney and Thompson were not the only people troubled by Proposition 42. Dr. Joseph Johnson, the president of Grambling State University, sided with the two coaches and declared that the rule was racist. His main argument was that the rule would eliminate access to higher education since ineligible students would not receive financial

aid. Johnson argued that forbidding the chance to succeed in college "hardly seems fair and exemplifies flawed logic" (Johnson & Ashe, 1989, p. 138). To support his argument, Johnson quoted a study on his own university graduating class of 1983 that was conducted by the Southwestern Athletic conference. Many of these students did not meet the requirements of Proposition 42; however the majority of them were within 90 percent or exceeded their predicted GPAs (Johnson & Ashe, 1989). Johnson stated in his editorial that he was not against academic standards; however he was against rules that negatively impacted poor and minority students.

Countering Johnson's arguments was Arthur Ashe, the first Black male to win at Wimbledon. He emphasized how minimal the standards actually were, observing that the SAT score of 700 placed students in the bottom tenth percentile in verbal and the bottom third in math (Johnson & Ashe, 1989). He noted that too many academic tragedies have happened and that the real issue is that Black athletes have grown to believe that they were entitled to an athletic scholarship instead of being rewarded one for academic and athletic achievement. To support his argument, Ashe quoted Richard Lapchick's research that 80 to 85 percent of Black football and basketball players never graduated from college (Johnson & Ashe, 1989). Ashe's hope was that these rules would affirm the importance of academics for Black middle and high school students.

Regardless of the various arguments, at the followings year's 1990 NCAA Convention the issue of amending Proposition 42 was put to a vote. Three options were placed on the agenda for the delegates to vote on, No. 26, 27 and 28. Number 26 was sponsored by the Presidents' Commission and would allow freshman partial qualifiers to

receive aid based on financial need, consistent with institutional and conference regulations and not funded by the athletic department. In addition, number 26 alleviated the fear of stockpiling student athletes by counting basketball and football recruited partial qualifiers towards the maximum financial aid limits for those sports. This was inserted to "encourage such athletic programs to be committed to the academic as well as the athletics success of such students" (Renfro, 1990, pp. 196–197). Number 27 would eliminate Proposition 42 all together and was enthusiastically promoted by the Southwestern and Big East Conferences. And finally, number 28 gave the option of putting off implementation of Proposition 42 until further studies could be done on its ramifications (Renfro, 1990; Robbins, 1990). By the end of the Convention, the delegation decided to soften Proposition 42 by voting for the President's Commission's proposal, number 26. If student athletes were able to meet continuing eligibility after their first year of residence, they would be given three years of athletic eligibility. Essentially, the 2.0 rule was resurrected for students that did not qualify initially (Byers, 1995).

Proposition 16

The debate about initial eligibility standards would not be pushed aside for long. In 1992, Presidents pressed for a new amendment to Proposition 48. Proposition 16 would raise the number of core courses needed from eleven to thirteen and would require student athletes to take 4 years of English, 2 years of Math, 2 years of natural or physical science (1 with lab if available), 2 additional courses in English, Math or natural or physical science, 2 years of social science, and 1 additional year in any of the previously

mentioned subjects or foreign language, computer science, philosophy or nondoctrinal religion. In addition, Proposition 16 enacted a new sliding scale index to determine the SAT/ACT score needed based on the student's high school GPA. However, this new scale did not go below a 2.0 GPA or 700 on the SAT. This proposal was to be fully enacted by August 1, 1995 (Owings & McMillen, 1995; Pickle, 2008; Renfro, 1992).

The first part of the proposal (Proposal No. 14) to increase the core course requirement, received vast support and endorsements from the Knight Commission, the American Association of Collegiate Registrars and Admissions Officers, American College Testing, The College Board, the National Association of College Admissions Counselors, and the National Association of Academic Advisors for Athletics. Although the recommendation from the Knight Commission was to increase the number of core courses to 15, the Academic Requirements Committee noted that not all schools would be able to provide 15 courses for their students before 1995, so the number was limited to 13 (Renfro, 1992). The President of Delaware State College, William DeLauder, strongly supported this action, stating that it was the one proposal that was backed by research. Citing a study conducted by the College Board, Dr. DeLauder noted that "completion of key academic courses, in particular algebra and geometry" was one of the two best predictors of college success by African American students (Renfro, 1992, p. 231). Proposal No. 14 easily passed with a 312-6 vote.

Immediately after voting for an increase in core courses, Proposal No. 16 was presented by President Thomas K. Hearn Jr. from Wake Forest University. This proposal recommended the establishment of an initial eligibility index based on a grade point

average of 2.5 and a 700 SAT or 17 ACT score. Conclusions of the academic-performance study, conducted by the NCAA, indicated that the grade point average of 2.5 had the same screening effects as the 700 SAT score. Thereby, this index would place the same weight on both eligibility factors. The index would not drop below a grade point average of 2.0 or 700 SAT; however, for each 10 point increase in SAT score, the corresponding required grade point average would decrease by .025, ultimately forcing a student with a 2.0 grade point average to achieve a 900 on the SAT (Renfro, 1992).

The 1992 NCAA Convention was no different from earlier conventions in that some delegates were in favor and others were opposed to this new form of academic reform. The presenter of proposal 16, President Hearn from Wake Forest, and chair of the NCAA committee that created the proposal, Lorna Straus from the University of Chicago, were convinced that the proposal was the correct avenue to pursue and would strengthen the already working Proposition 48. Most notably, these delegates reminded attendees at the convention that the proposal was endorsed by the Knight Commission, the testing organizations, and other collegiate associations. However, many delegates wanted to postpone any new reforms in order to see what additional effects the current Proposition 48 would have on academic performance. Chancellor Edward B. Fort of North Carolina A&T State University eloquently stated that the academic research showed that "after five years of experience that the current system works. It is not broken, so why are we attempting to fix it?" (Renfro, 1992, p. 234). Francis Rienzo, athletic director of Georgetown University, asked if anyone or any organization even had the ability to create "appropriate national standards." He believed that it was impossible

because of the "complex heterogonous world of American higher education." He also questioned the motive of the proposal, voicing his concern that it was being presented for politically correct reasons instead of what was academically sound (Renfro, 1992, p. 238). Discussions and debates continued on Proposition 16, with one delegate quoting MacBeth and many speaking to the common theme of racial discrimination. In the end, the proposal was passed by a 249-72 vote and the academic index would be used for new students in 1995.

Shortly after the passage of the proposition, the Black Coaches Association (BCA) spoke out against the "racist group psychologist" who created Proposition 16. The BCA accused the NCAA of cutting the number of scholarships allowed to basketball players as a way to decrease the number of black athletes, and proposed a boycott of the NCAA basketball tournament. With the help of President George H.W. Bush, the BCA called off the boycott after an agreement was reached that "a number of issues related to expansion of education, employment and governance-participation opportunities for Blacks and other ethnic minorities within the NCAA" would be addressed ("Method," 1994, p. 1). However, there was such an uproar that the implementation of Proposition 16's sliding scale was moved forward to 1996, despite opposition from the Knight Commission and the NCAA's Presidents Commission (Davis, 1996; Smith, 2010).

Opinions, effects, and research on Proposition 16. The approval of Proposition 16 during the 1992 NCAA Convention did not please many organizations, and after the convention, many expressed their opinions on the new legislation. In December 1994, the McIntosh Commission for Fair Play in Student Athlete Admissions stated that the

NCAA's initial eligibility requirements "undermined the Association's self-professed goals of high-performance standards, a level playing field, and academic integrity" ("McIntosh Commission," 1994). The commission claimed that all of the previous and the current NCAA academic reforms (Proposition 48, 42, and 16) were unethical because test score cut-offs are used instead of student's ability to do college level work, and pointed out that even the NCAA's own research showed that requiring high test scores does not mean you are getting better qualified students that will most likely graduate. In addition, even without the NCAA's intervention, athletes were already graduating at a rate similar to nonathletes. Before giving recommendations on eliminating Proposition 16 and freshman eligibility, which was ultimately ignored by the NCAA, the McIntosh Commission report concluded:

> While the development of more stringent eligibility criteria for athletes might raise graduation rates by excluding students with more educational disadvantages, the attainment of this goal by such means is morally questionable since a significant percentage of excluded students would have graduated had they been allowed to enroll. ("McIntosh Commission," 1994)

In August 1995, one year before the implementation of Proposition 16, the National Center for Education Statistics (NCES) published a research article that supported the McIntosh Commission Report that had been published the previous year. Using data from the National Education Longitudinal Study of 1988, authors Jeffrey Owings and Marilyn McMillen analyzed 1992 college bound seniors' transcripts and SAT scores to determine the eligibility of these students under Proposition 48 and 16.

The students were also separated by race/ethnicity, socioeconomic status, and athletic participation for comparison purposes. To be considered college bound, a student had to have graduated from high school, apply to one or more colleges, and had to have taken the SAT or ACT (Owings & McMillen, 1995). It was concluded that although 83.7 percent of these seniors met all of Proposition 48 requirements, only 64.7 percent met the new Proposition 16 requirements. Similar to the statistics from Proposition 48, more white students qualified than black (67% vs. 46.4%) under Proposition 16's regulations. An even lower percentage of low socioeconomic students qualified (42%). In addition, athletes and nonathletes alike met the requirements of Proposition 16 at the same rates. The authors ultimately concluded that student athletes needed to begin the academic planning process early and that "student athletes, guidance counselors, parents, and coaches must be aware of the NCAA eligibility requirements" (Owings & McMillen, 1995, p. 7).

Joshua Price, a scholar from Cornell University, also conducted a study on the effects of Proposition 16 on the university and the student athlete. He analyzed the change in the type of students admitted into individual institutions and if Proposition 16 did, in fact, increased the graduation rate of student athletes. By using graduation rates and information about five freshman cohorts from Division I and Division II institutions, the graduation hypothesis was tested. Three of the cohorts began school before the implementation of Proposition 16 (1993-1995) and two after implementation (1996-1997), allowing differences between the two groups to be seen. A total of 306 Division I schools and 288 Division II schools were ultimately used in the study. Proposition 16

was used at Division I institutions, allowing the Division II schools to be used as a control group (Price, 2010).

Price used a difference-in-differences approach to examine effects on enrollment and graduation rates when Proposition 16 was implemented. Based on his results, there was a total enrollment decrease of all first time freshman student athletes (all races included) by 9.9 percent after Proposition 16 came into effect. When separated by race, the decrease was more pronounced with a 12.2 percent decrease in white freshman student athletes and 20.1 percent decrease in black freshman student athletes – showing support for claims that African American student athletes were more negatively affected by Proposition 16. However, the total number of student athletes enrolled had not changed significantly, even the number of African American student athletes. Price concluded that an increase of African American transfers had to account for lower levels of African American freshman student athletes. In addition, there was no significant enrollment change in the non-student athlete population, indicating that Proposition 16 did not affect groups outside the student athlete population. Graduation rates were also analyzed using the difference-in-differences approach, and overall graduation rates for student athletes did not significantly change. However, when broken down by race, African American student athletes increased their graduation rate by 7.5 percent (Price, 2010). In summary, Price determined that Proposition 16 did increase African American student athlete graduation rates, but also forced athletic departments to recruit and depend on transfer students to fill scholarships rather than traditional freshman student athletes.

NCAA, Proposition 16, and the Federal Courts System. Athletes themselves soon got involved in the controversy over Proposition 16 by challenging the legality of the rule in the courts system. In 1997, four African American student athletes brought a Title VI of the Civil Rights Act of 1964 lawsuit against the NCAA in the Eastern District of Pennsylvania, alleging that they were "unlawfully denied educational opportunities" because of the use of test scores in Proposition 16's index and that these scores had an "unjustified disparate impact on African American student athletes" (*Cureton vs. National Collegiate Athletic Association*, 1999). All four of the plaintiffs were high school honor students at their inner city high schools, as well as stars in track and field. Each of the students received multiple scholarship offers; however, these scholarship offers were withdrawn when they failed to meet the minimum test score requirement of Proposition 16.

The students first had to show that the NCAA was a recipient of federal funds and to present evidence of the disparate impact on African Americans because of the NCAA's academic policy (Hunt, 2000). The plaintiffs were able to establish that the NCAA was a recipient of federal funds because it was an "indirect recipient or controlling authority" of those funds through the National Youth Sport Program, which the plaintiffs claimed was "merely an alter ego of the NCAA" (Mondello & Abernethy, 2000, pp. 141–142). The ruling allowed the Title VI action to continue through the legal system.

The plaintiffs had to show that there were adverse disproportionate effects on African Americans. The disparate impact theory states that "some employment practices,

adopted without deliberately discriminatory motive, may in operation be functionally equivalent to intentional discrimination" (Mondello & Abernethy, 2000, p. 142). If the plaintiffs were able to show this disparate impact, the burden then shifted to the defendant to show that the policy was an educational necessity. The plaintiffs presented three key pieces of evidence that provided the necessary requirements for disparate impact. The first was a 1998 NCAA memorandum to its members stating that there was a greater number of black student athletes negatively affected by Proposition 16 than white student athletes and that "for both African American and low-income student athletes, the single largest reason for not meeting Proposition 16 standards was a failure to meet the minimum standardized test score" (Hunt, 2000, p. 291; Mondello & Abernethy, 2000, p. 143). A second memorandum from 1994 was also presented and stated that both Proposition 48 and 16 had a disparate impact on minority students. This was particularly damaging to the NCAA because it showed they had knowledge of the negative impact before the implementation of Proposition 16. Finally, the plaintiffs used statistical evidence to show the impact on African Americans, primarily evidence from the National Center for Education Statistics study (Hunt, 2000, p. 291). These pieces of evidence shifted the burden to the NCAA. The NCAA made a case for educational necessity by stating that their ultimate goal was to increase graduation rates among all student athletes and closing the gap between white and black student athlete's graduation rates. However, the court was not convinced that Proposition 16 was a legitimate means of accomplishing greater graduation rates. Accordingly, the plaintiffs were awarded an injunction banning the NCAA from further use of Proposition 16 (Hunt, 2000).

The plaintiff's victory was short lived, however, when the Third Circuit Courts of Appeals reversed the decision in favor of the NCAA. The court determined that the plaintiffs failed to show that the NCAA was a recipient of federal funds, a key requirement for a Title VI claim (Hunt, 2000). This put the requirements of Proposition 16 back on the books, pending subsequent appeals. These appeals ultimately failed, as the District and Third Circuit courts both denied the motions on grounds of prejudice and delay (Waller, 2003). Even with the reversal, the *Cureton vs. NCAA* case is considered a landmark decision for it "briefly reversed thirty years of judgments that affirmed the legality of the NCAA's academic eligibility rules" (Hunt, 2000, p. 288).

Another legal case would soon bring the NCAA and its Proposition 16 back into the courthouse. In 2002, The United States Court of Appeals decided on Pryor vs. NCAA. Kelly Pryor and Warren Spivey were both African American student athletes who had signed National Letters of Intent to play for their respective universities. However, both failed to meet the requirements of Proposition 16 and lost their scholarships. Both filed suit alleging that the NCAA intentionally discriminated against them in violation of Title VI of the Civil Rights Act of 1964 and 42 U.S.C. Pryor also filed a claim under the Americans with Disabilities Act because she had a learning disability. Initially, the district court dismissed both claims stating that the NCAA "adopted Proposition 16 in spite of and not because of its alleged disparate impact on minority student athletes" (Waller, 2003, p. 196). The court also dismissed the ADA claim because Pryor was able to earn back the year of eligibility that she had lost by completing degree requirements.

During the 2002 appeal, the court reversed the decision to dismiss the Title IV and 42 count. The court stated that "for relief the plaintiffs needed merely to show that there was a chance that the NCAA adopted Proposition 16 because of and not in spite of its disparate impact on an identifiable group" (*Pryor vs. NCAA*, 2002; Waller, 2003, p. 196). It continued to acknowledge that the NCAA intended to help African Americans earn a degree, but that any policy or rule that purposely discriminates, regardless of intent, is invalid. The court continued by stating, "based on the face of the complaint and all reasonable references thereto, the NCAA at least partially intended to reduce the number of black athletes who could attend college on an athletic scholarship by adopting the heightened academic requirements of Proposition 16" (*Pryor vs. NCAA*, 2002; Waller, 2003, p. 197).

Because of the court's opinion, the NCAA passed an amendment to Proposition 16 instead of abolishing it. Starting in 2003, student athletes had to complete 14 core courses (up from 13, and scheduled to increase to 16 in 2008) and the test/GPA index scale was extended and contained no minimum score. A student athlete could now receive a SAT score as low as 400 (the lowest possible score) and be eligible to participate in athletics if they had earned a 3.55 or higher GPA. The extension also eliminated the need to have partial qualifier standards, because the scale essentially extended the scale used for these standards – there was no more middle ground to define (Waller, 2003, p. 194). In addition to these changes, the amendment also increased the degree requirements for these student athletes once they were admitted into an institution. To continue to be eligible for athletic participation, student athletes now had to complete

40 percent of their degree by the beginning of their third year, 60 percent by their fourth year, and 80 percent by their fifth (40-60-80 rule). These percentages were up from 25, 50, and 75 percent that were previously required for eligibility (Mclendor, 2002). These changes were the third change in eligibility standards since 1983, and more academic reform changes were scheduled to be presented by the NCAA.

Academic Progress Rate

Other academic reforms in college athletics were on the horizon in 2003 when Myles Brand was selected to be the new president of the NCAA. Brand was the first former university president to be selected for this role and his background was essential for obtaining the cooperation and results that he desired. Bob Bowlsby, at the time the athletic director at Stanford University, stated in 2005 that, "Presidents listen to him, and I'm not sure, going back to Walter Byers, that presidents necessarily listened to the executive director or the NCAA president in quite the same way" (Copeland, 2011). This influence was essential because in 1997 the NCAA had created a new governance structure that "empowered a body of institutional chief executive officers (CEOs) [Presidents] to set forth the policies, rules and regulations for operating the division" (Earle, 2002, p. 21). This was different from the past structure that gave each school one vote on all operational and administrative bylaws. Now the governance structure for Division I athletes was headed by an 18 member Board of Directors, CEOs (i.e. presidents) of NCAA institutions that has final authority over bylaws and operation procedures. Below this board, is a 49 member Management Council that is comprised of athletic administrators from the various Division I conferences that contribute to the

Board of Directors with recommendations and adoption of bylaws and rules (*2004-2005 Manual*, 2004, pp. 23–27).

One of Brand's major contributions to the academic reform effort was the creation and implementation of an Academic Performance Program (APP). The program was fully adopted in April of 2004 and the stated purpose of the program was:

> To ensure that the Division I membership is dedicated to providing student athletes with an exemplary educational and intercollegiate athletics experience in an environment that recognizes and supports the primacy of the academic mission of its member institutions, while enhancing the ability of male and female student athletes to earn a four year degree. (*2004-2005 Manual*, 2004, p. 387)

The first component of this program was the amendment to Proposition 16 which increased the core course requirement to 14 and the degree progress percentage increases that officially began in 2003. However, the development of these changes had started in 2000, before Brand became NCAA president. The Board of Directors created a group of "academic consultants" that were commissioned to create a program that would increase graduation rates, but would minimize any negative impact on minority and low income student athletes (Katz, 2002). The group discovered, by reviewing data from the NCAA's Academic Performance Census, that high school grades and test scores were the best predictors of first year performance and the *likelihood* of graduation, but that performance within college was a better predictor of *actual* graduation. With this information, the group created "academic mileposts" to use as continuing eligibility

standards, to help ensure graduation and persistence towards a degree (40-60-80 rule) (Katz, 2002).

This was a great step forward for academic reform, but Myles Brand was not completely satisfied with the changes. Brand had noted in his inaugural State of the Association speech his desire for an incentives/disincentives package to be developed to enhance the academic performance of student athletes and considered this the next step in the Academic Performance Program. Just three days after the 2003 NCAA convention, the Division I Management Council formed a working group, chaired by Vanderbilt's Athletic Director Todd Turner, to investigate and create a "white paper" discussing such a program (Brown, 2003).

On March 11, 2003, Mr. Turner distributed the "white paper" on the proposed framework for an incentives/disincentives program for college athletics to all Division I institutions and major professional organizations for feedback. The framework was tied directly to the benefits of the association – postseason competition, athletic scholarships and NCAA revenues. In addition, seven key principles for the proposed incentives/disincentives program were listed:

1. The goal should be, first and foremost, to encourage improved academic performance of all student athletes on all sports teams;

2. The structure must appropriately reward institutions and sports teams that achieve significant academic success while penalizing those that have a demonstrated history of academic underachievement, targeting the "habitual" offenders;

3. All Division I athletic programs and sports teams should be subject to the program;

4. The structure must be fair and credible;

5. The structure should be as straightforward and understandable as possible. (Turner, 2003)

The program also expected the incentives and disincentives to be applied at three different levels: the student athlete, the sport team and finally entire athletic programs; allowing for the penalties to be focused on the prime offender or offenders (Turner, 2003).

Two types of data, and in turn penalties, were proposed as ways to evaluate a teams' academic performance in Turner's white paper. Historical data (four year average) would look at the performance by the graduation rates over time, whereas the contemporaneous data would look at yearly academic progress and retention of each specific sports team. Although not fully developed at this point, the Academic Progress Rate (APR) was slated to be the primary measure to determine these penalties. During this time, the methodology of the APR was being developed with the data from a pilot study conducted by the NCAA (which was never officially disseminated to the public). The specifics of this measure were to be distributed by May 2003. Although not fully developed, the combined components of eligibility, retention and graduation were solidified as the variables in the measure (Turner, 2003). Penalties based on the teams' historical data were a warning, leading to and resulting in grant in aid reductions and ultimately restriction to postseason competition. Penalties based on teams'

contemporaneous data being proposed were to restrict institutions from re-awarding scholarships that had been awarded to a student athlete that had left the institution in bad academic standing. The incentives to be given to successful programs had yet to be determined (Turner, 2003).

Turner's white paper was the first official document distributed to the NCAA membership at large describing the proposed Academic Performance Program and was used to generate feedback for the Management Council and Board of Directors to consider. The proposal still had to go through many legislative steps and the methodology of the APR completed before the program was official. However, the proposed timeline for completing these steps had the APP package being voted on in April 2004 and the first data to be collected during the 2003-04 academic year (Turner, T., 2003).

On April 29, 2004, the Division I Board of Directors unanimously approved the APP, and its corresponding APR, after three long years of research and discussion. NCAA President Myles Brand was excited about the approval of the APP and praised the Board of Directors leadership when he stated:

> This landmark legislation marks the beginning of a sea of change in college sports. These are strong and well thought out reforms that are critically necessary to ensuring that student athletes are academically successful. For the first time ever, the NCAA will have the ability to hold institutions and teams accountable for the academic progress of their student athletes. (Christianson, 2004)

Along with the passage of the APP, two new measures were created to determine acceptable academic progress – the Graduation Success Rate (GSR) and the Academic Progress Rate (APR).

Creating new measures. In November 1990, the Higher Education Act of 1965 was amended to mandate institutions to publish the graduation rates of student athletes that receive athletic related aid. This amendment came to be known as The Right to Know Act and required that first time freshman students that completed their program within 6 years (calculated as within 150 percent of the normal time need for completion) at their first institution were to be counted as graduates. Each institution was now required to publish the graduation rate not only of the regular student body, but the student athlete population as well. The number was also broken down by race, sex and sport (basketball, football, baseball, cross country/track, and all other sports combined). Each student athlete cohort consisted of "first time full time freshman matriculating in a given fall term while receiving athletically related financial aid" (Petr & Paskus, 2009, p. 78). Student athletes that were not receiving aid from the athletic department were not counted. In addition, students that transferred to a different institution were counted as a non-completer, regardless if they graduated at their new institution or not. Similarly, student athletes transferring into an institution were not counted (Petr & Paskus, 2009). This same metric was used for the general student body (enrolled first time, full time freshman student – scholarship or not), however, the student athletes were counted in both the general and athlete populations. This rate is known as the Federal Graduation

Rate (FGR) and is still used as the primary national comparison of student athletes and general student body's academic success.

The loss of transfer student data was of great concern to the NCAA. The U.S. Department of Education state that in the 1980s and 1990s over 50 percent of bachelor degree recipients attended more than one institution, and was estimated to be over 60 percent by 2000. In addition, the NCAA claimed that 35 percent of student athletes transfer into or out of an institution other than their first one at some point in the six year time frame (Adelman, 1999; Petr & Paskus, 2009). Because of these statistics, it was believed that many student athletes that are counted as non-completers under the FGR, do actually earn a degree, just not at their first institution. The NCAA did not appreciate the assumption that students that left their first institutions did not graduate, so they created their own measure to be used with the FGR starting in 2005, the Graduation Success Rate (GSR).

The GSR starts with the same cohort as the FGR, however, it also includes student athletes that come from two year institutions and student athletes that start midyear, as long as they receive athletic aid. For institutions that do not award athletic aid (thus exempted from the FGR), the student athletes that are defined as recruited athletes are used to calculate the GSR. If a student athlete transfers out of an institution, and would have been academically ineligible to participate in athletics, he/she is counted as a non-completer. However, if a student athlete leaves in good academic standing, they are removed from the cohort completely. This calculation assumes that the student is transferring to another institution and will be added into that cohort (Petr & Paskus,

2009). The NCAA states that the GSR captures 37 percent more student athletes than the FGR, thus "making it a more accurate reflection of athletes' academic success" (Denhart, M. et al., 2009, p. 9) and has become the preferred measure of the NCAA. When the GSR is used to calculate graduation rate, student athletes have a higher rate than the general student body; however, there is no similar metric for the general student body that accounts for transfers so the comparison is moot.

The Academic Progress Rate (APR), the second measure created, is the center of the APP's incentives/disincentives program and is it meant to be a "real time" measure of the academic progress of athletic teams. The six year lag time between a student entering and receiving a graduation report was a major weakness, and was a motivating factor in creating this new measure. The APR takes eligibility, graduation rate, retention, and progress towards degree into its calculation (Denhart, et al., 2009). One difference with the APR is that it holds the institution and individual teams responsible for their academic progress. Each student athlete that receives athletic related aid is counted in the cohort and can receive a maximum of 2 points each semester; 1 for staying at the institution and 1 for being academically eligible, for a maximum of 4 points a year for each student. Table *2* shows the different combinations to earn points with the APR (Katz, D., 2003). Each team's total points are then divided by the points possible and multiplied by 1000 to get the team's APR. If a team receives an APR score below 925, immediate sanctions can occur. The score of 925 was said to be equal to a 50 percent graduation rate, based on the federally mandated methodology ("How APR," 2010).

Table 2

Combinations of Earned APR Points

Student Athlete	Eligibility	Retention	Points Earned	Points Possible
Academically eligible and returns to school	1	1	2	2
Would be academically eligible but does not return to school	1	0	1	2
Not academically eligible and does not return to school	0	0	0	2
Stays in school but is not academically eligible	0	1	1	2
Graduates	G	G	2	2

The chair of the group that formed the APR, University of Hartford President Walter Harrison, knows that in the beginning 925 is going to be hard to understand and related it to "announcing that we're going to have SAT scores for the first time and having nobody understand what an 1100 means" (Brown, 2005). But Harrison insisted that in time this number was going to mean more and will be better than graduation rates, because it is a real time assessment of how athletes and teams are doing academically. The committee wanted teams to graduate at least 50 percent of their athletes, so they picked a corresponding APR which turned out to be 925. Harrison continued by stating, "In three years, it's my hope that people will understand an APR score without question. But since this is a new metric, we needed to equate it with something. We had to explain how we decided 925 was the right number. That adds confusion, though, because the words 'graduation rate' have a certain meaning, and the APR isn't quite the same thing" (Brown, 2005). However, Harrison emphasized that this number is not arbitrary and will

withstand any legal challenge because the APR is an aggregated line that effects teams, not individuals like Proposition 16 did with initial eligibility (Brown, 2004).

The APR program continued with the incentives/disincentives portion of the program. It has two sets of penalties for teams that do not show the appropriate academic progress, contemporaneous and historical. Contemporaneous penalties are not to be overly punitive, but "serve as a catalyst" to create change in a team's current academic and athletic culture; and falling below 925 does not automatically put a team at risk for contemporaneous penalties. Penalties happen when a team has a player that is academically ineligible and does not return to the institutions, i.e. a 0-2 player. When this occurs, the team is not allowed to re-award that player's scholarship the following year, up to a total of 10 percent of their team's total scholarship allowance. This limit on scholarship loss allows the team to adjust and improve their situation, without a great sacrifice to the athletic ability of the team (Brown, 2005; "How APR," 2010). Conversely, teams that do fall below 925 are required to submit an Academic Progress Rate Improvement Plan to the NCAA on how they plan to improve their situation, supporting the ideal of improvement, and not solely punishment ("How APR," 2010).

The second set of penalties is used to punish habitual poor academic performance and is based on a four year average of the APR. These penalties begin when a team falls below an APR score of 900, and increases in severity each consecutive year a team obtains this score. The penalties are the following:

- Year 1: a public warning letter for poor performance;
- Year 2: restrictions on scholarships and practice time;

- Year 3: loss of postseason competition for the team;
- Year 4: restricted membership status for the institution, the school's entire athletic program is penalized and will not be considered a part of Division I ("How APR," 2010). As with many of the NCAA sanctions, the institutions receiving the harshest penalties have an opportunity to appeal to the Committee on Academic Performance (CAP).

In February 2005, presidents and chancellors received their first APR report for the 2003-2004 year, which included scores by team and the overall institution's APR. Contemporaneous penalties were not in place for this first round of data, but institutions were told what penalties, if any, would have been assessed if they had been. Contemporaneous penalties would not be handed out until the next report, the 2004-2005 data, that would be the average of the two years. This gave the institutions time to try and correct any problems. Distribution of the APR reports to presidents and chancellors was deliberate. The NCAA wants presidents to have and take the responsibility of their athlete's academic progress and ultimate success (Brown, 2005).

Response and research on the APP and APR. The response to the new academic reform package was mostly positive, but some reservations were raised from important constituents of college athletes. The Knight Commission expressed praise for the standards in general, but was concerned about the ability of the NCAA to enforce the penalties. The commission urged the NCAA "not to go easy on institutions" that do not meet their expectations. In addition, the Knight Commission was concerned that the progress towards degree percentages would not allow players to choose certain majors

and be pressured to take "easy" measures to stay eligible for athletics. Commission member and president emeritus of Michigan State University, Clifton R. Wharton noted "I am worried that there tends to be a clustering of student athletes in particular courses" and that these "jock majors impugned the academic integrity of institutions" (Wolverton, 2005).

The progress towards degree requirement was also the concern of the National Association of Academic Advisors for Athletes (N4A), and Steve McDonnell, the N4A president at the time, expressed these concerns to the Director of Membership Services of the NCAA. In a letter and report from the N4A Task Force, N4A stated its opinion that the "initial eligibility standards seem incongruent when coupled with increased progress towards degree requirements." Just like the Knight Commission, N4A was concerned about the ability of student athletes to choose a major that was meaningful to them and their futures, instead of their current need for athletic eligibility. They continued by stating that "current legislation may not encourage sound educational outcomes" and encouraged the NCAA to form a waiver policy for student athletes to be able to change majors if they are in good academic standing (McDonnell, 2004).

Even people within the NCAA's Management Councils were concerned about the degree completion percentage increase needed of continuing eligibility, while at the same time lowering initial eligibility. "The equation will never balance," says Christine A. Plonsky, chairwomen of the Management Council, and will lead to unintended consequences. These consequences include discouraging student athletes from pursuing challenging majors, grade inflation, and even recruiting wars between schools with and

without easy majors (Suggs, 2004). However, NCAA President Brand, rejected these opinions when he spoke to a reporter in 2004:

> Student athletes in the past, in the future, will make decisions for all kinds of reasons – how they want to spend their time, what majors they want to take. I don't see anything in raising the standards that would lead them away from taking the course loads that they want. If that were true, I would say, 'Let's just lower the standards. They can take whatever they want.' That's fallacious. That's not a good argument. (Suggs, 2004)

Kevin Lennon, the NCAA's vice president for membership services continued by expressing that the goal of the new reform program was to change behaviors of coaches and athletes and to force athletes to focus on academics. If behaviors do not change, Mr. Lennon agreed that the 40 percent rule "will catch a lot of students" (Suggs, W., 2004).

The concern about changing academic behaviors of student athletes, as well as the academic administrators that are involved in helping these students when faced with the 40-60-80 rule, was the topic of Dr. Jennifer Kulics dissertation in 2006. In *An Analysis of the Academic Behaviors and Beliefs of Division I Student Athletes and Academic Administrators: The Impact of the Increased Percentage Towards Degree Requirements*, Kulics used a mixed method design to survey 1,027 student athletes and 21 administrators to determine the impact of the increased degree requirements on athletic eligibility, retention, selection of major, summer school enrollment and projected graduation rates. She used predetermined athletic teams and athletic administrators at six Midwestern institutions that shared the same conference affiliation.

Results showed that most student athletes saw the new regulations as a positive and helped them stay on track for graduation; however, they did feel anxiety and pressure to make the correct choice of major. Many felt trapped in their major and were unable to explore their academic options without ending their athletic careers. Administrators felt a bit different, with 15 of the 21 not agreeing with the degree progress requirements. Their greatest concerns were student athletes dropping out or quitting school due to athletic ineligibility and limitations surrounding a selection of major. Even with this concern, none of the administrators surveyed had ever encouraged or suggested a student athlete to quit their athletic team in order to pursue a desired major that was not possible if they continued athletics. In the end, 22.6 percent of student athletes said that they would change their major to stay athletically eligible and 52.4 percent of administrators would advise a student athlete to change their major to stay athletically eligible because of the new regulations (Kulics, 2006).

The progress towards degree regulation is only one part of the NCAA Academic Performance Program, with the APR being the measure that sets this reform measure apart from all the other past initiatives. The APR places sanctions on teams and programs, not solely individual athletes, on a year by year basis – putting the most emphasis on perpetual offenders. The researchers in an 2008 study, *Intercollegiate Athletics: A Preliminary Study Examining the Opinions on the Impact of the Academic Performance Rate (APR)*, asked athletic directors, faculty athletic representatives, senior women administrators and head coaches from six prominent Bowl Championship Series (BCS) schools for their opinions on the APR. Seventy five responses were received, with

47 of the responses coming from administrators and 28 from head coaches (Christy, Seifried, & Pastore, 2008).

Of this population, 64 percent (n=48) believed that the APR would have a positive impact on college athletes, primarily because it would force coaches and athletic departments to be more selective in who they recruit and ultimately admit into their institution. The results also indicated that the APR would hold the coaches more accountable for the academic success of their athletes. On the other hand, 32 percent (n=24) of the population believed that the APR would have little or no impact on college athletics. One respondent called it a "PR tool" and believed that there were already enough checks and balances to the current system. Another mentioned that, just as with past reform efforts, people will find a way around the APR and it is more likely to increase academic fraud and contribute to watered-down academic programs. Unfair and unrealistic were also words mentioned in association with the APR. One coach wondered "how student athletes can be expected to graduate in four years when the average student nationally graduates in approximately 5 years and 3 months" (Christy et al., 2008).

Conclusion

The APR is the primary focus of the newest academic reform instituted by the NCAA, but no scholar has looked at the actual measure and what institutional variables affect the measure itself. The NCAA conducted a pilot study using data collected from their academic census, to create the APR. But the procedures and methods used to create the measure was never disseminated to the public, making it impossible to analyze what went into the creation of the measure (E. L. Summers, personal communication, April 10,

2012). Researchers have looked at how the APR has changed football programs' recruiting and retention strategies (Castle, 2010) and what student specific variables predict student athletes to lose a retention point, an eligibility point, or both (Green, 2008; Johnson, 2010; Le Crom, Warren, Clark, Marolla, & Gerber, 2009; McCall, 2011), but no study has looked at a large scale, national study on the institutional variables that contribute and are related the APR score. The previous mentioned studies have all been case studies of individual institutions or conferences.

The goal of the APR was to improve graduation rates of student athletes by providing each team with a real time measure of academic success. Analysis of this goal and what variables contribute to institutions APR scores is the purpose of this dissertation research.

Chapter Two examined the history of the academic reform process of the NCAA from its inception to the most current reform measure. It is essential to know the history of the present measure to gain an understanding of the significance of the current APR measure, how and why it was thought to be needed. The methodology that will be used to achieve the desired analysis of the APR will be discussed in the following chapter.

CHAPTER THREE: METHOD

The purpose of this study was to investigate and examine the most current NCAA academic reform measure and its effect on the academic success of student athletes within different types of higher education institutions. The Academic Progress Rate is the NCAA's newest measure and is meant to be a "real time" measure of the academic progress of athletic teams that takes eligibility, graduation rate, retention, and progress towards degree into its calculation (Denhart, et al., 2009) This was accomplished by employing the following research questions:

1. Does the APR 925 cut score accurately translate into a 50 percent federal graduation rate in the revenue sports?
2. To what extent did the APR affect graduation rates on revenue sports?
3. Which revenue sport did the APR 925 cut score have the most effect on in terms of graduation rates?
4. Do different categorical grouping of institution based on (1) enrollment size, (2) admissions standards, (3) public or private affiliation, (4) sport conference affiliation, (5) athletic operating cost, (6) athletic recruiting cost, (7) football coaches' salary, (8) and athletic performance based on the RPI differ on the APR score of revenue sports?

Data Sources

Data from multiple sources were utilized to categorize the educational institutions used in this study. All of the data sources that were used are aggregated, publically available secondary datasets.

The NCAA Education and Research Search Engine ("NCAA Data," n.d.) was used to retrieve the graduation rate information (FGR, APR) on each of the institutions. Each institution is required to submit relevant information to the NCAA each year to satisfy NCAA bylaws as well as the federal Right to Know Act of 1990. The first report retrieved for each institution was the Federal Graduation Rate Report which contains the federal graduation rates of the general student body and athletes (only athletes on athletic aid), based on the traditional six year cycle. The data is broken down by gender, race and sport and will provide the total number of student athletes on aid. This same search engine also allowed APR reports to be generated for each school. These reports list the APR of every sport that is offered at the institution.

The second data source used was the Equity in Athletics Data Analysis Cutting Tool. Data collected from this tool is assembled from OPE Equity in Athletics Disclosure Website database and consists of "athletics data that are submitted annually as required by the Equity in Athletics Disclosure Act (EADA), via a Web-based data collection, by all co-educational postsecondary institutions that receive Title IV funding (i.e., those that participate in federal student aid programs) and that have an intercollegiate athletics program" ("Equity in Athletics," n.d.). This tool generated general athletic and athletic

financial statistics for each institution, including athletic operating expenses, and athletic recruiting cost.

A related source that also contain financial information was the USA Today's Compensation for Division I-A College Football Coaches database ("Compensation," 2006). The searchable database allows individuals to look at the base salary, the maximum bonuses, and extra income that the head coach did or could receive during the 2004-05 season. The actual contracts are made accessible as a downloadable pdf., if available. The data extracted were the total salary of each of the studied institutions' head football coach.

Athletic performance for the 2005 season was also gathered. The Rating Percentage Index (RPI) was used to determine the success on the court or field. The RPI assigns a numerical rating, between 0 and 1, to each of the competing teams with the higher the number equaling a better performance (Wobus, 2005). The RPI was first created by the NCAA in 1981 to assist the Men's Basketball Committee to select and seat the participants in its national tournament. The basic formula takes a team's winning percentage (times .25), opponents' winning percentage (times .50), and its opponents' opponents' winning percentage (times .25) to get the RPI ranking (Pomeroy, 2005; Wobus, 2005). This rating is still used as one component for choosing at-large selections for the NCAA basketball tournament, and has been used by numerous individuals and applied to other sports. For this study, the calculations done by John Wobus were used. Wobus has worked for Syracuse and Cornell Universities in the computing field. His work was chosen because he uses the above described formula for all three sports being

examined, football, men's basketball, and women's basketball. Consistency in the way statistic was calculated led to the use of this individual's database compared to the many other options available.

General institutional information was gathered from the National Center for Education Statistics (NCES) database that is maintained by the U.S. Department of Education ("NCES Search," n.d.). The NCES fulfills "a Congressional mandate to collect, collate, analyze, and report complete statistics on the condition of American education" ("About Us NCES," n.d.). This database was used to gather general institutional data such as enrollment and admission information. Any other specific information about individual institutions was generated from their individual webpage.

Participants

The National Collegiate Athletic Association (NCAA) is divided into three different divisions that "creates its own rules governing personnel, amateurism, recruiting, eligibility, benefits, financial aid, and playing and practice seasons – consistent with the overall governing principles of the Association" ("About NCAA," 2011). For this study, only schools that achieve revenues through the sponsorship of athletic programs were analyzed. This designation eliminates the inclusion of all Division II and Division III institutions that are members of the NCAA.

The remaining 329 institutions, that were designated Division I during the 2004-05 academic year, are required to offer at least 14 sports total and at least two team sports for each gender. In addition to the number of sports required, Division I institutions are required to offer a minimum amount of financial aid to their athletes. Division I

institutions can then decide what subdivision to compete within based on their football program. To hone this study, only institutions that participated in the Football Bowl Subdivision (FBS) Division I institutions during 2004-2005 academic year will be utilized, leaving 117 institutions that meet these parameters.

FBS institutions utilize a postseason bowl model, the Bowl Championship Series (BCS), instead of a playoff system to determine championships. These programs also have a stricter mandate on their program than other Division I institutions. Each must sponsor more sports (16 instead of 14), has a strict football scheduling and financial aid structure, and must meet minimum attendance standards in football ("Differences," 2011). Six major, five mid-major, and two independent schools are eligible to be participants in the BCS and include: the Atlantic Coast Conference (ACC), Big East, Big 10, Big 12, Conference USA, Mid-American Conference, Mountain West Conference, Pacific 10, Southeastern Conference (SEC), Sun Belt Conference, Western Athletic Conference (WAC), and Notre Dame and Navy ("BCS background," 2012). Data was collected from the member schools within these conferences during the 2004-05 academic year.

These institutions, and corresponding athletic conferences, were chosen because of the participation and financial requirements placed on them by the NCAA and the media and publicity that their athletic programs generate. The 2004-05 academic year was used because this was the first year for APR sanctions and the six year federal graduation cycle data are now available (2010-2011), allowing comparison and analyzing of the same cohort of students.

Research Design

A non-experimental quantitative secondary research analysis design was utilized to answer the proposed research questions. A secondary research analysis design aims to "address a research question distinct from that for with the data set was originally collected, and generating novel interpretations and conclusions" (Jupp, 2006). This study re-examined existing data to determine if there are relationships between chosen categorical variables, more commonly referred to as an explanatory research design.

Procedures

All of the data that was used in this study are stored and located in publically accessible locations. No survey or questionnaire was used to gather data, but a study specific database was created with the desired variables and was analyzed statistically within SPSS. Because existing data was used, an exempted status from the Human Subject Research Board was granted. All data is associated with the 2004-2005 student cohort and was collected from the already described data sources.

To answer the first research question, the NCAA Education and Research Search Engine was used. Each school's Federal Graduation Report and Academic Progress report was extracted from this search engine in order to obtain the FGR and APR from each institution and the institution's revenue sports teams. During the creation of the APR, the NCAA justified the 925 APR cut score by stating that it was equivalent to a 50 percent federal graduation rate. To ensure the same cohort of students is used in the comparison, the 2010-2011 FGR report and the 2004-2005 APR report was used. Each

institution's two scores from their revenue sports were listed along with descriptive statistics to determine the accuracy of the NCAA's claim.

The general goal of implementing the APR was to have real time data about academic progress of student athletes and to ultimately increase graduation rates. To answer the second and third research question, the FGR reports from 2008-09 were generated to compare to the 2010-11 reports. The 2008-09 report was chosen because it was the year before the APR was ever applied to the cohort. The APR was not officially reported during the 2003-04 year, however, the calculations were computed and distributed as a test case. The difference between these two graduation rates were calculated for each institution's revenue sports to determine if the implementation of the APR affected the graduation rates of revenue sport playing student athletes. T-tests were conducted between the two groups overall and an ANOVA by sport to determine statistical significance between group means.

Higher education in the United States is different than other parts of the world. It has many types of institutions to fit the needs of the variety of students that desire to earn a degree. However, regardless of the type and category of school, the NCAA expects all to achieve the set APR and FGR for their student athletes. In order to answer the final research question, the institutions chosen for the study were grouped into different categories based on academic variables. Definitions from the National Center for Educational Statistics (NCES), the NCAA website, the BCS website, the Equity in Athletics Data Analysis Cutting Tool, the USA Today's Compensation for Division I-A

College Football Coaches database, and RPI calculations were used to group the institutions.

Enrollment size of the institutions was categorized into groups based on five thousand increments. The categories were influenced by the NCES database size categories: small institutions having fewer than 4,999 full-time undergraduate students; medium having 5,000 – 19,999 full-time undergraduate students; and large having over 20,000 full-time undergraduate students; however the groups were broken down into eight specific groups (5,000 increments) for a more accurate comparison. Using descriptive statistics and an ANOVA, the means of these groups were compared to see if there is a statistically significant different in revenue sports APR scores based the different sizes of institutions. A similar calculation was performed based on the number of student athletes enrolled at each institution, based on one hundred student enrollment increments. Because student athletes are the focus of this study, this specific population was extracted from the greater population for a more accurate comparison in APR scores. Descriptive statistics and an ANOVA were performed to compare the athlete enrollment groups.

Admissions standard was categorized as inclusive, selective, more selective and most selective and was also influenced by the NCES database categories. Schools categorized as *inclusive* have entering students' ACT/SAT test scores of 20/940-970 and below (at the 25th percentile); as *selective* when entering student have scores ranging from 21-25/980-1150 (at the 25th percentile); *more selective* when entering student have scores 26-29/1160-1320 (at the 25th percentile); and *most selective* when entering

students have over 30/1330 (at the 25th percentile). The 25th percentile is defined as twenty five percent of the students scored at or below the stated score. Using descriptive statistics and an ANOVA, the groups were compared to determine if there is a statically significant difference in revenue sport APR scores based on the admissions standards of institutions.

The institutions were also be categorized into private and public schools. Again these were based on the NCES database. Using descriptive statistics and t-test, the groups were compared to determine if there is a statically significant difference in revenue sport APR scores based on the type of institutions.

Institutions that choose to participate in NCAA sports are usually members of an athletic conference in which the member institutions compete against each other athletically and typically determine a conference champion. Traditionally, these conferences have been made up of institutions with similar missions within a certain geographic region. Although this assumption does not usually apply today, institutions are still members of athletic conferences and compete for conference championships. The institutions in this study were categorized into the eleven BCS conferences, based on their 2005 affiliation. This information is located on the NCAA website. Using descriptive statistics and an ANOVA, the conferences were compared to determine if there is a statistic significant difference in APR scores between conferences.

As described earlier, the conferences that are being used in this study are institutions that utilize the BCS system to determine a national champion in football. The BCS has a prescribed process in determining what teams will play in each of their bowl

games, and one of the conditions concerns automatic and non-automatic bids for bowl games. Of the eleven conferences that are members of the BCS system, six conferences are automatic qualifiers (ACC, Big East, Big 10, Big 12, Pac 10, and SEC). This means that the conference champion of these six conferences earn an automatic berth to one of the participating bowl games. On the other hand, the remaining five conferences (Conference USA, Mid-American, Mountain West, the Sun Belt, and the WAC) are non-automatic conferences. These five conference's institutions go through the BCS at-large process to be selected to compete in a participating bowl game ("BCS selection," 2011). Using descriptive statistics and t-tests, institutions based on their automatic or non-automatic conference affiliations were compared to determine if there is a statistical significant difference between APR scores.

Athletic budgets and spending differ from institution to institutions and is dependent on a number of factors based on each institution's desire. In recent years, these budgets have exploded and have gained media attention. The NCAA concluded that athletic budgets have risen three times faster than academic budgets among their Division I institutions (Kirwan & Turner, 2010). This has cause some concern on the priority of athletics over academics, and if this spending has caused differences in the academic success of student athletes.

Two important budget items to all athletic departments are operating and recruiting cost. Operating and recruiting cost for each institution were generated through the Equity in Athletics Data Analysis Cutting Tool. The institutions were categorized as high, medium, or low in each of these categories. There is no common definition for the

high, medium, or low distention in college athletic financials, so the institutions will be place in descending order from highest to lowest and separated into thirds to get the desired categories. To strengthen the investigation, the institutions were also separated into monetary categories for a separate analysis. Both of these groups were compared separately using descriptive statistics and ANOVAs to determine if there is a statistically significant difference in APR scores based on operating and recruiting cost.

Another financial component that gets media attention is the institutions football coach's salary. Many of these salaries are higher than the institution's president and have been criticized as "the single largest contributing factor in the unsustainable growth of athletics expenditures" (Kirwan & Turner, 2010). This study evaluated if the size of the salary affects the academic success of student athletes. The USA Today's Compensation for Division I-A College Football Coaches database generated total salary for all the institution's football coaches for the 2005 season. Again, the institutions was categorized as either large, medium, or small based on this salary. Similarly, as with expenses, there is no common definition for these categories, so the institutions will be placed in descending order and separated into thirds. To strengthen the investigation, the salaries were also categorized based on 300 thousand increments, for a separate analysis. The total salary groupings were compared using descriptive statistics and ANOVAs to determine if there is a difference in APR scores based on football coaches salaries.

Budgets and salaries are important but there is another component to sports that everyone wants to know, if you win on the field or court. The final analysis was performed to see if there are differences in the APR scores based on the institution's

athletic performance. The measuring of athletic performance is complicated because of the different schedules and situations that are unique to different sports, so the Rating Percentage Index (RPI) was used for measuring individual team performances. The RPI assigns a numerical rating, between 0 and 1, to each of the competing teams with the higher numbers equaling a better performance (Wobus, 2005). Each sport's corresponding institutions' RPI was categorized based on .100 increments. These groups within each of the sports will be compared using descriptive statistics and ANOVA to determine if there is a statistically significant difference in APR scores based on athletic performance.

Data Analysis

In this study, descriptive statistics, independent t-test, and ANOVAs were utilized to determine if there are significant differences between all of the variables discussed and APR or graduation rate. The data was inputted into SPSS for this analysis.

Limitations

The major limitation to this study is that the data is all self-reported. In order to conduct a study of this size, publically available data is almost essential. However, the information that is available is only the data that is required by law and NCAA bylaw to be published. To get more in-depth information on the individual institutions, direct contact would have to be made to each of the schools in the study, and even this does not guarantee adequate response to the inquiries. The general culture of college athletics, of not sharing information about their programs, is the reason that the decision to use existing data was made. This information is also the data that is used by the NCAA to

award or punish schools and teams, so it is appropriate for this information be used when the measure itself is being analyzed.

In addition, the chosen variables are only a few of the possible contributors to institution's APR and graduation rates. A multitude of factors go into each student athlete's academic success, anything from prior academic preparations, family commitments and situations, and personal experiences. These very important factors are not recognized in the variables that are chosen for this study and need to be acknowledged.

CHAPTER FOUR: RESULTS

This chapter will discuss the results obtained from the secondary data analysis of a unique database created from a number of different data sources. This database was created to address the following research questions, and will be discussed individually in this chapter:

1. Does the APR 925 cut score accurately translate into a 50 percent federal graduation rate in the revenue sports?
2. To what extent did the APR affect graduation rates on revenue sports?
3. Which revenue sport did the APR 925 cut score have the most effect on in terms of graduation rates?
4. Do different categorical grouping of institution based on (1) enrollment size, (2) admissions standards, (3) public or private affiliation, (4) sport conference affiliation, (5) athletic operating cost, (6) athletic recruiting cost, (7) football coaches' salary, (8) and athletic performance based on the RPI differ on the APR score of revenue sports?

Research Question One

As discussed extensively in Chapter 2 of this study, the Academic Progress Rate is the NCAA's newest measure and is it meant to be a "real time" measure of the academic progress of athletic teams that takes eligibility, graduation rate, retention, and

progress towards degree into its calculation (Denhart, et al., 2009). This equation was justified by the NCAA by stating that the chosen cut score of 925 equaled a federal graduation rate of 50 percent. When analyzing the sample, 114 institutions had data for both the 2004-05 APR scores and 2010-11 FGR. Three institutions (Army, Air Force, and Navy) do not offer athletically related aid; excluding them for the government requirement of reporting graduation rates of student athletes. These three institutions were eliminated from the analysis for question one.

The 114 institutions that were used for analysis were listed with each sports APR and FGR to compare the 925 cut score and the 50 percent FGR. When the scores were compared 36 institutions in men's basketball, 28 institutions in women's basketball, and 46 institutions in football did not compute to the required outcome. Two different types of errors were recorded, institutions that scored the 925 APR score but did not have the 50 percent FGR and institutions that received 50 percent FGR but did not get the 925 APR score. In total, 110 (32.16%) institutions in all three sports recorded an error in the Academic Progress Rate equation. Table 3 shows each sports error and percentages.

Table *3*

Error in APR Equation

	n	925 APR not 50% FGR	50% FGR not 925 APR	Total Error
MBB	114	16 (14.04%)	20 (17.54%)	36 (31.54%)
WBB	114	17 (14.91%)	11 (9.65%)	28 (24.56%)
FB	114	14 (12.28%)	32 (28.07%)	46 (40.35%)

Total	342	47 (13.74%)	63 (18.42%)	**110(32.16%)**

Although 232 institutions in the analysis satisfied the equation in the eyes of the NCAA, almost a third of the institutions did not. In addition, 63 institutions did not met the APR cut score, but did receive the FGR score, allowing 18.42% of this institutions to be eligible for penalties under the NCAA regulation when it was not appropriate.

Research Question Two and Three

The general goal of any higher education institutions is to graduate the students that are enrolled. The NCAA is specifically interested in the graduation rates of the student athletes, and the academic reform packages being analyzed was developed to assist in increasing the graduation rates of this population. To test if the Academic Progress Program did promote an increased graduation rate in revenue sports, the FGR from two years prior to the implementation of the APR and the FGR from the first year of implementation were compared. Therefore the FGR from the 2002-03 and the 2004-05 student cohorts will be compared. Descriptive statistics from these cohorts can be seen in Table 4.

Table 4

Descriptive Statistics of FGR, 2002-03 and 2004-05

		MBB	WBB	FB
	n	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
2002-03 FGR	114	.4341 (.339)	.7068 (.301)	.5489 (.169)

2004-05 FGR	114	.4418 (.348)	.6417 (.282)	.5744 (.156)
Mean Difference		.0077	-.0651	.0255

Note: Navy, Air Force, and Army were not included.

T-tests were performed and showed that there are no statistically significant differences between the student cohorts in any of the three revenue sports (MBB – $t(113) = .178$, $p = .859$; WBB – $t(113) = -1.84$, $p = .069$; FB – $t(113) = 1.44$, $p = .153$).

Without a significant difference in any of the revenue sports FGR, the mean difference is used to answer research question three and determine which revenue sport benefited the most from the implementation of the APR. Men's basketball and football both had an average increase in graduation rate by 0.7% and 2.5% respectively, and women's basketball average graduation rate decreased by 6.5%. These numbers have not statistically been evaluated to determine significant difference between the revenue sports. However, as raw number it can be stipulated that football benefited the most from implementation of APR in terms of FGR.

Research Question Four

As it has been discussed in Chapter 2 and other areas of this study, the American higher education system is unique. There are many different types of institutions that have distinctive goals, missions, and objectives in order to serve the diverse populations of students within the country. Because of the different missions and goals, each institution has the ability to make their own decisions on whom and why to accept students; however, the NCAA does not take these institutional differences into consideration when their academic policies are applied to student athletes. The only thing

that NCAA takes into account is the level of athletic competition the institution decides to compete, i.e. Division I-A, I-AA, I-AA, II, or III. For this study, institutions that compete at the highest level of competition, Division I-A, were analyzed to determining if there were difference in APR scores in revenue sports when the institutions are categorized into groups based on their individual profile. There are 117 institutions that competed in the NCAA Division I-A and were included in this analysis. The demographic characteristics of institutional differences analyzed in this study are displayed in Table *5*.

Table 5

Demographic Characteristics of Studied Institutions

Variable	**Category**	**n**	**%**
Enrollment	Under 4,999	6	5.1%
	5,000-9,999	12	10.3%
	10,000-14,999	14	12.0%
	15,000-19,999	25	21.4%
	20,000-24,999	27	23.1%
	25,000-29,999	16	13.6%
	30,000-34,999	10	8.5%
	Over 35,000	7	6.0%
Athlete Enrollment	Under 299	3	2.6%
	300-399	28	24.6%
	400-499	43	37.7%
	500-599	16	14.0%
	600-699	15	13.2%
	700-799	5	4.4%
	Over 800	4	3.5%
Admissions	Inclusive	35	30.2%

	(under 20/940-970)		
	Selective (21-25/980-1150)	58	50.0%
	More Selective (26-29/1160-1320)	17	14.6%
	Most Selective (over 30/1330)	6	5.2%
Institution Designation	Public	100	85.5%
	Private	17	14.5%
Conference	ACC	11	9.4%
	Big East	7	6.0%
	Big Ten	11	9.4%
	Big 12	12	10.3%
	Conference USA	11	9.4%
	Mid-American	14	11.9%
	Mountain West	8	6.8%
	Pac-10	10	8.5%
	SEC	12	10.3%
	Sun Belt	9	7.8%
	WAC	10	8.5%
	Independent	2	1.7%
BCS Qualification	Automatic	64	54.7%
	Non-automatic	53	45.3%

Enrollment size. The institutions that were part of this study was separated into groups based on the number of full-time student enrolled based on the NCES website. APR statistics based on enrollment size can be seen in Table *6*.

Table 6

APR Statistics Based on Total Enrollment

	Under 4,999 *n*=6		5,000-9,999 *n*=12		10,000-14,999 *n*=14		15,000-19,999 *n*=25		20,000-24,999 *n*=27	
	M	SD	M	SD	M	SD	M	SD	S	SD
Men's Basketball	961	40.40	933	59.66	908	60.40	916	60.51	902	38.56
Women's Basketball	988	19.50	959	30.16	953	37.69	953	30.22	949	35.66
Football	964	20.49	951	25.04	934	26.42	927	27.49	920	27.29

	25,000-29,999 *n*=16		30,000-34,999 *n*=10		Over 35,000 *n*=7	
	M	SD	M	SD	M	SD
Men's Basketball	921	26.72	931	35.52	909	31.52
Women's Basketball	957	30.05	958	22.25	967	23.82
Football	924	29.06	929	26.40	925	16.92

ANOVAs were performed for each sport to determine if there were differences in APR scores between groups based on the enrollment size groups. Men and women basketball

showed no statistically significant differences between groups (MBB – $F(7,109) = 1.506$, $p = .173$; WBB – $F(7,109) = 1.296$, $p = .259$). However there were statistically significant differences among enrollment groups in football APR scores at the .05 significant level ($F(7,109) = 3.289$, $p = .003$).

Tukey post hoc test were performed to determine which groups had significant differences at the .05 level of significance. Institution enrollment groups with fewer than 4,999 students and 20,000-24,999 students, fewer than 4,999 students and 25,000-29,999 students, and 5,000 students and 20,000-24,999 student have statistically significant differences based on football APR scores. The statistics from these groups are displayed in Table 7.

Table 7

Significant Tukey HSD Comparisons Between Football and Enrollment Groups

Comparisons	Mean Difference	Standard Error	95% CI
Under 4,999 vs. 20,000-24,999	43.89*	11.936	[7.00, 80.78]
Under 4,999 vs. 25,000-29,999	39.67*	12.660	[0.54, 78.80]
5,000-9,999 vs. 20,000-24,999	31.39*	6.179	[3.03, 59.75]

** $p < .05$*

Another important enrollment statistics is the number of student athletes enrolled in each of the institutions. Student athletes are the focus of the NCAA, so each institution was divided into groups based on information gathered from the Equity in Athletics Data Analysis Cutting Tool, which list the number of student-athletes recorded on the roster

during the first day of practice. APR statistics of each of the student athlete enrollment groups are displayed in Table 8.

Table 8

APR Statistics Based on Number of Athletes Enrolled

	Under 299 *n*=3		300-399 *n*=28		400-499 *n*=43		500-599 *n*=16	
	M	SD	M	SD	M	SD	M	SD
Men's Basketball	930	49.57	910	49.41	910	55.21	923	37.78
Women's Basketball	960	33.55	949	41.52	952	29.49	962	27.67
Football	935	9.54	926	29.61	924	26.42	928	29.59

	600-699 *n*=15		700-799 *n*=5		Over 800 *n*=4	
	M	SD	M	SD	M	SD
Men's Basketball	917	42.55	950	25.99	919	28.83
Women's Basketball	963	17.04	948	32.20	975	17.75
Football	939	26.18	953	6.88	938	38.27

Note: Navy, Air Force, and Army were not included

ANOVAs were performed in each sport to determine if there were differences in APR scores between groups based on the number of student athletes enrolled. There was found to be no statistically significant differences among any of the revenue sports (MBB – $F(6,107) = .669$, p = .675; WBB – $F(6,107) = .829$, p = .550; FB – $F(6,107) = 1.373$, p = .232).

Admissions standards. The institutions within the study population have varying degree of standardized test score (ACT or SAT) requirement for admissions. Based on the 25th percentile of test scores, each institution were categorized into four different groups – inclusive (under 20/940-970), selective (21-25/980-1150), more selective (26-29/1160-1320), or most selective (over 30/1330). APR statistics for each admissions standard group are displayed in Table *9*.

Table 9

APR Statistics Based on Admissions Standards

	Inclusive *n*=35		Selective *n*=58		More Selective *n*=17		Most Selective *n*=6	
	M	SD	M	SD	M	SD	M	SD
Men's Basketball	891	56.52	920	38.46	942	42.09	964	17.94
Women's Basketball	948	33.57	956	32.33	965	21.72	977	18.56
Football	916	27.55	930	26.41	944	17.82	968	16.97

Note: Wake Forest did not publish their standards

ANOVAs were performed on each sport to determine statistically significant differences between each sports APR groups based on admissions standards. There was no difference among these groups in women's basketball at the .05 level of significance (WBB – $F(3,112) = 2.277$, $p = .084$), however there are statistically significant differences in men's basketball and football (MBB – $F(3,112) = 7.994$, $p < .001$); FB – $F(3,112) = 9.662$, $p < .001$).

Tukey post hoc analysis were performed on men's basketball and football to determine which specific admission standards groups tested significantly at the .05 level of significance. In both sports, the inclusive institutions were significantly different from the three other groupings. In addition to these differences, football was also significantly different between the selective and most selective groups. The statistics from the Tukey analysis can be seen in Table *10* and Table *11*.

Table 10

Significant Tukey HSD Comparisons Between Men's Basketball and Admission Standards Groups

Comparisons	Mean Difference	Standard Error	95% CI
Inclusive vs. Selective	-28.62*	9.532	[-53.48, -3.76]
Inclusive vs. More Selective	-51.07*	13.165	[-85.40, -16.73]
Inclusive vs. Most Selective	-72.27*	19.677	[-123.59, -20.95]

** $p < .05$*

Table 11

Significant Tukey HSD Comparisons Between Football and Admission Standards Groups

Comparisons	Mean Difference	Standard Error	95% CI
Inclusive vs. Selective	-14.20*	5.430	[-28.36, -0.14]
Inclusive vs. More Selective	-28.03*	7.500	[-47.59, -8.47]
Inclusive vs. Most Selective	-51.53*	11.210	[-80.76, -22.29]
Selective vs. Most Selective	-37.33*	10.880	[-65.70, -8.95]

** $p < .05$*

Public verses private affiliation. There are primarily two different types of institutions of higher education in the United States, public and private. Private institutions are supported by a private organization or individuals rather than the government. The institutions in this study were divided into public or private affiliation based on information obtained from the National Center for Educational Statistics. APR statistics based on these two groups are displayed in Table *12*.

Table 12

APR Statistics Based on Institution Classification

	Private *n*=17		Public *n*=100	
	M	SD	M	SD
Men's Basketball	942	50.61	913	47.23
Women's Basketball	969	17.22	954	32.96
Football	955	19.72	926	27.33

A t-test was performed between the private and public institutions and statistically significant differences at the .05 level of significance were found in all three sports (MBB – $t(40) = 2.862$, $p = .007$; WBB – $t(115) = 4.181$, $p < .001$; FB – $t(115) = 2.255$, $p = .026$). Private institutions had a significantly higher APR score in all three sports. Men's basketball private institutions are 3.44 to 53.03 APR points higher; women's basketball private institutions are 4.47 to 25.98 APR points higher; and football private institutions are 15.24 to 42.68 APR points higher than their public school counterparts.

Sport conference affiliation. The institutions in this study are separated into athletic conferences, which assist in regular season competition and usually compete to determine a conference champion. There are eleven conferences used, as well as two institutions that are independent of any conference but compete in the BCS championship. The APR statistics of the conferences are displayed in Table *13*.

Table 13

APR Statistics Based on Sport Conference Affiliation

	ACC *n*=11		Big East *n*=7		Big Ten *n*=11		Big 12 *n*=12		Conference USA *n*=11	
	M	SD	M	SD	M	SD	M	SD	M	SD
Men's Basketball	946	31.47	916	26.73	933	28.01	910	49.99	917	40.79
Women's Basketball	974	18.36	949	24.03	958	25.12	958	24.08	946	46.42
Football	951	13.57	941	49.35	931	20.14	930	8.58	937	22.90
	Mid-American *n*=14		Mountain West *n*=8		Pac-10 *n*=10		SEC *n*=12		Sun Belt *n*=9	
	M	SD	M	SD	M	SD	M	SD	M	SD
Men's Basketball	934	41.99	914	51.84	912	42.43	921	38.79	868	61.97
Women's Basketball	964	25.22	965	21.84	970	18.86	946	34.59	938	41.23
Football	911	28.82	929	26.15	927	30.14	942	21.48	906	26.59
	WAC		Independent							

	n=10		*n*=2	
	M	SD	M	SD
Men's Basketball	891	72.16	985	11.31
Women's Basketball	941	42.99	981	5.66
Football	924	32.06	966	28.28

ANOVAs were performed to determine if there are statistically significant differences among conference affiliation in APR scores at the .05 level of significance. There was no differences in women basketball scores (WBB – $F(11,105) = 1.568$, $p = .119$). However there are statistically significant differences among men's basketball and football APR scores (MBB – $F(11,105) = 2.406$, $p = .010$; FB – $F(11,105) = 2.851$, $p = .003$).

Tukey post hoc test were performed on men's basketball and football groups to determine which specific conferences had statistical differences based on APR scores at the .05 level of significance. In men's basketball, the APR scores of the ACC and the Sun Belt conferences, and the Mid-American and the Sun Belt conferences were statistically different. In football, the APR scores of the ACC and the Mid-American conferences, and the ACC and the Sun Belt conferences were statistically different. The results from the Tukey post hoc test are displayed in Table *14* and Table *15*.

Table 14

Significant Tukey HSD Comparisons Between Men's Basketball and Conferences

Comparisons	Mean Difference	Standard Error	95% CI
ACC vs. Sun Belt	77.95*	20.50	[9.43, 146.47]
Mid-American vs. Sun Belt	66.29*	19.48	[1.16, 131.43]

** $p < .05$*

Table 15

Significant Tukey HSD Comparisons Between Football and Conferences

Comparisons	Mean Difference	Standard Error	95% CI
ACC vs. Mid-American	39.95*	10.49	[4.90, 75.00]
ACC vs. Sun Belt	45.54*	11.70	[6.43, 84.64]

** $p < .05$*

Another distinction between conferences are ones that receive an automatic bid to BCS championship bowl games and those that do not receive automatic bids and must go through the at-large process to be invited to participate in a BCS bowl game. Six of the conferences in this study are automatic qualifiers (ACC, Big East, Big 10, Big 12, Pac 12, and SEC), while the remaining five conferences (Conference USA, Mid-American, Mountain West, the Sun Belt, and the WAC) are non-automatic conferences. APR statistics of these two groups are displayed in Table *16*.

Table 16

APR Statistics Based on BCS Conference Affiliation

	Automatic *n*=64		Non-Automatic *n*=53	
	M	SD	M	SD
Men's Basketball	924	38.94	909	57.41
Women's Basketball	960	26.07	952	37.01
Football	937	24.93	922	29.99

T-tests were performed on each sport group to determine if there were statistically significant differences among BCS conference affiliation in APR scores. There were no differences between conferences in men and women basketball (MBB – $t(115) = 1.66$, $p = .099$; WBB – $t(91) = 2.88$, $p = .225$), however football did have a significant difference in APR scores between the conferences categories (FB – $t(101) = 2.88$, $p = .005$). The automatic conferences had a higher APR scores by 4.62 to 25.11 points in the sport of football.

It is well documented that having an athletic program cost the institutions financially; however there are significant differences in the amount that each institution is willing and able to spend on the programs. Financial information for each institution was gathered from the Equity in Athletics Data Analysis Cutting Tool and the USA Today Coaches Salary Database. Information obtained was total expenses, men's expenses, women's expenses, total recruiting, men's recruiting, women's recruiting, and the head

football coach's salary. Descriptive statistics of the analyzed financials are displayed in Table *17*.

Table 17

Financial Descriptive Characteristic of Institutions

Variable	**Category**	**n**	**%**
Total Expenses	Under 10,999,999	6	5.3%
	11,000,000-19,999,999	24	21.1%
	20,000,000-29,999,999	19	16.7%
	30,000,000-39,999,999	16	14.0%
	40,000,000-49,999,999	20	17.5%
	50,000,000-59,999,999	12	10.5%
	60,000,000-69,999,999	12	10.5%
	Over 70,000,000	5	4.4%
Men's Expenses	Under 5,999,999	7	6.1%
	6,000,000-9,999,999	27	23.7%
	10,000,000-15,999,999	26	22.8%
	16,000,000-19,999,999	13	11.4%
	20,000,000-25,999,999	30	26.3%
	Over 26,000,000	11	9.7%
Women's Expenses	Under 3,999,999	21	18.5%
	4,000,000-5,999,999	34	29.8%
	6,000,000-7,999,999	17	14.9%
	8,000,000-9,999,999	25	21.9%
	Over 10,000,000	17	14.9%
Total Recruiting	Under 199,999	6	5.3%
	200,000-399,999	24	21.1%
	400,000-599,999	22	19.2%
	600,000-799,999	23	20.2%
	800,000-999,999	23	20.2%

	Over 1,000,000	16	14.0%
Men's Recruiting	Under 199,999	15	13.2%
	200,000-399,999	36	31.6%
	400,000-599,999	33	28.9%
	600,000-799,999	17	14.9%
	800,000-999,999	9	7.9%
	Over 1,000,000	4	3.5%
Women's Recruiting	Under 99,999	18	15.8%
	100,000-149,999	25	21.9%
	150,000-199,999	11	9.7%
	200,000-249,999	25	21.9%
	250,000-299,999	19	16.7%
	Over 300,000	16	14.0%
Football Coach's Salary	Under 299,999	21	19.8%
	300,000-599,999	20	18.9%
	600,000-899,999	15	14.2%
	900,000-1,199,999	19	17.9%
	1,200,000-1,499,999	9	8.5%
	1,500,000-1,799,999	12	11.3%
	Over 1,800,000	10	9.4%

Athletic total expenses. Total athletic expenses include all operating cost for each sport offered by the institution, as well as all cost that are not allocated to a specific sport or team. The institutions were listed in descending order (lowest to highest), based on their total expenses and separated into thirds. APR statistics of each third is displayed in Table *18*.

Table 18

APR Statistics Based on Total Expenses (thirds)

	Small *n*=38		Medium *n*=38		Large *n*=38	
	M	SD	M	SD	M	SD
Men's Basketball	899	59.76	928	39.79	920	37.70
Women's Basketball	946	38.81	962	22.70	958	28.74
Football	915	27.80	933	27.18	940	21.94

Note: Army, Air Force, and Navy were not included

ANOVAs were performed to determine if there were statistically significant differences among total expenses groups in APR scores at the .05 level of significant. Women basketball was found to have no statistically significant differences (WBB – $F(2,111) = 2.898$, $p = .056$); however there are statistically significant differences in men's basketball and football based on total expenses (MBB – $F(2,111) = 3.857$, $p = .024$; FB – $F(2,111) = 9.721$, $p < .001$).

Tukey post hoc test were performed on to determine which groups were significantly significant among total expenses (thirds) in men's basketball and football at the .05 level of significant. In men's basketball, there was a significant difference in APR scores in institutions that were categorized small and medium expenses. Institutions with a medium expenses level had APR score 3.43 to 54.46 points higher than their small expense counterparts. In football, there were significant differences in APR scores in institutions that were categorized small and medium, and small and large expenses. Significant results from the football Tukey post hoc test are displayed in Table *19*.

Table 19

Significant Tukey HSD Comparisons Between Football and Total Expenses (Thirds)

Comparisons	Mean Difference	Standard Error	95% CI
Small vs. Medium	-18.29*	5.913	[-32.34, -4.24]
Small vs. Large	-25.24*	5.913	[-39.28, -11.19]

*$p < .05$

Separating the institutions into thirds is a solid way of categorizing based on total expenses, because there is no common definition of high or low spending; however it not as specific and accurate as it can be. To increase the accuracy in comparing groups, the institutions were also grouped into total expense categorizes based on 10 million increments. APR statistics of the 10 million categorize are displayed in Table *20*.

Table 20

Descriptive Statistics Based on Total Expenses (10 millions)

	Under $10,999,999 *n*=6		$11,000,000-19,999,999 *n*=24		$20,000,000-29,999,999 *n*=19		$30,000,000-39,999,999 *n*=16		$40,000,000-49,999,999 *n*=20	
	M	SD	M	SD	M	SD	M	SD	S	SD
Men's Basketball	961	40.40	933	59.66	908	60.40	916	60.51	902	38.56
Women's Basketball	988	19.50	959	30.16	953	37.69	953	30.22	949	35.66
Football	964	20.49	951	25.04	934	26.42	927	27.49	920	27.29

	$50,000,000-59,999,999 *n*=12		$60,000,000-69,999,999 *n*=12		Over $70,000,000 *n*=5	
	M	SD	M	SD	M	SD
Men's Basketball	921	26.72	931	35.52	909	31.52
Women's Basketball	957	30.05	958	22.25	967	23.82
Football	924	29.06	929	26.40	925	16.92

Note: Army, Air Force, and Navy were not included

ANOVAs were performed to determine if there were statistically significant differences among total expense groups in 10 million increments in APR scores based on the .05 level of significance. Women basketball, again, did not have any significant differences in APR scores among groups (WBB – $F(7,106) = 1.849$, $p = .085$). But men's basketball and football did have significant differences among the 10 million groups (MBB – $F(7,106) = 3.113$, $p = .005$; FB – $F(7,106) = 3.624$, $p = .002$).

Tukey post hoc test were performed on the significant sports to determine which specific groups had statistically significant differences. In men's basketball, institutions that spent under $10,999,999 and $40,000,000-49,999,999, and $20,000,000-29,999,999 and $40,000,000-49,999,999 had statistical differences in APR scores. In football, there were also two spending pairs that were statistically different, $11,000,000-19,999,999 and $40,000,000-49,999,999, and $40,000,000-49,999,999 and over $70,000,000. The statically significant results from the Tukey post hoc test are displayed in Table *21* and Table *22*.

Table 21

Significant Tukey HSD Comparisons Between Men's Basketball and Total Expenses (10 Millions)

Comparisons	Mean Difference	Standard Error	95% CI
Under $10,000,000-19,999,999 vs. 40,000,000-49,999,999	-79.62*	21.00	[-144.57, -14.66]
$20,000,000-29,999,999 vs. $40,000,000-49,999,999	-47.73*	14.46	[-92.50, -3.09]

** $p < .05$*

Table 22

Significant Tukey HSD Comparisons Between Football and Total Expenses (10 millions)

Comparisons	Mean Difference	Standard Error	95% CI
$11,000,000-19,999,999 vs. $40,000,000-49,999,999	-31.76*	7.78	[-55.80, -7.71]
$11,000,000-19,999,999 vs. Over $70,000,000	-40.91*	12.63	[-79.95, -1.86]

** $p < .05$*

Men and women athletic expenses. Expenses in athletic departments can be split into the specific gender of athlete that the expenses are allocated. These expenses are obviously part of the whole, but it does approximate the cost associated with different sports that are offered for specific genders. The institutions were listed in descending order (lowest to highest), based on each gender's expenses and separated into thirds.

APR statistics for men and women expenses in thirds are displayed in Table *23* and Table *24*.

Table 23

APR Statistics Based on Men's Expenses (thirds)

	Small *n*=38		Medium *n*=38		Large *n*=38	
	M	SD	M	SD	M	SD
Men's Basketball	906	51.43	918	53.66	922	36.80
Women's Basketball	949	39.56	963	21.85	957	28.29
Football	913	27.15	932	26.81	942	21.03

Note: Army, Air Force, and Navy are not included

Table 24

APR Statistics Based on Women's Expenses (thirds)

	Small *n*=38		Medium *n*=38		Large *n*=38	
	M	SD	M	SD	M	SD
Men's Basketball	905	51.66	921	49.54	922	41.46
Women's Basketball	945	38.85	962	23.74	959	27.49
Football	914	26.43	930	27.36	944	21.16

Note: Army, Air Force, and Navy are not included

ANOVAs were performed to determine if there were statistically significant differences among expenses by gender in APR scores of revenue sports based on the .05 level of significance. Among men's expenses, there were no statistically significant

differences in men's and women's basketball groups in APR scores (MBB – $F(2,111) = 1.239$, $p = .294$; WBB – $F(2,111) = 3.013$, $p = .053$), but there was significant differences in football APR scores (FB – $F(2,111) = 12.976$, $p < .001$). Among women's expenses, there was also no statistically significant differences in men's and women's basketball expenses groups in APR scores (MBB – $F(2,111) = 1.522$, $p = .223$; WBB – $F(2,111) = 3.299$, $p = .051$), but again there was significant differences in football APR scores (FB – $F(2,111) = 13.108$, $p < .001$).

Tukey post hoc test were performed on both of the significant football groups to determine which specific groups were significantly different. Among men's expenses, there were significant differences in the small and medium categories, as well as the small and large categories. Among women's expenses, there were significant differences in the small and medium categories, the small and large categories, and the medium and large categories. The statically significant results from the Tukey post hoc test based on men and women expenses are displayed in Table *25* and Table *26*.

Table 25

Significant Tukey HSD Comparisons Between Football and Men's Expenses (thirds)

Comparisons	Mean Difference	Standard Error	95% CI
Small vs. Medium	-18.42*	5.77	[-32.13, -4.71]
Small vs. Large	-29.05*	5.77	[-42.76, -15.34]

** $p < .05$*

Table 26

Significant Tukey HSD Comparisons Between Football and Women's Expenses (thirds)

Comparisons	Mean Difference	Standard Error	95% CI
Small vs. Medium	-15.68*	5.77	[-29.38, -1.99]
Small vs. Large	-29.50*	5.77	[-43.20, -15.80]
Medium vs. Large	-13.82*	5.77	[-27.51, -0.12]

*$p < .05$

To increase the accuracy in comparing men's and women's expense groups, the institutions were also grouped into expense categorizes based on million categories. The APR statistics for men's and women's expenses based on million categories are displayed in Table *27* and Table *28*.

Table 27

APR Statistics Based on Men's Expenses (millions)

	Under $5,999,999 *n*=7		$6,000,000-9,999,999 *n*=27		$10,000,000-15,999,999 *n*=26		$16,000,000-19,999,999 *n*=13		$20,000,000-25,999,999 *n*=30		Over $26,000,000 *n*=12	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Men's Basketball	874	51.6	914	52.2	906	54.4	939	44.3	924	32.6	916	45.0
Women's Basketball	938	43.9	949	40.5	960	23.4	962	25.6	955	22.7	962	38.2
Football	915	16.8	913	31.1	927	29.7	930	17.6	943	21.0	944	21.6

Note: Army, Air Force, and Navy are not included

Table 28

APR Statistics Based on Women's Expenses (millions)

	Under $3,999,999 *n*=21		$4,000,000-5,999,999 *n*=34		$6,000,000-7,999,999 *n*=17		$8,000,000-9,999,999 *n*=25		Over $10,000,000 *n*=23	
	M	SD	M	SD	M	SD	M	SD	M	SD
Men's Basketball	891	54.06	912	53.26	932	34.93	920	46.86	928	30.85
Women's Basketball	936	45.05	959	25.24	961	25.02	959	28.68	961	24.34
Football	914	27.94	925	25.17	923	33.67	942	19.47	944	23.12

Note: Army, Air Force, and Navy are not included

ANOVAs were performed on both men's and women's categories to determine if there are any statistically significant differences among expenses in APR scores at the .05 level of significance. Among men's expenses, there are no significant differences in men's and women's basketball (MBB – $F(5,108) = 2.228$, $p = .057$; WBB – $F(5,108) = 1.075$, $p = .378$), but there was significant differences in football APR scores (FB – $F(5,108) = 5.035$, $p < .001$). Similarly, among women's expenses, there are no significant differences in men's and women's basketball (MBB – $F(4,109) = 2.355$, $p = .058$; WBB – $F(4,109) = 2.706$, $p = .052$), but there was significant differences in football APR scores (FB – $F(4,109) = 5.412$, $p = .001$).

Tukey post hoc test were performed on both of the significant football groups to determine which specific groups were significantly different. Among men's expenses, there were two pairs that were significantly different: $6,000,000-9,999,999 and $20,000,000-25,999,999, and $6,000,000-9,999,999 and over $26,000,000. Among

women's expenses, there were also two pairs that were significantly different: under $3,999,999 and $8,000,000-9,999,999, and under $3,999,999 and over $10,000,000. The Tukey post hoc significant results are displayed in Table *29* and Table *30*.

Table 29

Significant Tukey HSD Comparisons Between Football and Men's Expense (millions)

Comparisons	Mean Difference	Standard Error	95% CI
$6,000,000-9,999,999 vs. $20,000,000-25,999,999	-29.61*	6.77	[-49.24, -9.97]
$6,000,000-9,999,999 vs. Over $26,000,000	-30.38*	9.12	[-56.85, -3.90]

** $p < .05$*

Table 30

Significant Tukey HSD Comparisons Between Football and Women's Expense (millions)

Comparisons	Mean Difference	Standard Error	95% CI
Under $399,999 vs. $800,000-999,999	-28.17*	7.62	[-49.32, -7.03]
Under $399,999 vs. Over $10,000,000	-30.75*	8.40	[-54.05, -7.44]

** $p < .05$*

Total athletic recruiting cost. Recruiting the top athletes to compete for your institution is a major activity for college coaches, and also a major expense for the athletic departments. Coaches are able to call, visit, and bring recruits to campus to show and convince student athletes that their institution is the best place to continue their

education and athletic careers. Just as with total expenses, each institution has different amounts that they are able and willing to spend on recruiting athletes. Men, women, and total recruiting cost were gathered from the Equity in Athletics Data Analysis Cutting Tool. The institutions were listed in descending order (lowest to highest), based on their total, men, and women recruiting cost and separated into thirds. APR statistics for total recruiting cost in thirds are displayed in Table *31*.

Table 31

APR Statistics Based on Total Recruiting Cost (thirds)

	Small *n*=38		Medium *n*=38		Large *n*=38	
	M	SD	M	SD	M	SD
Men's Basketball	900	58.95	920	38.71	927	40.50
Women's Basketball	943	38.44	962	21.55	939	23.11
Football	912	29.60	939	23.11	937	21.28

Note: Army, Air Force, and Navy are not included

ANOVAs were performed to determine if there were statistically significant differences among total recruiting cost in APR scores. All three sports were found to have significant differences among groups (MBB – $F(2,111) = 3.503$, $p = .033$; WBB – $F(2,111) = 4.663$, $p = .011$; FB – $F(2,111) = 14.256$, $p < .001$).

Tukey post hoc test were performed on each sport to determine which specific groups had statistically significant differences. In men's basketball, there was a significant difference between small and large categories. Institutions that were

categorized as large recruiting spending had a larger APR score from 1.96 to 53.14 points. In women's basketball, there was a significant difference between small and medium, and small and large categories. In football, there was also a significant difference between small and medium, and small and large categories. Statically significant results from women's basketball and football Tukey post hoc test are displayed in Table *32* and Table *33*.

Table 32

Significant Tukey HSD Comparisons Between Women's Basketball and Total Recruiting (thirds)

Comparisons	Mean Difference	Standard Error	95% CI
Small vs. Medium	-18.92*	6.96	[-35.46, -2.38]
Small vs. Large	-17.87*	6.96	[-34.41, -1.33]

** $p < .05$*

Table 33

Significant Tukey HSD Comparisons Between Football and Total Recruiting (thirds)

Comparisons	Mean Difference	Standard Error	95% CI
Small vs. Medium	-27.66*	5.72	[-41.24, -14.08]
Small vs. Large	-25.03*	5.72	[-38.61, -11.44]

** $p < .05$*

Just as with total expenses, separating the institutions into thirds is a solid way of categorizing based on total recruiting, because there is no common definition of high or

low spending. To increase the accuracy in comparing groups, the institutions were also grouped into total recruiting categorizes based on hundred thousand increments. APR statistics of total recruiting cost based on hundred thousands are displayed in Table *34*.

Table 34

APR Statistics Based on Total Recruiting Cost (100 thousands)

	Under $199,999 *n*=6		$200,00-399,999 *n*=24		$400,000-599,999 *n*=22		$600,000-799,999 *n*=23		$800,000-999,999 *n*=23		Over $1,000,000 *n*=16	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Men's Basketball	876	60.75	905	63.54	914	40.76	920	39.41	921	42.99	933	37.39
Women's Basketball	899	54.66	953	31.09	962	23.38	956	21.65	965	21.70	956	35.32
Football	898	22.42	919	27.60	922	32.65	941	23.78	932	20.79	943	20.04

Note: Army, Air Force, and Navy are not included

ANOVAs were performed to determine if there were statistically significant differences among recruiting cost in each of the revenues sports. There is no significant difference among men's basketball (MBB – $F(5,108) = 1.624$, $p = .160$) at the .05 level of significance. However, there was significant differences among total recruiting cost in women's basketball and football (WBB – $F(5,108) = 5.385$, $p < .001$; FB – $F(5,108) = 4.993$, $p < .001$).

Tukey post hoc test were performed on each sport to determine which specific groups had statistically significant differences. In women's basketball, each hundred thousand group was significantly difference to the lowest spending level, under $199,999.

In football, there are multiple groups that were statistically significant including: under $199,999 and $600,000-799,999; under $199,999 and $800,000-999,999; under $199,999 and over $1,000,000; $200,000-399,999 and $600,000-799,999; and finally $200,000-399,999 and over $1,000,000. Statically significant results from women's basketball and football Tukey post hoc test are displayed in Table *35* and Table *36*.

Table 35

Significant Tukey HSD Comparisons Between Women's Basketball and Total Recruiting (100 thousands)

Comparisons	Mean Difference	Standard Error	95% CI
Under $199,999 vs. $200,000-399,999	-53.29*	13.08	[-91.26, -15.33]
Under $199,999 vs. $400,000-599,999	-62.48*	13.20	[-100.79, -24.18]
Under $199,999 vs. $600,000-799,999	-56.88*	13.14	[-95.01, -18.76]
Under $199,999 vs. $800,000-999,999	-65.75*	13.14	[-103.88, -27.63]
Under $199,999 vs. Over $1,000,000	-56.35*	13.72	[-96.17, -16.54]

** $p < .05$*

Table 36

Significant Tukey HSD Comparisons Between Football and Total Recruiting (100 thousands)

Comparisons	Mean Difference	Standard Error	95% CI
Under $199,999 vs. $600,000-799,999	-43.72*	11.70	[-77.68, -9.77]

Under $199,999 vs. $800,000-999,999	-34.29*	11.70	[-68.25, -0.33]
Under $199,999 vs. Over $1,000,000	-45.71*	12.22	[-81.17, -10.25]
$200,000-399,999 vs. $600,000-799,999	-22.31*	7.45	[-43.92, -0.69]
$200,000-399,999 vs. Over $1,000,000	-24.29*	8.24	[-48.20, -0.38]

** $p < .05$*

Men and women recruiting cost. Total recruiting cost shows how much an institution is willing and able to financially pursue top athletes for their athletic teams. Yet, this number can also be broken down by the gender of the athlete being pursued, implying which sports are more important to the institution. Men and women recruiting cost were gathered from the Equity in Athletics Data Analysis Cutting Tool. The institutions were listed in descending order (lowest to highest), based on their men and women recruiting cost and separated into thirds. APR statistics for men's and women's recruiting costs are displayed in Table *37* and Table *38*.

Table 37

APR Statistics Based on Men's Recruiting Cost (thirds)

	Small *n*=38		Medium *n*=38		Large *n*=38	
	M	SD	M	SD	M	SD
Men's Basketball	900	59.17	920	37.51	927	41.83
Women's Basketball	944	38.62	962	22.34	960	28.65

Football	914	27.02	937	28.48	937	21.21

Note: Army, Air Force, and Navy are not included

Table 38

APR Statistics Based on Women's Recruiting Cost (thirds)

	Small *n*=38		Medium *n*=38		Large *n*=38	
	M	SD	M	SD	M	SD
Men's Basketball	900	60.10	924	35.81	922	42.10
Women's Basketball	943	38.82	964	20.83	958	28.63
Football	914	30.26	938	24.06	936	21.75

Note: Army, Air Force, and Navy are not included

ANOVAs were performed between groups to determine if there were statistically significant differences among recruiting categories in APR scores at the .05 level of significance. In men's recruiting, each sport had significant differences (MBB – $F(2,111) = 3.125$, $p = .048$; WBB – $F(2,111) = 3.659$, $p = .029$; FB – $F(2,111) = 9.774$, $p < .001$). In women's recruiting, women basketball and football had statistically significant differences (WBB – $F(2,111) = 4.755$, $p = .010$); FB – $F(2,111) = 10.517$, $p < .001$); however there was no statistically differences in men's basketball (MBB – $F(2,111) = 3.051$, $p = .051$).

Tukey post hoc, test were performed on each men's recruiting groups to determine which specific sport groups had statistically significant differences. In men's basketball, the large recruiting groups had significantly higher APR scores than the small recruiting groups by .41 to 51.75 points. In women's basketball, the medium recruiting

group had significant higher APR scores than the small recruiting groups by .58 to 33.95 points. In football, the small and large groups as well as the small and large groups were statistically significant. These results are displayed in Table *39*.

Table 39

Significant Tukey HSD Comparisons Between Football and Men's Recruiting (thirds)

Comparisons	Mean Difference	Standard Error	95% CI
Small vs. Medium	-22.53*	5.91	[-36.57, -8.49]
Small vs. Large	-22.74*	5.91	[-36.78, -8.70]

** $p < .05$*

Similarly, Tukey post hoc test were also performed on each significant women's recruiting groups to determine which specific sport groups had statistically significant differences. In women's basketball, the medium recruiting group has significantly larger APR scores than the small recruiting group. The medium group was 4.23 to 37.29 points higher. In football, the large and medium groups were both significantly larger than the small recruiting group. These results are displayed in Table *40*.

Table 40

Significant Tukey HSD Comparisons Between Football and Women's Recruiting (thirds)

Comparisons	Mean Difference	Standard Error	95% CI
Small vs. Medium	-24.11*	5.88	[-38.07, -10.14]

Small vs. Large	-22.50*	5.88	[-36.46, -8.54]

*$p < .05$

Again, separating the institutions into thirds is a solid way of categorizing based on total recruiting, because there is no common definition of high or low spending. To increase the accuracy in comparing groups, the institutions were also grouped in 100 thousands (men's recruiting) and 50 thousands (women's recruiting) groupings. APR statistics from men's and women's recruiting in currency groups are displayed in Table *41* and Table *42*.

Table 41

APR Statistics Based on Men's Recruiting Cost (hundred thousands)

	Under $199,999 *n*=15		$200,00-399,999 *n*=36		$400,000-599,999 *n*=33		$600,000-799,999 *n*=17		$800,000-999,999 *n*=9		Over $1,000,000 *n*=12	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Men's Basketball	899	52.48	907	55.86	920	38.58	927	44.93	945	38.30	898	25.09
Women's Basketball	931	52.28	956	23.70	962	24.43	959	21.25	959	22.87	954	63.15
Football	904	25.88	923	29.83	940	21.65	923	23.20	944	15.99	949	28.38

Note: Army, Air Force, and Navy are not included

Table 42

APR Statistics Based on Women's Recruiting Cost (50 thousands)

	Under $99,999	$100,00-149,999	$150,000-199,999	$200,000-249,999	$250,000-299,999	Over $300,000

	n=18		*n*=25		*n*=11		*n*=25		*n*=19		*n*=16	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Men's Basketball	899	64.55	909	56.32	921	41.34	923	32.87	923	43.12	921	42.91
Women's Basketball	936	48.15	952	27.44	966	18.74	966	20.40	956	25.60	957	33.15
Football	909	28.18	921	31.35	930	31.06	945	20.47	929	20.79	939	18.77

Note: Army, Air Force, and Navy are not included

ANOVAs were performed between both men's and women's groups to determine if there were statistically significant differences among monetary recruiting categories in APR scores at the .05 level of significance. In men's recruiting cost, there was no statistically significant differences among men's basketball and women's basketball (MBB – $F(5,108) = 1.688$, $p = .144$; WBB – $F(5,108) = 2.251$, $p = .054$), but there was in football (FB – $F(5,108) = 5.683$, $p < .001$). In women's recruiting cost, there was no statistically significant differences among men's basketball (MBB – $F(5,108) = .787$, $p = .561$), but were differences in women's basketball and football (WBB – $F(5,108) = 2.525$, $p = .033$; FB – $F(5,108) = 5.195$, $p < .001$).

Tukey post hoc, test were performed on the football significant men's recruiting groups to determine which specific sport groups had statistically significant differences. Three pairs were significantly different: under $199,999 and $400,000-599,999; under $199,999 and $800,000-999,999; and finally under $199,999 and over $1,000,000. These results are displayed in Table *43*.

Table 43

Significant Tukey HSD Comparisons Between Football and Men's Recruiting (100 thousands)

Comparisons	Mean Difference	Standard Error	95% CI
Under $199,999 vs. $400,000-599,999	-35.78*	7.85	[-58.55, -13.00]
Under $199,999 vs. $800,000-999,999	-39.98*	10.63	[- 70.81, -9.14]
Under $199,999 vs. Over $1,000,000	-45.37*	14.18	[-86.52, -4.21]

** $p < .05$*

Tukey post hoc test were also performed on the significant women's recruiting groups to determine which specific groups had statistically significant differences. Women's basketball had a significant difference between the under $99,999 and $200,000-249,999 women recruiting cost groups in their APR scores. Institutions that spent $200,000-249,999 had a higher APR score by 3.51 to 57.89 points. In football, there were statistically significant differences between multiple groups: under $99,999 and $200,000-249,999, under $99,999 and over $300,000, and lastly, $100,000-149,999 and $200,000-249,999. The results from are displayed in Table *44*.

Table 44

Significant Tukey HSD Comparisons Between Football and Women's Recruiting (50 thousands)

Comparisons	Mean Difference	Standard Error	95% CI
Under $99,999 vs.	-36.14*	7.86	[-58.95, -13.33]

$200,000-249,999			
Under $99,999 vs. Over $300,000	-30.41*	8.74	[-55.76, -5.05]
$100,000-149,999 vs. $200,000-249,999	-23.48*	7.19	[-44.35, -2.61]

** $p < .05$*

Football coaches salaries. Another financial component that the study institutions have in common is the salary of the football coach. This element again speaks to the institution's ability and willingness to spend on their athletic programs. The USA Today's Compensation for Division I-A College Football Coaches database was used to generate the total football coaches' salary for the 2004-2005 season. The coaches' salaries can be broken down into base salary, performance bonuses, and finally extra compensation. To get the most accurate salary amounts, the total of these three components of compensation were used. Similar to the other financial groupings, the institutions were listed in descending order (lowest to highest) and separated into thirds for the first analysis and then separated based on 300 thousand increments for the second. APR statistics for both of these categories are displayed in Table *45* and Table *46*.

Table 45

APR Statistics Based on Football Coach's Salaries (thirds)

	Small *n*=35		Medium *n*=35		Large *n*=36	
	M	SD	M	SD	M	SD
Men's Basketball	904	56.34	928	34.78	909	50.81

Women's Basketball	945	39.78	963	23.24	957	29.10
Football	914	29.31	937	25.27	935	17.98

Note: Pittsburg, Temple, Nothwestern, Penn State, Army, Tulane, BYU, Stanford, Vanderbilt, Rice, and Notre Dame are not included

Table 46

APR Statistics Based on Football Coach's Salaries (300,000s)

	Under $299,999 *n*=21		$300,000-599,999 *n*=20		$600,000-899,999 *n*=15		$900,000-1,199,999 *n*=19	
	M	SD	M	SD	M	SD	M	SD
Men's Basketball	898	60.02	914	47.58	925	33.18	920	42.57
Women's Basketball	950	38.66	945	39.63	958	20.07	968	22.24
Football	911	25.82	923	30.37	931	31.23	942	19.10

	$1,200,000-1,499,999 *n*=9		$1,500,000-1,799,999 *n*=12		Over $1,800,000 *n*=10	
	M	SD	M	SD	M	SD
Men's Basketball	902	81.35	938	24.39	904	40.95
Women's Basketball	952	26.31	959	29.42	956	34.42
Football	925	18.36	940	18.99	940	18.14

Note: Pittsburg, Temple, Nothwestern, Penn State, Army, Tulane, BYU, Stanford, Vanderbilt, Rice, and Notre Dame are not included

ANOVAs were performed first on the coaches' salaries based on thirds and then based on monetary groupings. Results from the thirds groupings revealed that there was a significant difference in APR scores in football (FB – $F(2,103) = 8.605$, $p < .001$),

however there was not a significant difference in men's and women's basketball (MBB – $F(2,103) = 1.682$, p = .191; WBB – $F(2,103) = 2.319$, p = .104). Similar results were found when ANOVAs were performed on the monetary groupings, with football being the only sport that had a statistically significant difference among coaches' salaries at the .05 level of significance (MBB – $F(6,99) = 1.167$, p = .330; WBB – $F(6,99) = 1.018$, p = .418; FB – $F(6,99) = 3.569$, p = .003).

Tukey post hoc test were also performed on both football significant groups to determine which groups have statistical differences. Within the thirds, there were significant differences between the small and medium groups, as well as the small and large group. When performed on the monetary groups, it was found that there were differences in APR scores based on football salaries in the following groups: under $299,999 and $900,000-1,199,999; under $299,999 and $1,500,000-1,499,999; and finally under $299,999 and over $1,800,000. Both of these results are displayed in Table *47* and Table *48*.

Table 47

Significant Tukey HSD Comparisons Between Football and Football Coaches' Salaries (thirds)

Comparisons	Mean Difference	Standard Error	95% CI
Small vs. Medium	-22.08*	5.92	[-36.14, -8.01]
Small vs. Large	-19.92*	5.83	[-33.78, -6.05]

** $p < .05$*

Table 48

Significant Tukey HSD Comparisons Between Football and Football Coaches' Salaries (300 thousands)

Comparisons	Mean Difference	Standard Error	95% CI
Under $299,999 vs. $900,000-1,199,999	-30.20*	7.84	[-53.80, -6.60]
Under $299,999 vs. $1,500,000-1,799,999	-28.24*	8.96	[-55.21, -1.27]
Under $299,999 vs. Over $1,800,000	-28.97*	9.51	[-57.61, -0.33]

** $p < .05$*

Athletic performance. It is one thing to invest millions of dollars into an athletic program, but the key measuring standard is how you perform on the field or court – winning forgives all sins in sports. However, a simple win-loss record is not a sufficient way to compare institutions, because of the different schedules of each institution. To alleviate this dilemma, the Rating Performance Index (RPI) was used to categorize the institutions. Descriptive statistics of athletic performance based on the RPI are displayed in Table *49*.

Table 49

Demographic Characteristics of Athletic Performance

Variable	**Category**	**n**	**%**
Men's Basketball	Under .399	3	2.6%
	.400-.499	23	19.7%
	.500-.599	71	60.7%
	.600-699	20	17.1%

Women's Basketball	Under .399	2	1.7%
	.400-.499	31	26.5%
	.500-.599	55	47.0%
	.600-.699	27	23.1%
	.700-.799	2	1.7%
Football	Under .399	15	12.8%
	.400-.499	48	41.0%
	.500-.599	41	35.1%
	.600-699	13	11.1%

The RPI uses a statistical formula to produce a numeral score that ranks the institutions based on athletic performance. Scores range from 0 to 1, with scores closer to 1 equating a better performance. The institutions were separated in to groups based on .100 intervals and compared. APR statistics for these groups based on each revenue sport are displayed in Table *50*, Table *51*, and Table *52*.

Table 50

APR Statistics Based on Men's Basketball RPI (.100)

	Under .399 *n*=3		.400-.499 *n*=23		.500-.599 *n*=71		.600-.699 *n*=20	
	M	SD	M	SD	M	SD	M	SD
Men's Basketball	909	66.19	909	44.24	916	51.41	931	40.36
Women's Basketball	946	60.17	946	39.69	959	28.64	962	25.50
Football	929	29.72	923	33.87	929	26.52	939	26.88

Table 51

APR Statistics Based on Women's Basketball RPI (.100)

	Under .399 *n*=2		.400-.499 *n*=31		.500-.599 *n*=55		.600-.699 *n*=27		.700-.799 *n*=2	
	M	SD	M	SD	M	SD	M	SD	M	SD
Men's Basketball	924	9.90	925	52.15	911	50.26	922	42.64	889	41.01
Women's Basketball	964	13.44	952	34.81	956	31.99	960	29.05	951	26.16
Football	921	14.14	927	31.50	925	24.16	944	30.20	930	6.36

Table 52

APR Statistics Based on Football RPI (.100)

	Under .399 *n*=15		.400-.499 *n*=48		.500-.599 *n*=41		.600-.699 *n*=13	
	M	SD	M	SD	M	SD	M	SD
Men's Basketball	908	49.14	923	51.58	920	48.73	898	30.87
Women's Basketball	951	35.71	958	32.55	955	29.58	958	32.11
Football	916	28.02	929	32.30	933	24.23	942	16.91

ANOVAs were performed on all three of these revenue sport groups. When men's basketball was the dependent variable, there was no statistically significant difference in APR scores at the .05 level of significance (MBB – $F(3,113) = .788$, $p = .503$; WBB –

$F(3,113) = 1.342$, p = .264; FB – $F(3,113) = 1.000$, p = .396). When women's basketball was the dependent variable, there were also no statistically significant differences in APR scores at the .05 level of significance (MBB – $F(4,112) = .664$, p = .618; WBB – $F(4,112) = .296$, p = .880; FB – $F(4,112) = 2.333$. p = .060). And finally, when football was the dependent variable, there were again no statistically significant differences in APR scores at the .05 level of significance (MBB – $F(3,113) = 1.158$, p = .329; WBB – $F(3,113) = .201$, p = .896; FB – $F(3,113) = 2.343$, p = .077).

Summary of Major Findings

The findings from this study should give the NCAA some significant information about their Academic Performance Program, and the APR specifically. The current equation used to determine academic success for student athletes has too much error for it to be appropriate for all institutions that participate in the NCAA's top level of competition, Division I. More importantly, too many institutions were falsely punished for not meeting the 925 cut score but graduating 50 percent of their athletes. Additionally, the implementation of the APR did not seem to increase overall graduation rates among revenue sports – one of the ultimate goals of all academic reform measures.

The fourth research question broke down the institutions into basic category groups based on affiliation, financial information, and athletic performance. In all of these groups, football had significantly different APR scores in every category at the .05 level of significance. The financial categories found that among football the institutions in the lowest category of spending had significantly lower APR scores than the other higher spending groups; and the inclusive admissions institution had significant lower

APR scores than other admissions categories. Men's basketball had significant different APR scores in admissions, conference affiliation, and expenses. Again, the inclusive admissions and the lower level of spending institutions in men's basketball had significant lower APR scores than more selective and higher spending level institutions. Women's basketball was only significant in one category – women's recruiting expense. Again the institutions that spent the lowest amount have significantly lower APR scores than higher level spending institutions. Finally, when institutions were separated based on the RPI there was no significant differences in APR scores among any sport or RPI level. Concluding that money spent affects APR scores but athletic performance does not, with football being the revenue sport that is affected the most by the amount of money spent.

CHAPTER FIVE: DISCUSSION

The purpose of this study was to investigate and examine the most current NCAA academic reform measure, the Academic Progress Rate, and its effect on the academic success of student athletes among different NCAA institutions. By utilizing four major research questions and an analysis of secondary data, this investigation was conducted on the NCAA institutions that were categorized as Division 1-A institutions during the 2004-05 academic year. This chapter will go through each research question and discuss the findings and conclusions that can be established from these findings, and finally further research opportunities on this subject.

Conclusions and Discussion – Research Question 1

The first research questions asked if the APR 925 cut score accurately translate into a 50 percent federal graduation rate in revenue sports. This is the key question to determine the accuracy and legitimate use of the NCAA's academic reform formula. At first glance, the equation that uses eligibility, graduation rate, retention, and progress towards degree to get a real time measure, works as the NCAA intended it to work. When the mean APR and FGR of each sport was calculated, men's basketball had a FGR under 50 percent and an APR score under 925, while both women's basketball and football had averages both above 50 percent and 925. The precise statistics are displayed in Table *53*.

Table 53

Descriptive Statistics for Academic Outcomes

	2010-11 FGR *n*=114		2004-05 APR *n*=117	
	M	SD	M	SD
Men's Basketball	.44	.3473	917	48.55
Women's Basketball	.64	.2822	956	31.57
Football	.57	.1558	930	28.21

However, when the institutions and their academic outcomes are examined individually, this accuracy is not so evident.

The athletic programs need to obtain a 925 APR score is important because the NCAA is able to place sanctions on institutions that failed to do so. First, institution's sports that fall below 925, lose scholarships of student athletes who are not eligible because the institutions are unable to reward that scholarship to another athlete who is eligible to compete. These sanctions increase in severity the longer the institution's sport teams are under the required APR score, with the most sever being not eligible to be a member of the NCAA. This all assumes that the 925 score equals a minimum FGR of 50 percent.

Within the sample of institutions in this study, 110 sports teams reported an error in the APR equation. Forty-seven sport teams met the 925 APR score, but did not obtain the FGR requirement. This is an error in the equations (Type II error), but does not cause the institutions to lose scholarships or be given any penalty. But, a total of 63 (18.42%)

revenue sport teams did meet the FGR requirement, but failed to reach the 925 APR score (Type I error). These sport teams potentially lost scholarships and were publicly ousted even though they obtained the ultimate goal of the academic reform program – 50 percent graduation rate of their student athletes. Football had the largest significant error with a total of 32 teams being eligible for sanctions, when they should not have been. Similarly, 20 men's basketball teams and 11 women's basketball teams were eligible for loss of scholarships when they had actually reached the graduation goal.

Analysis of these institutions separately leads to some thought-provoking results that need to be examined. All 63 sport teams are from public institutions and all but two have either an inclusive or selective admissions standards, meaning 25 percent of the student population have an ACT score of 25 or lower. Twenty five of the institutions are inclusive institutions (ACT scores under 20), a total of 71% (25/35) of all the inclusive institutions within the Division 1-A study population. The majority of inclusive institutions achieved their goal of graduating their students, however were getting punished by taking away scholarships.

Determining the amount of error that is acceptable is a matter of opinion, and in this case, the goals and mission of the NCAA. But, a total error of 32 percent (110 sport programs) is hard to justify. In turn, 18 percent (63 sport programs) of these programs were punished when they should have not been; an even harder statistic for the NCAA to justify. Adding difficulty to this issue is that in 2011 university presidents and sport administrators met and agreed to change the APR process. Now sport teams will have to meet an APR score of 930, or the teams will face postseason bans. No longer do teams

face just scholarship losses, but immediate ban from NCAA tournaments or bowl games. Dr. Walt Harrison, the president of the University of Hartford and the chair of the Division I committee on academic performance, was quoting saying after the decision, "A 930 equates to a 50 percent graduation rate and that is the stake in the ground that the presidents wish to put in as an overall goal for every team in Division I. It's a clear marker. We believe a 50 percent graduation rate is a reasonable goal for all teams" (O'Neil, 2011).

Yet, the NCAA stated that the 925 was equal to a 50 percent graduation rate in 2003 when it was first developed. A 925 and a 930 cannot both equal 50 percent. In addition, up until this study, there was no investigation on whether this statement was true. Looking at the results from this study's research question one, it can be inferred that the new 930 APR score is only going to produce an even greater amount of error. The current rate of error is not acceptable, so the new amount of error certainly will not be either. In addition to increasing the APR score that will be required, there is no longer an appeals process for institutions that want to dispute their sanctions (O'Neil, 2011).

An even greater issue is that this study only looked at a small portion of the institutions that are required to report and calculate the APR. The error could be, and is expected to be, even higher when all 393 Division I institutions are examined. As of this study, the APR has not been proven to be effective. There needs to be additional studies to confirm this fact, however, until then, the APR should be discontinued, or at least its penalties be eliminated, while other ways of measuring academic success are created and examined.

Conclusions and Discussion – Research Questions 2 and 3

The second research question asked if the implementation of the Academic Performance Program and in turn the APR was able to assist in the NCAA's ultimate goal of increasing the graduation rates of student athletes. Sequentially, research three asked which, if any, revenue sport was impacted the most by the implementation of the APR. The t-test that was performed between the FGR from 2002-03 and 2004-05 determined that there was no significant difference between the two graduation rates in any of the revenue sports. However, when the same test was performed on the general student body graduation rates, there was a significant difference ($t(115) = 4.897$, $p < .001$).

The general student body is not regulated by a governing body like the NCAA governs the student athlete population, instead each institution self regulates on degree progress and admissions standards. The general student body was able to significantly increase their graduation rates in the institutions studied with this self-regulation model, but the NCAA's governing model failed to increase graduation rates. There are a number of possible reasons for this, but it does begin an interesting conversation about the effectiveness of the NCAA's strict academic regulations.

As mentioned previously, the United States' higher education system has a multitude of different types of institutions with various missions, goals, and objectives when educating their students. When an institution is able to establish their own set of rules and guidelines while meeting their stated missions and goals, most people would agree that the institution has been academically successful. The institutions are not

required to graduate a certain number of students to be allowed to continue to exist; however this is exactly what the NCAA has done with a small cohort of students within these institutions. History has shown that a complete "home rule" system in athletic matters does not necessarily work; however, maybe a function of it would when dealing with academics. Without looking at individual institutions, alongside with their missions and goals, there are a number of things that are missed when an institution and student athletes are evaluated on academic success.

"Blanket policies", which do not look at individual differences, but put the same stipulations on all parties involved (i.e. the APR), are too simplistic. Most of the research deals with business and concludes that policies are more likely to succeed when they are "tailored to a given territory" and when the policy makers identify the needs of that environment (Dubini, 1988; Goel & Nelson, 2005). More importantly, blanket policies in education usually overlook social and cultural factors and often create educational inequities (Gerstl-Pepin, 2007), which was exactly what Proposition 48 and 42 did in previous NCAA regulations in regards to the African American population, and it can be inferred by this research, that the APR has done the same.

Essentially, there is no one way of achieving academic success in education. Karin Chenoweth has presented this with her books and especially with *Its Being Done: Academic Success in Unexpected Schools*. Although the book examined K-12 institutions, most of the lessons in the book can be transferred to higher education. A few major lessons learned is that schools that are successful have high expectations, teach

their students and don't teach for the test, and constantly reexamine their methods (Chenoweth, 2007, pp. 217–218).

The NCAA could learn from this text and the lessons that have been extracted. Although it could be argued that there are high expectations with the 50 percent graduation mandate, it all depends on the school. The general student body graduation rate and the institution's mission have to be included in the equation to understand if this is an appropriate goal for the individual institution. There are just too many institutions of higher education in the U.S. to assume that this standard is correct for all. Secondly, the simplicity of the APR can lead to some "teaching to the test" of eligibility and not teaching student athletes a meaningful and desired skill. Dr. Jennifer Kulics dissertation revealed that most student athletes are concerned about picking the appropriate major and being unable to explore their options if they want to be athletically eligible. In turn, both the athletes and the academic advisors stated if changing a major, even a major that students were uninterested in, would keep them eligible to participate in athletics they would switch or suggest the switch (Kulics, 2006). Another study indicated that one out of five student athletes are not enrolled in their first choice of major, especially when that chosen field is time-intensive (OShaunghnessy, 2009). This is increasing the priority of eligibility over learning, and will not help the student to become productive and happy citizens after their playing days are over – a consequence that the NCAA has chosen to ignore. Finally, the NCAA has not examined their methods, and has not even shared their methods on the APR creation with the general public, making it impossible for researchers and academics to successfully analyze the APR. This is the first study that

has tested the NCAA's statements on what the APR actually means. Although there are noted limitations, mainly with the limited data available, it was concluded that the APR calculation results in errors that have major consequences to institutions that do not deserve to be punished. And without examining these results, the NCAA has elected to increase the required APR cut score five points. The foreseen result is even more error and picking majors based on eligibility, which is not good for the higher education community and society at large.

Let it be stressed that having no rules or standards is not the way to create a culture of success among student athletes in higher education. This would only lead to problems that have already been experienced in earlier years of college athletics such as tramp athletes from the 1920s and academic tragedies of the 1980s. But the institutions in this study have made clear through their general student body graduation rates that they are capable of creating rules and regulations that allow all students to prosper and graduate in their respective settings. Maybe it is time for the NCAA to reexamine their academic policies and ultimately the futures of the student athletes that participate each year.

Conclusions and Discussion – Research Question 4

Research question four categorized the institutions in the FBS based on a number of variables. The question attempted to determine if characteristics such as size, affiliation, athletic finances, and athletic performance makes a difference in their ability to be academically successful according to the NCAA and the APR. Three basic groups of categories were developed: university categories (enrollment, public vs. private,

admissions, and conference affiliation), athletic financial information (total, men's, and women's expenses; total, men's, and women's recruiting cost; and football coaches salaries), and athletic performance (RPI). A lot of information was gained when these groups were analyzed based on revenue sports APR scores, which can be seen in detail in chapter 4, but there are four major inferences that warrant further discussion. These conclusions are:

1. Admission standards of the institutions greatly contribute to the APR scores.
2. The more money spent on athletics, the higher the APR scores.
3. Athletic performance does not matter in terms of APR scores.
4. Football is the revenue sport that causes the most problems when it comes to academic issues and reform.

Admissions standards impact. Admissions standards are based on the minimum academic achievement that is required for acceptance and enrollment in a specific institution. For this study, there were four different admission standard categories that all of the institutions were placed. When the groups were analyzed, it was discovered that inclusive institutions had significantly lower APR scores than the other categories in football and men's basketball. This conclusion allows the NCAA to assume that these inclusive institutions are unable to graduate their student athletes in the allowed six year timeframe. However, this conclusion relates directly to the research question one that was discussed earlier.

There were 63 institutions that did not reach the APR cut score of 925 in 2005, however, after the six year graduation rate were released it was disclosed that they were

able to graduate at or above the 50 percent benchmark. Twenty five (out of 35 in total study population) of these institutions were designated as having inclusive admissions standards. This leads to the question on how fair the APR scores are for the Division I institutions that have a variety of admissions standards? One of the goals discussed in the white paper published by the NCAA in 2003 on the proposed incentive/distinctive program stated that the new "structure must be fair and credible" (Turner, T., 2003). When 71% of the studied inclusive institutions meet the required FGR, but fail to reach the required APR, the fairness and credibility of the APR is in serious doubt.

Monetary incentive. It is no secret that it takes money to maintain an athletic department among institutions of higher education. There are limits set by the NCAA regarding the number of scholarships within each sport that institutions can award to their student athletes; however, that is the only monetary restriction that is placed on the institutions. Institutions can choose to spend any amount of money on facilities, personnel, academic support, and coaches' salaries which directly affects the athletics programs ability to perform daily functions. In 2009, the median budget for athletic programs in the FBS was $40 million, however the range of these budgets is extreme with the largest contributor to the budget being salaries and benefits of athletic personnel. A telling example of this phenomenon is the University of Alabama's football program. In 2009, the program spent nearly $6.6 million on football coaches salaries alone, which is more than 32 FBS programs spent on their entire football programs (Weiner, 2009).

Each institution has a number of different categories based on their monetary ability, including expenses, recruiting costs, and football coaches' salaries. Based on the

results generated in this study, institutions that spent more in each of these categories had significantly higher football APR scores. One possible reason for this fact is the ability of institutions to spend on academic service programs for their athletes.

The NCAA found that since 2007, 92 percent of Division I institutions have increased spending on athlete academic services, with most school increasing their spending by 1 to 20 percent and approximately 47 institutions had an even greater increase (Davidson, 2009). The actual amount spent on academic services for student athletes is not reported to the NCAA, but it is estimated to be over $1 million in Division I institutions. There are a number of speculations on why this budgeted item has continued to increase with the most popular hypothesis claiming that the increased competition for superior athletes has eased some schools admissions standards. However, the academic progress requirement has also stiffened with the approval of the APP, and with the APP has come the additional threat of scholarship losses for academic deficiencies. These are a few of the reasons that have increases the perceived need for academic services for athletes (Wolverton, 2008).

One major trend that has occurred over the years in higher education is building of large stand-alone academic centers that are specified for student athletes. Some examples of these massive buildings are the Cox Communications Academic Center for Student Athletes at LSU, the Alice and Erle Ny Academic Center at Texas A&M, the Stephen M. Ross Academic Center on the University of Michigan's campus, the University of Oregon's Philip Knight academic center, and most recently the University of Nebraska at Omaha's Academic Excellence Center (Steinbach, 2012; Wolverton,

2008). Although these buildings are usually built with donations and other outside funding, the institutions still have to support the everyday activities, including personnel, utilities, and general maintenance.

Critics of these stand-alone academic buildings have problems with the exclusivity that they represent. Most of these buildings are restricted to student athletes, with others allowing only varsity student athlete's use, eliminating most of the student population. The NCAA's Bylaw 1.3.1 states that the purpose of the NCAA is to "maintain intercollegiate athletics as an integral part of the educational program and the athlete as an integral part of the student body" (Steinbach, 2012); but one begins to question how this principle is accomplished when so much of the athlete's campus life is separated from the general student population. Jason Lanter, a professor at Kutztown University and the president of The Drake Group is a critic of these buildings and states that there is no evidence that these centers improve the academic performance of student athletes, but only increases the gap between institutions that are able to build and those that are not (Steinbach, 2012).

Another issue is the rapid increase of the salaries of the coaching staff, primarily in the top football programs but increasingly more common in basketball programs as well. The average salaries of head football coaches in the top programs increased 47 percent between 2004 and 2007. Many of these coaches are the highest paid employees at their institutions. In 2007, Pete Carroll, of the University of Southern California, was reported to make more than $4 million per year, which was the highest paid private institution university employee of any kind and the salary amounts are larger now six

years later (Weiner, 2009). One of the many problems with these salaries is that coaches can be fired for not meeting athletic expectations, even if they are leading their teams to high graduation rates. Again, this questions the ability of athletics being an integral part of the educational program.

Athletic performance. Every athlete wants to win and be the best at their craft on the field or court. No question, winning is enjoyable and is a goal of most athletic programs. There are many monetary or other intangible benefits for winning championships and bowl games. In 2010-2011, the NCAA distributed about $478 million to their members, with 40.5 percent of this amount coming from the "Basketball Distribution Fund." The NCAA states that this fund "provides for moneys to be distributed to Division I conferences based on their performance in the Division I Men's Basketball Championship over a six-year rolling period" (Jessop, 2012). For each game that an institution played in the tournament in 2011 (besides championship games), the institution's conferences were given about $239,664 from the NCAA (Jessop, 2012). The Football Bowl Association (FBA) takes the same model in its distribution of football bowl appearances, and in 2011 the FBA's 35 bowl games distributed $281.8 million to the conferences bowl participants (Mccann, 2011). Both of these distribution systems provide motivation for any institution to compete in the NCAA's top level of competition and to field the best possible athletic teams possible. In addition to the monetary benefits to winning, at least one study determined that winning also reduces acceptance rates, and increases donations, application, academic reputation, in-state enrollment, and incoming SAT scores (Anderson, 2012).

But winning on the athletic field is not the only goal in higher education; educating and graduating its students supposedly the foremost goal. Institutions in this study were categorized by their revenue sports athletic performances, measured by the RPI, and compared each groups APR. It was found that there were no statistical difference in the sports APR regardless of their RPI. Meaning that regardless of their performance on the field, the ability to achieve the appropriate APR score is not affected by it.

This conclusion makes one wonder if institutions of higher learning, at least in the Division I category of the NCAA, have their focus and priorities in the wrong place? This is not a new question, and will continue to be asked as long as the NCAA and their individual institutions run college athletics the way it does. This study indicates that a winning team does not contribute to the revenue sports academic performance – so why do institution stress winning on the field so much? It all goes back to the money. Athletic departments' goal is to make money, which most of the times goes directly against the goals of the educational institution. As shown above, having a good athletic team allows institutions to earn a monetary benefit from being successful in BCS bowl games and the NCAA basketball tournament – a benefit that no academic department is going to be able to match.

To make things more interesting, it has been substantiated that the more an institution spend on athletics, the more likely it will be successful on the playing field. According to a Compass Lexecon report from 2009, for each $1 million increase spent a football program, there is a 6.7 percent increase in winning percentage (approximately

0.8 more winning games) (Orszag & Israel, 2009). This conclusion will lead to the continued reality of athletic haves and have-nots. Spending money on athletics leads to winning performances which leads to more money being awarded to their conferences. Ultimately, sports is a zero-sum game, when one team wins the other losses – meaning institutions are essentially purchasing wins to the detriment of other institutions (Anderson, 2012). Yet, every institution is trying to be in the haves category, making the athletic 'arms race' very real and pressuring smaller and less affluent institutions to continue to spend on athletics instead of academics.

Football, football, and football. Ask anyone about college athletics, and the likelihood of football coming up in the conversation is high. During the fall, a multitude of games can be seen on television, showcasing any of the 230 plus teams competing in both subcategories of Division I. Football is visible to the general public and is also the most expensive and perceived important sport in college athletics. The NCAA allows for up to 85 full scholarships to be distributed to intercollegiate football teams, nearly five and a half times more allowed in any other sport, which affects the institution's ability to be compliant with Title IX. The expense of football is justified because of the potential revenues that the teams can generate for the institution, mainly from television, media relations, media coverage, and bowl game payouts.

The potential for revenue generation is real, but the ability to actually generate revenue often depends on the size and reputation of the institution. Top schools can make more than $30 million a year from its football programs. The University of Texas, the most profitable football institution in 2012, generated over $78 million on sales related to

football (Fancis, 2013), but only 19 percent of FBS institutions in 2011 reported a profit from their athletic pursuits (Burnette, 2012). The size and ability to generate revenue seems to be also related to the academic outcomes of the teams. During this study, football was significant in **every** institutional and financial category. Institutions with smaller enrollment and more inclusive admissions had significantly lower APR than their larger and more selective counterparts; and more importantly, institutions in smaller financial expenditure groups had significantly lower APR scores. Football might be the most important sport, but is also the sport with the largest discrepancy between large and small schools and between large budgets and small budgets – all that affects the ability to obtain the appropriate APR scores.

Final Conclusions and Thoughts

College athletics are undeniably a major part of the culture higher education, which affects not only what happens on Saturday afternoon but every other aspect of the college experience – academics included. The NCAA and its policies also affect the students who happen to also be athletes. Throughout its history, the NCAA has implemented several different academic policies that have impacted athletic participation. Most of these regulations have had their critics and have been revised or overturn all together after additional data is gathered such as in Proposition 48, legal action brought upon the NCAA as in the Ross vs. Creighton University, or protest by players and coaches as John Thompson did when he walked off the court in protest of Proposition 42. The APR is just the most recent policy that the NCAA has implemented to determine how college athletes are performing academically, and from data generated from this

study the APR is another policy that is flawed based on the NCAA's own standards and commonsense.

When the NCAA determined in 2003 what measurement was going to be used in its new incentive/disincentive program on academics, key principles that were discussed was the need for the structure to be "fair and credible" as well as "straightforward and understandable" (Turner, 2003). The first principle was not realized with the APR. The calculation is not fair or credible for institutions that are considered inclusive institutions. Too many of the inclusive institutions in this study did not meet the required APR score, but were able to graduate their student athletes at the 50 percent level or higher. The APR was supposed to be consistent regardless of the each institution's missions, goals, or composition – which it did not do in the studied population.

The second principle discussed and needed before the APR was implemented was for the mathematical calculation to obtain a numeric score that was straightforward and understandable. The three components that are used to calculate the score – athlete's eligibility, athlete's retention at the institution, and graduation – are straightforward and how the points are allocated to these components is understandable. But the NCAA never released the reasons why they chose these specific components. In any research study, including the pilot study conducted by the NCAA during the creation of the APR, the methods used are important to judge the credibility of the results. The methods used were never published, making it impossible for outside researchers to test the credibility of the created APR equation (E. L. Summers, personal communication, April 10, 2012).

Michael Oriard may have stated it bested in his book, *Bowled Over*, when he states that the problems are obvious, but the solutions are not. The market demands and benefits of having a competitive athletic program (primarily football teams) have and will continue to challenge any real chance of academic reform. This can be seen most clearly with the long-standing tradition of allowing "special admits" to be admitted into institutions. These students do not meet the regular admissions standards of the institution, however are admitted because of their athletic skills; all that is required by the special admits is to meet the NCAA's initial eligibility requirements. Since 2003 when the NCAA amended Proposition 16 to extent the sliding scale to contain no minimum SAT score or GPA, this hurdle to become athletically eligible has become quite easy. The difficulty comes when these academically deficient students want to continue to be athletically eligible, and more importantly to be successful in their chosen academic coursework. In 2008, the University of Oklahoma had approximately 60 percent of their football recruits as special admits, and the institutions also spent 2.9 million on academic support for these athletes. Most institutions do not have the budget for these type of support, however all institutions are all trying to compete athletically making the major divide of the haves and have-nots. This divide is evident from 2006 when the NCAA passed out its first loss of scholarship punishment for failure to meet the APR score of 925. Ninety-nine teams from 65 schools lost scholarships, but only 7 teams belonged to BCS institutions (Oriard, 2009).

What past and current reformers have failed to acknowledge is the wide variability of athletic and academic programs within the 117 institutions in the BCS, not

to mention all institutions competing in the NCAA Division I. Because of this variety, one reform model – especially academically – will not work. The average football recruit at Division I institutions is 940 – 1000. Thirty-nine BCS schools are ranked in the top 83 by the *US News,* however only two of these institutions have incoming freshman with a 25th percentile SAT score below 1070. In addition, when football student athletes are compared to the general student body in BCS institutions, the football student athletes add a lower SAT score ranging from 88 points to over 300. How are these students to be expected to be successful academically when they are so far below the average student? Not to mention after spending 40 to 50 hours a week on football (Oriard, 2009).

An individually tailored reform to athletically academic reform is needed for anything to be successful. But this will not happen with the current system in place because academic reform does not acknowledge the "intensely competitive, highly commercialized entertainment enterprise" that college football is today (Oriard, 2009, p. 187). The NCAA is has done everything it can to continue this overly competitive model by awarding financial benefits for winning, and there is no reason for them to stop. Reform will have to come from the outside, either through economic or legal means. Presidents could decide that the cost of doing the business of college athletics is too expensive and choose to not participate. This would have to take number of presidents to 'bite the bullet' and there would have to be many institutions to make the cut for it to be widespread – but it could happen. More likely, reform will come from the legal standpoint. The NCAA is currently a taxed exempted educational organization, which is getting harder and harder to justify with the billions of dollars they receive from their

championships. Congress has already challenged this status in 2006 in the House's Ways and Means Committee and the Senate Finance Committee. Although it was not changed during these discussions, it has been the subject and the day will come when it will be obvious that the NCAA is more of a business than an educational enterprise. When this does happen the IRS will be asking for their cut and the student athletes will officially become employees and will seek wages. This is when things will change in college athletics, not a system wide academic reform measure proposed by the NCAA better known as the APR.

Future Research

The findings in this study conclude that the APR was not able to accomplish the goals set by the NCAA's academic reform program during the first year of its implementation. The next step in this study would be to continue to collect data in the coming years and to determine if the flaws that were found during the first year of measurement persist. This would allow researchers to see if the issues found during the first year of the APR continue or are just growing pains of the program. Especially with the increased in penalties for athletic teams not meeting the designated APR score, this knowledge is extremely important to determine for all sport programs in the NCAA.

Another reason to continue gathering APR data is that many Division I institutions participated in conference realignments in 2005, with twenty-three institutions changing athletic conferences. There are many reasons for conference realignments, but money from football is the primary reason for this phenomenon. Television rights for football is the main source of this money and the institution's

conference affiliation affects the size of the contract and ultimately the amount that each individual school will receive. The security of the money is also enticing, because many of the television contracts are now long term deals ranging from 8 to 14 years (Tribou, 2011). One thing that was not considered with the conference realignment was the academics outcomes – especially the APR – of the student and teams affected.

A logical next step for APR research would be to conduct a regression study to determine any predictors to the 925 APR score. If there were a number of variables that could be used to predict a successful APR score, this would assist institutions on knowing what aspect of their athletic programs is most important to emphasis during reform. This type of study could also use aggregated data that is required to be published by the NCAA and the federal government, allowing for easier access; or more accurate data if access to specific athletic programs was granted.

The next step is to actually see what the APR is doing within specific athletic departments with a qualitative research study. There is only so much information that can be gathered by quantitative study on aggregated data, especially when the data is linked to individuals that are more than just numbers. Case studies from top BCS athletic institutions and from less successful athletic institutions need to be explored determine difference in thoughts and actions as it concerns the APR. How does the APR affect the day-to-day activity in academic services of large and small schools? How do small schools compensate for not having the budget for academic services like many of the larger schools? Why do some special admits succeed, while others don't make it past the first semester? It would be fruitful to be able to observe and ask these questions and

others to athletes and administrators that are directly affected by the APR. This would allow researchers to include the human aspect into the equation, not just numbers on a spreadsheet.

REFERENCES

REFERENCES

1946-1949 Yearbook of the National Collegiate Athletic Association. (1949). Chicago, IL: National Collegiate Athletic Association.

1950 Yearbook of the National Collegiate Athletic Association. (1950). Chicago, IL: National Collegiate Athletic Association.

1961-1962 Yearbook of the National Collegiate Athletic Association. (1962). Kansas City, MO: National Collegiate Athletic Association.

2004-2005 NCAA division I manual. (2004). Indianapolis, IN: National Collegiate Athletic Association.

About us. (n.d.). *National Center for Education Statistics*. Retrieved from http://nces.ed.gov/about/

About us - The College Board. (2011). Retrieved from http://about.collegeboard.org/

Adelman, C. (1999). Answers in the tool box: Academic intensity, attendance patterns, and bachelor's degree attainment. Retrieved from http://www2.ed.gov/pubs/Toolbox/toolbox.html

Anderson, M. (2012). The benefits of college athletic success: An application of the propensity score design with instrumental variables. *The National Bureau of Economic Research*. Retrieved from http://are.berkeley.edu/~mlanderson/pdf/Anderson%20College%20Sports.pdf

Bartell, T., Kessling, J. W., LeBlanc, L. A., & Tombaugh, R. (1984). *Study of freshman eligibility standards*. Reston, VA: Social Science Division of Advanced Technology, Inc.

BCS background. (2012, January 16). Retrieved from http://www.bcsfootball.org/news/story?id=4809699

BCS selection procedures. (2011). *BCS: Bowl Championship Series*. Retrieved from http://www.bcsfootball.org/news/story?id=4819597

Benson, M. T. (1991). *NCAA research report: A statistical analysis of proposed initial eligibility legislation* (No. 91-03). Overland Park, Kansas: National Collegiate Athletic Association.

Benson, M. T. (1994). *NCAA research report: Report 91-07 executive summary of reports 91-01 to 91-06*. Overland Park, Kansas: The National Collegiate Athletic Association.

Blacks hit hard by proposition 48, survey shows. (1988, September 9). *New York Times*. Retrieved from http://www.nytimes.com/1988/09/09/sports/blacks-hit-hard-by-proposition-48-survey-shows.html

Bowen, E. (1986, February 24). Education: Blowing the whistle on Georgia. *Time Magazine*. Retrieved from http://www.time.com/time/magazine/article/0,9171,960700,00.html

Brief setback for college gladiators. (1986, February 19). *New York Times*, p. A22.

Brody, E. B., & Brody, N. (1976). *Intelligence: nature, determinants, and consequences*. New York: Academic Press.

Brown, G. T. (2003, February 3). Incentives/disincentives package taking shape. *NCAA News Archive.* Retrieved from http://fs.ncaa.org/Docs/NCAANewsArchive/2003/Division+I/incentives-disincentives+package+taking+shape+-+2-3-03.html

Brown, G. T. (2004, June 21). CAP-ing off reform. *NCAA News Archive.* Retrieved from http://fs.ncaa.org/Docs/NCAANewsArchive/2004/Association-wide/cap-ing+off+reform+-+6-21-04.html

Brown, G. T. (2005, February 5). APR 101. *NCAA News Archive.* Retrieved from http://fs.ncaa.org/Docs/NCAANewsArchive/2005/Division+I/apr%2B101%2B-%2B2-14-05%2Bncaa%2Bnews.html

Burnette, J. (2012, December 12). Television revenue for top collegiate conferences skyrocket, do schools need the money? *College Football Universe*. Retrieved from http://www.collegefootballuniverseblog.com/1/post/2012/12/television-revenue-for-top-collegiate-conferences-skyrocket-do-schools-need-the-money.html

Butcher, H. J. (1973). *Human intelligence; its nature and assessment*. New York: Harper & Row.

Byers, W. (1995). *Unsportsmanlike conduct: exploiting college athletes*. Ann Arbor: University of Michigan Press.

California State University, Hayward et al. v. National Collegiate Athletic Association. , 121 Cal. Rptr. 85 (Court of Appeals of California April 28, 1975).

Castle, J. (2010). *The impact of the Academic Progress Rating on the retention and recruiting strategies of NCAA Division I football programs*. (Doctoral Dissertation) Available from ProQuest Dissertations and Theses database. (UMI No. 3422386)

Chenoweth, K. (2007). *Its being done: academic success in unexpected schools*. Cambridge, Massachusetts: Harvard Educaton Press.

Christianson, Erik. (2004, April 29). NCAA board of directors adopt landmark academic reform package. *NCAA Press Release Archive*. Retrieved from http://fs.ncaa.org/Docs/PressArchive/2004/Legislation/NCAA%2BBoard%2Bof%2BDirectors%2BAdopts%2BLandmark%2BAcademic%2BReform%2BPackage.html

Christy, K., Seifried, C., & Pastore, D. L. (2008). Intercollegiate athletics: A preliminary study examining the opinions on the impact of the academic performance rate (APR). *Journal of Issues in Intercollegiate Athletics*, *1*, 1–10.

Coaches compensation. (2006). *USA Today*. Retrieved from http://www.usatoday.com/sports/graphics/coaches_contracts/flash.htm

College “purity code” in athletics certain to fail, experts believe: Survey of football writers and coaches reveals few felt “boycott” clause will halt off-campus recruiting. (1947, December 19). *New York Times*, p. 36.

Copeland, J. (2011). Myles Brand: A legacy of leadership. *NCAA.org*. Retrieved from http://www.ncaa.org/wps/wcm/myconnect/public/ncaa/about+the+ncaa/who+we+

are/myles+brand+legacy/legacy+of+leadership/presidential+control+of+intercollegiate+athletics

Cowley, W. H. (1930). Athletics in american colleges. *The Journal of Higher Education*, *1*(1), 29–35. doi:10.2307/1974839

Creighton university : About creighton. (2011). Retrieved June 6, 2012, from http://www.creighton.edu/about/

Cureton v. National Collegiate Athletic Association. , 37 F. Supp. 2d 687 (March 8, 1999).

Curry, J. (1990, January 30). Suing for 2nd chance to start over. *New York Times*. Retrieved from http://www.nytimes.com/1990/01/30/sports/suing-for-2d-chance-to-start-over.html?pagewanted=all&src=pm

Davenport, J. (1985). From Crew to commercialism - the paradox of sport in higher education. In Chu, D., Segrave, J. O., & Becker, B. J. (Eds.), *Sport and Higher Education* (pp. 5–16). Champaign, IL: Human Kinetics Publishers, Inc.

Davidson, B. (2009). Athletic funding, academic improvement. Retrieved from http://www.ncsasports.org/blog/2009//10/06/athletics-funding-academic-improvement/

Davis, T. (1996). African-American student-athletes: Marginalizing the NCAA regulatory structure? *Marquette Sports Law Review*, *6*(2), 199–227.

Denhart, M., Villwock, R., & Vedder, R. (2009). *The academic athletics trade-off: Universities and intercollegiate athletics*. Washington, D.C.: The Center for College Affordability. doi: 10.1007/978-1-4419-5960-7_5

Dr. Jan Kemp v. Leroy Ervin and Virginia Trotter. , 651 F. Supp. 495 (April 22, 1986).

Dubini, P. (1988). The influence of motivations and environment on business start-ups: some hints from public policies. *Journal of Business Venturing*, *4*, 11–26. doi: 10.1016/0883-9026(89)90031-1

Earle, M. V. (Ed.). (2002). *2002-2003 NCAA division I manual*. Indianapolis, IN: The National Collegiate Athletic Association.

Edwards, H. (1984). The collegiate athletic arms race: Origins and implications of the "rule 48" controversy. *Journal of Sport & Social Issues*, *8*(1), 4–22. doi:10.1177/019372358400800103

Equity in athletics data analysis cutting tool website. (n.d.). Retrieved from http://ope.ed.gov/athletics/

Ex-Creighton player surrenders after siege. (1987, July 24). *New York Times*, p. B12.

Falla, J. (1981). *NCAA, the voice of college sports: a diamond anniversary history, 1906-1981*. Mission, KS: National Collegiate Athletic Association.

Fancis, D. (2013, January 3). The big business of college football: Who's winning? *The Fiscal Times*. Retrieved from http://www.thefiscaltimes.com/Articles/2013/01/08/The-Big-Business-of-College-Football-Whos-Winning.aspx#page1

Fulks, D. L. (2009). *2004-08 NCAA revenues and expenses of division I intercollegiate athletic programs report*. Indianapolis, IN: National Collegiate Athletic Association.

Gerstl-Pepin, C. (2007). Introduction to the special issue on the media, democracy, and the politics of education. *Peabody Journal of Education*, *82*(1), 1–9. doi:10.1080/01619560709336534

Goel, R., & Nelson, M. A. (2005). Tobacco policy and tobacco use: Differences across tobacco types, gender and age. *Applied Economics*, *37*, 765–771. doi:10.1080/00036840420000337415

Green, S. (2008). *A profile of the ineligible and not-retained (0/2) student-athletes of the Atlantic Coast Conference*. (Master's thesis) Available from ProQuest Dissertation and Theses database. (UMI No. 1452919)

Hamilton, K. (2005). Putting the "student" back into student-athlete. *Black Issues in Higher Education*, *22*(4), 28.

Hanford, G.H. (1985). Proposition 48. In D. Chu, J. O. Segrave, & B. J. Becker, (Eds.), *Sport and Higher Education* (pp. 367–372). Champaign, IL: Human Kinetics Publishers, Inc.

How is the academic progress rate calculated? (2010). *NCAA.org*. Retrieved from http://www.ncaa.org/wps/wcm/connect/public/NCAA/Academics/Division+I/How+is+APR+calculated

Hunt, N. (2000). Cureton v. NCAA: Funmble! The flawed use of proposition 16 by the NCAA. *University of Toledo Law Review*, *31*, 273–299.

Jessop, A. (2012, March 2). How much money do conferences earn from march madness? *Business of College Sports*. Retrieved from

http://businessofcollegesports.com/2012/03/02/how-much-money-do-conferences-earn-from-march-madness/

Johnson, J. (2010). *Predicting first-year grade point average and retention of student-athletes using demographic, academic, and athletic variables*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3403233)

Johnson, J., & Ashe, A. (1989, June). Is proposition 42 racist. *Ebony*, *44*(8), 138–140.

Jupp, V. (2006). Secondary analysis. *The SAGE dictionary of Social Research Methods*, 275–276. doi:10.4135/9780857020116

Katz, D. (2002, November). NCAA considers new standards for initial and continuing eligibility. *AACRA -SEM Newsletter*. Retrieved from http://www2.aacrao.org/sem/index.cfm?fa=view&id=2349

Katz, D. (2003, June). The question of how to measure graduation rates. *AACRA -SEM Newsletter*. Retrieved from http://www2.aacrao.org/sem/index.cfm?fa=view&id=2272

Kevin Ross v. Creighton University. , 957 F. 2d 410 (U.S. App 1992).

Kirwan, W.E., & Turner, R. G. (2010, October). Changing the game: Athletics spending in an academic context. *Association of Gorverning Boards of University and Colleges*. Retrieved from http://agb.org/trusteeship/2010/septemberoctober/changing-game-athletics-spending-academic-context

Kramer, J. R. (1966, May 2). Monro doubts NCAA, Ivy can resolve disagreement over 1.6 eligibility rule. *The Harvard Crimson*. Retrieved from http://www.thecrimson.com/article/1966/5/2/monro-doubts-ncaa-ivy-can-resolve/

Kulics, J. M. (2006). *An analysis of the academic behaviors and beliefs of Division I student-athletes and academic administrators: The impact of the increased percentage toward degree requirements*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3227411)

Le Crom, C. L., Warren, B. J., Clark, H. T., Marolla, J., & Gerber, P. (2009). Factors contributing to student athlete retention. *Journal of Issues in Intercollegiate Athletics*, 14–24.

McCall, M. (2011). *Predicting student-athlete academic success with preadmission, social-contextual, and sport variables*. (Doctoral dissertation). Available from ProQuest Dissertation and Theses database. (UMI No. 3469158)

Mccann, Z. (2011, November 8). Bowl payout projected around $281 million. *College Gridiron 365*. Retrieved from http://blogs.orlandosentinel.com/sports_college/2011/11/bowl-payouts-projected-around-281-million.html

McCollum, D. (2009, July 25). New UCA president taking front-porch philosophy with athletics. *TheCabin.net*. Retrieved from http://thecabin.net/news/local/2009-07-25/new-uca-president-taking-front-porch-philosophy-athletics#.T-MpI5HNkYI

McDonnell, S. (2004). *N4A task force "practices and conepts for the success of NCAA academic reform*. National Association of Academic Advisors for Athletes.

McKeena, K. M. (1987). A proposition with a powerful punch: The legality and constitutionality of NCAA proposition 48. *Duquesne Law Review*, *26*(43), 43–77.

Mclendor, R. (2002, November 14). NCAA raises academic standards for athletes. *The Red and Black*. Retrieved from http://redandblack.com/2002/11/14/ncaa-raises-academic-standards-for-athletes/

McManis, S. (1988, November 29). Aftermath of the trial: Jan Kemp, Georgia have new school of thought. *Los Angeles Times*. Retrieved from http://articles.latimes.com/1988-11-29/sports/sp-494_1_william-kemp

Miller, J. J. (2011). *The big scrum : how Teddy Roosevelt saved football*. New York: HarperCollins.

Monahan, T. (1998, December). The rise of standardized educational testing in the U.S.: A bibliographic overview. Retrieved from http://www.torinmonahan.com/papers/testing.pdf

Mondello, M. J., & Abernethy, A. M. (2000). An historical overview of student athlete academic eligibility and the future implications of Cureton v. NCAA. *Villanova Sports and Entertainment Law Journal*, *7*, 127–150.

Mulligan, K. (1986, August 12). Sudden impact grades in on proposition 48, 397 athletes affected so far. *The Inquirer - philly.com*. Retrieved from http://articles.philly.com/1986-08-12/sports/26062919_1_football-recruits-football-teams-proposition

Nack, W. (1986, February 24). This case was one for the books: Jan Kemp won $2.58 million in a suit that bared academic abuses involving the athletes at Georgia.

Sports Illustrated. Retrieved from http://sportsillustrated.cnn.com/vault/article/magazine/MAG1064531/index.htm

Nairn, A., & Nader, R. (1980). *The reign of ETS: the corporation that makes up minds*. Washington, D.C.: Ralph Nader.

NCAA Background on Academic Reform. (n.d.). *NCAA.org*. Retrieved from http://www2.ncaa.org/portal/academics_and_athletes/education_and_research/academic_reform/backgrounder_academic_reform.html

NCAA education and research data - APR, GSR, federal graduation rates, ASR. (n.d.). Retrieved from http://fs.ncaa.org/Docs/newmedia/public/rates/index.html

Nelson, J. (1987, September 20). Class of `87 - The second year of proposition 48/Educators say it creates a better class of student. *Houston Chronicle*. Retrieved from http://www.chron.com/CDA/archives/archive.mpl/1987_490492/class-of-87-the-second-year-of-proposition-48-educ.html

Newman, R. E., & Miller, M. T. (1995). *Attitudes of high school personnel toward NCAA academic integrity reform measures and proposals*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 304116317)

O'Neil, D. (2011, August 12). Increase in academic cutline approved. *ESPN.com*. Retrieved from http://espn.go.com/college-sports/story/_/id/6853878/ncaa-committee-approves-increase-apr-cutline

Oriard, M. (2009). *Bowled over: Big-time college football from the sixties to the BCS era.* The University of North Carolina Press: Chapel Hill.

Orszag, J., & Israel, M. (2009). *The empirical effects of collegiate athletics: An update based on 2004-2007 data*. Compass Lexecon. Retrieved from http://fs.ncaa.org/Docs/DI_MC_BOD/DI_BOD/2009/April/04,%20_Empirical_Effects.pdf

O'Shaughnessy, L. (2009, June 2). The truth about sports scholarships. *CBS news*. Retrieved from http://www.cbsnews.com/8301-505144_162-51307434/the-truth-about-sports-scholarships/

Outside the lines: Unable to read. (2002, March 17). *ESPN*. Retrieved from http://espn.go.com/page2/tvlistings/show103transcript.html

Owings, J., & McMillen, M. (1995). *Who can play? An examination of NCAA's proposition 16* (No. NCES 95-763). Washington, D.C.: National Center of Education Statistics. Retrieved from http://nces.ed.gov/pubs95/95763.pdf

Petr, T. A., & Paskus, T. S. (2009). The collection and use of academic outcomes data by the NCAA. *New Directions for Institutional Research*, *2009*(144), 77–92. doi:10.1002/ir.315

Pickle, D. (2008, Winter). Prop 48 is growing old. *NCAA Champion Magazine*, *1*(1), 32–39.

Pomeroy, K. (2005, August 1). RPI help. *Advanced Analysis of College Basketball*. Blog. Retrieved from http://kenpom.com/blog/index.php/weblog/rpi_help/

Price, J. (2010). The effects of higher admission standards on NCAA student athletes: An analysis of proposition 16. *Journal of Sport Economics*, *11*(4), 363–382. doi:10.1177/1527002509347989

Proceedings of the 62nd annual convention of the National Collegiate Athletic Association. (1968). Kansas City, MO: National Collegiate Athletic Association.

Proceedings of the 65th annual convention of the National collegiate Athletic Association. (1971). Kansas City, MO: National Collegiate Athletic Association.

Proceedings of the 66th annual convention of the National Athletic Association. (1972). Kansas City, MO: National Collegiate Athletic Association.

Proceedings of the 67th annual convention of the National Collegiate Athletic Association. (1973). Shawnee Mission, KS: National Collegiate Athletic Association.

Proceedings of the 77th annual convention of the National Collegiate Athletic Association. (1983). Mission, KS: National Collegiate Athletic Association.

Proceedings of the 80th annual convention of the National Collegiate Athletic Association. (1986). Mission, KS: National Collegiate Athletic Association.

Proceedings of the thirty-fourth annual convention. (1939). Los Angles, CA: National Collegiate Athletic Association.

Pryor v. National Collegiate Athletic Association. , 288 F.3d 548 (U.S. App. 2002).

Purity code rejected: Virginia doubts if NCAA plan can be properly enforced. (1948, August 10). *New York Times*, p. 28.

Rasmuson, M. R. (1968, January 11). NCAA alters 1.6 rule, defeats ivies' motion. *The Harvard Crimson*. Retrieved from http://www.thecrimson.com/article/1968/1/11/ncaa-alters-16-rule-defeats-ivies/

Reed, W. F. (1989, January 23). A new proposition: An NCAA rule deemed unfair to minorities drew angry. *Sports Illustrated*. Retrieved from http://sportsillustrated.cnn.com/vault/article/magazine/MAG1126483/index.htm

Renfro, W. I. (Ed.). (1989). *1989 NCAA convention proceedings*. Mission, KS: National Collegiate Athletic Association.

Renfro, W. I. (Ed.). (1990). *1990 NCAA convention proceedings*. Overland Park, Kansas: National Collegiate Athletic Association.

Renfro, W. I. (Ed.). (1992). *1992 NCAA convention proceedings*. Overland Park, Kansas: National Collegiate Athletic Association.

Report of the McIntosh Commission on fair play in student-athlete admissions. (1994, December). *Institute for the Study of Academic Racism*. Retrieved from http://www.ferris.edu/isar/Institut/NCAA/mcintosh.htm

Rhoden, W. C. (1989, January 19). Thompson's protest over freshman rule is drawing some criticism. *New York Times*. Retrieved from http://www.nytimes.com/1989/01/19/sports/thompson-s-protest-over-freshman-rule-is-drawing-some-criticism.html

Robbins, D. (1990, January 7). NCAA will look at proposition 42 again. *Los Angeles Times*. Retrieved from http://articles.latimes.com/1990-01-07/sports/sp-418_1_ncaa-convention

Sack, A. L., & Staurowsky, E. J. (1998). *College athletes for hire: The evolution and legacy of the NCAA's amateur myth*. Westport, CT: Praeger.

Sailes, G. A. (1998). A case against NCAA proposition 48. In Sailes, G. A. (Ed.), *African Americans in Sport: Contemporary Themes* (pp. 133–144). New Brunswick, New Jersey: Transaction Publishers.

Savage, H. J., Bentley, H. W., McGovern, J. T., & Smiley, D. F. (1929). *American college athletics*. New York, NY: The Carnegie Foundation for the Advancement of Teaching.

Search for schools, colleges, and libraries. (n.d.). *NCES Search*. Retrieved from http://nces.ed.gov/globallocator/

Sheehan, J. M. (1958, January 16). Notes on college sports: Realistic coach offers 4 scholarships through ad in track magazine. *New York Times*, p. 37.

Sherman, E. J. (1991). Good sports, bad sports: The district court abandons college athletes in Ross v. Creighton university. *Loyola of Los Angeles Entertainment Law Review*, *11*(2), 657–687.

Shropshire, K. L. (1997). Colorblind propositions: Race, the SAT, and the NCAA. *Stanford Law & Policy Review*, *8*(1), 141–157.

Smith, R. A. (2010). *Pay for play: A history of big-time college athletic reform*. Champaign, IL: University of Illinois Press.

Staples, A. (2008, June 23). A history of recruiting; how coaches have stayed a step ahead. *Sports Illustrated*. Retrieved from http://sportsillustrated.cnn.com/2008/writers/andy_staples/06/19/recruiting.main/index.html

Staurowsky, E. J., & Ridpath, B. D. (2005). The case for a minimum 2.0 standard for NCAA division I athletes. *Journal of Legal Aspects of Sport*, *15*(1), 113–138.

Steinbach, P. (2012). Are academic support centers worth the investment? *Athletic Business*. Retrieved from http://www.athleticbusiness.com/editors/blog/default.aspx?id=785

Student Right to Know Act of 1990. , Pub. L. No. 101-542 § 580 (1990).

Suggs, W. (1999). Fight over NCAA standards reflect long-standing dilemma. *The Chronicle of Higher Education*, *45*(31), A48–A49.

Suggs, W. (2004, April 23). NCAA weighs new penalties for academic laggards. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/NCAA-Weighs-New-Penalties-for/29598

Summers, J. G. (1991). *NCAA academic performance study report 90-01*. Overland Park, KS: National Collegiate Athletic Association.

Swift, E.M. (1994, December 5). With prop 48's success, college educators are pushing high. *Sports Illustrated*. Retrieved from http://sportsillustrated.cnn.com/vault/article/magazine/MAG1006046/index.htm

Temkin, B. (1987, August 14). Proposition 48 gives athletes a nudge toward their books. *Chicago Tribune*. Retrieved from http://articles.chicagotribune.com/1987-08-14/sports/8703010990_1_recruits-eligibility-richard-lapchick

Thelin, P. J. R. (1994). *Games colleges play: Scandal and reform in intercollegiate athletics*. Baltimore, MD: The Johns Hopkins University Press.

Tribou, D. (2011, October 29). NCAA conference realignment. *Only a Game*. Retrieved from http://onlyagame.wbur.org/2011/10/29/ncaa-conference-realignment

Turner, T. (2003, March 11). NCAA division I framework related to an incentives and disincentives structure. White paper. Retrieved from http://www.archive.senate.ufl.edu/hot_topics/secPdfs/NCAA_IncentivesTurner031103.pdf

Van Biema, D. (1986, March 3). U of Georgia teacher Jan Kemp bulldogs athletic corruption and wins $2.6 Million. *People*. Retrieved from http://www.people.com/people/archive/article/0,,20093073,00.html

Waller, J. M. (2003). A necessary evil: Proposition 16 and its impact on academics and athletics in the NCAA. *DePaul Journal of Sport Law & Contemporary Problems*, *1*(2), 189–206.

Watt, S. K., & Moore, J. L. (2001). Who are student athletes? *New Directions for Student Services*, *2001*(93), 7–18. doi:10.1002/ss.1

Watterson, J. S. (2000). *College football: History, spectacle, controversy*. Baltimore, MD: Johns Hopkins University Press.

Weiner, J. (2009). *College sports 101: A primer on money, athletics, and higher education in the 21st century*. Miami, FL: Knight Commission on Intercollegiate Athletics.

White, G. S. (1983, January 13). Black colleges threaten to leave N.C.A.A. over academic policy. *New York Times (1923-Current file)*, p. A1.

Wobus, J. (2005). Explanation of Wobus RPI calculation. Retrieved from http://vaporia.com/sports/rpi.html

Wolverton, B. (2008). Rise in fancy academic centers for athletics raises questions of fairness. *Chronicle of Higher Education*, *55*(2). Retrieved from http://chronicle.com/weekly/v55/i02/02a09901.htm

Wolverton, B. (2005, November 9). Knight commission members voice concerns about the NCAA's new academic expectations. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/Knight-Commission-Members/119869

Zgonc, E. (2010). *NCAA sport sponsorship and participation rates report, 1981-82 - 2009-10*. Indianapolis, IN: National Collegiate Athletic Association.

Zimbalist, A. S. (1999). *Unpaid professionals*. Princeton, NJ: Princeton University Press.

CURRICULUM VITAE

Jill A. Singleton graduated from Rolla High School, Rolla, Missouri, in 2001. She received her Bachelor of Business Administration from Abilene Christian University in 2005 and her Master of Science in Sport Management from Georgia Southern University in 2006. She was employed by the School of Recreation, Health, and Tourism at George Mason University from 2007 to 2013.