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Graduation rates of academic non-qualifier, junior college transfers within NCAA division I men's basketball

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GRADUATION RATES OF ACADEMIC NON-QUALIFIER, JUNIOR COLLEGE
TRANSFERS WITHIN NCAA DIVISION I MEN'S BASKETBALL

A Thesis

Presented To

Eastern Washington University

Cheney, Washington

In Partial Fulfillment of the Requirements

for the Degree

Master of Science, Physical Education

By

Michael W. Score

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Chapter One

Athletics and education form an intricate bond in American culture. From the late 19th century, athletics began to find its way onto the campuses of higher education (Chu, 1989; Lee, 1983). As the industrial era boomed, major employers across the nation were looking for workers that were competitive, aggressive, and accustomed to a team environment (Gerdy, 2000; Lee, 1983). The benefits of organized athletics were seen as positives in the American workplace. The “American Way” of winning had been born (Gerdy, 2000). Organized athletics were introduced onto college campuses and often funded by large area businesses in order to develop some of these non-classroom attributes seen as beneficial in the American workplace (Gerdy, 2000; Lee, 1983).

By the turn of the 20th century, athletic teams and clubs had become widespread on American college campuses. Several colleges fielded rowing, baseball, bowling, and American football teams (Chu, 1989; Gerdy, 2000; Lee, 1983). It was out of concern regarding the safety of the newly popular sport of American football, that the National Collegiate Athletic Association (NCAA) was ultimately formed in 1904 (National Collegiate Athletic Association, 2009g).

Today the NCAA oversees a 4 billion dollar college athletics industry in the United States. Under its direction are 36 sports (18 for men and 18 for women). Over 75,000 young men and women compete in NCAA Division I athletics each year (National Collegiate Athletic Association, 2009g).

The growth of college athletics has not been without turmoil. Several problems have plagued college sports over the past decades including academic integrity (Duderstadt, 2000; Gerdy, 2006; Reynolds, 1985), commercialization and professionalization (Johnson, 1985;

Suggs, 2009), gambling (Duderstadt, 2000; Reynolds, 1985), pay for play issues (Berkowicz, 1991; Reynolds, 1985), along with racial and social issues (Brooks, 1993; Duderstadt, 2000; Gerdy, 2006).

In various cases, the very question of whether or not organized athletics belongs in the academic arena has been asked. This question has been met with a variety of answers ranging from emphatic opinions that athletics should be eliminated from the academic arena (Flath, 1972; Gerdy, 2006, 2000), to those that have said that the nature of athletics are positive, albeit when properly administered (Bailey, 1991; Chu, 1989; Duderstadt, 2000). In almost every case, there is a consensus that athletics and academics in current United States higher education form a difficult bond, one that must be continually evaluated and effectively managed.

To deal with these perceived problems within college athletics, the NCAA has continually attempted to evolve in order to uphold the integrity of its organization. In 1974, the NCAA restructured its institutions into 3 Divisions. Division I is the highest level, reserved for the institutions competing in the most sports and having athletics departments with the widest scope (National Collegiate Athletic Association, 2009i). Division II is the middle level, having more limitations on scholarships and not requiring an athletic department to field as many sports as Division I. Division III is the most limited level, prohibiting institutions from granting athletic based scholarships at all (National Collegiate Athletic Association, 2009i).

Over the past 25 years the NCAA has put in place a series of academic reforms. The most widespread path of reform has been with regard to initial eligibility for incoming student-athletes. Over this time, standards for acceptable high school grade point average, the number of required core high school classes, and level of acceptable standardized test score have all been increased (National Collegiate Athletic Association, 2009c). Other avenues of academic reform

have included percentage towards degree requirements and, the most recent, Academic Progress Rating (APR) (National Collegiate Athletic Association, 2009c). Progress towards degree requirements were the first to target current student athletes, while the APR has targeted the institution. According to the rules of the APR, poor retention or poor academic achievement of student-athletes by an athletic program can cost it future scholarships or other sanctions (National Collegiate Athletic Association, 2009e).

From the athletic department's side, the NCAA has mandated that member institutions promote and maintain an effective overall student-athlete support program (National Collegiate Athletic Association, 1998). NCAA funds are distributed out of a special account to each Division I athletic department to maintain such programs as student-athlete academic support staff, educational programs, and increased access to technology needed during the academic process. The amount allocated to each institution for these support programs is only enough to maintain a very small support operation (Newsome, 2005). Each institution is responsible to use additional athletic department funds to facilitate the operation of these programs. Due to this, there is a wide discrepancy between the existence and quality of these programs amongst member athletic departments.

To show the progress of these reforms and support programs, the NCAA needed a method to evaluate its student-athletes' academic success. Due to their measurability, the graduation rates of NCAA student-athletes became a focus and the vehicle by which the NCAA would attempt to show improvement (National Collegiate Athletic Association, 2007a).

The first set of NCAA graduation rates evaluated the 1984 freshman class. This study showed that overall Division I athletes graduated at a lower rate than the general student population. It also showed that men's basketball had the lowest graduation rate of all sports with

a rate of only 38% as compared to the national general student population average of 53% (National Collegiate Athletic Association, 2007b). This only fueled the belief that athletes who participated in revenue sports were not interested in earning a degree (Berkowicz, 1991; Reynolds, 1985).

Self-studies performed and published by the NCAA since the first 1984 graduation rate evaluation have indeed shown that they are achieving their goal of increasing these graduation rates. Starting with the freshman class of 1986, student-athletes' graduation rates took the lead over the general student population and have maintained that lead until the present (National Collegiate Athletic Association, 2007c). All sports have shown increases over this time, including men's basketball that had a graduation rate of 49% for the 2003 cohort. Men's basketball does however continue to have the lowest rate of any sport (National Collegiate Athletic Association, 2009f).

Many studies performed by independent sources have evaluated NCAA academic reforms. Several questioned the overall effectiveness (Hatcher, 2004; Kulics, 2006; Smith, 2009), while others have even gone as far as to claim that some of these reforms are racially biased (Brooks, 1993; Smith, 2007; Takahashi, 2002; Taplette, 2005). A few, while questioning the NCAA's methods and direction, have in fact shown that the NCAA is accomplishing its goals through these reforms (Judge, 1991).

To accomplish its goals of increasing student-athletes' graduation rates within Division I athletics and to boost the public perception that its athletes are indeed student-athletes, the NCAA has chosen methods that, in effect, make it more difficult for high school students to qualify academically to compete in NCAA Division I sanctioned sports (Smith, 2009; Takahashi, 2002). These student-athletes who do not meet the academic standards set by the NCAA upon

graduation from high school are declared “non-academic qualifiers”, and are not eligible for Division I competition (National Collegiate Athletic Association, 2009a).

Those non-academic qualifiers are given the opportunity to attend a junior college and graduate with an associate’s degree in order to earn their remaining years of eligibility (National Collegiate Athletic Association, 2009a). The normal path for these non-qualifiers is to compete at a junior college for 2 years while earning their associate’s degree and to then transfer to a Division I institution to compete for their remaining 2 years of eligibility.

It has been shown that men’s basketball student-athletes have been the most affected athlete group by the increases in initial eligibility standards (Smith, 2007; Takahashi, 2002). Proportionately, more men’s basketball student-athletes have been declared non-academic qualifiers than any other sport. As these NCAA academic reforms have been put in place, more and more men’s basketball athletes have needed to first attend junior colleges (Smith, 2007; Takahashi, 2002; Taplette, 2005).

This study intended to explore whether these junior college men’s basketball student-athletes end up graduating with a bachelor’s degree from a four-year institution. There are mixed results of several prior studies showing how junior college transfers in the general student population perform once in a four-year college environment. Several studies showed that these junior college students fare worse than native four-year students (Geleskie, 1998; Horrell, 1992; Pascarella, 1991). There have also been studies that question whether junior colleges prepare student athletes for the rigors of four-year university academic life (Kulics, 2006; Smith, 2009). The credit loss upon transferring from junior colleges to four-year institutions is a concern of junior college academic advisors with regard to their students (Smith, 2009). Due to this credit loss, many junior college transfers may require more time to graduate than their normal Division

I eligibility allows. While acceptable according to NCAA bylaws, not all Division I athletic departments fund this added time needed for degree completion (Newsome, 2005).

Currently there is no NCAA evaluation process for this junior college transfer subgroup within men's basketball. NCAA graduation rates have only two methods of evaluation (National Collegiate Athletic Association, 2008b). The first includes freshman class evaluation. The second accounts for transfers of all types, four year, and two year qualifiers included with the two year non-qualifier.

This study investigated the graduation rate of this particular subgroup within men's basketball. It has not only been shown that NCAA Division I Men's basketball student-athletes graduate at the lowest rate of any sport (National Collegiate Athletic Association, 2007b), but also that more men's basketball athletes have been affected by NCAA academic reform than any other sport (Smith, 2007; Takahashi, 2002). Additionally, it has been called into question as to whether or not junior college students are equipped for four year university academics (Kulics, 2006; Smith, 2009). The studied sub-group was initially denied their eligibility Division I men's basketball, but prior to this study, there are no specific data to evaluate as to what rate this sub-group was graduating with Bachelor's degrees.

This study also evaluated the correlation between the availability of certain academic programs and institutional rules, and these graduation rates. Certain available programs and institutional policies have been suggested to impact these junior college transfers and affect this sub-group's overall ability to complete a bachelor's degree.

Statement of Research Question

This study examined the difference between the graduation rates of initial men's basketball non-academic qualifiers who transferred from junior colleges, and that of the whole of

NCAA Division I men's basketball. The study also evaluated whether a correlation exists between the graduation rate of this particular sub-group and certain variables including: the availability of certain athletic academic support programs for athletes, the institutional credit transfer situation, and the overall coaches involvement and care given to the student-athlete's academic situation.

The comparison study between the graduation rate of the studied sub-group within Division I men's basketball and the overall graduation rate of men's basketball includes two variables. The dependent variable is the graduation rate of the men's basketball student-athletes included in the study for both the sample and the population. For the sample group, the independent variable is the academic qualifier status of the selected student-athletes. This group is made up of entirely academic non-qualifiers. For the population of men's basketball student-athletes used as a comparison group, the independent variable is whether or not the student-athlete participates in men's basketball.

The second portion of the study involves five different variables which are evaluated for correlation with graduation rate. In each of these variables, the dependent variable is the graduation rate of the studied sub-group of men's basketball student-athletes. The independent variable for the questions regarding athletic-academic support staff, summer school, and post-eligibility aid is the specific athletic department's support of each program. The independent variable for the question regarding institutional credit transfer policy is whether or not the institution participates in direct transfer associate's degrees. For the final question the independent variable is the opinion of the institution's athletic compliance director as to the level of care or emphasis the coaching staff places on the academic success of their student-athletes.

Significance of Study

The NCAA has put forth significant effort in publishing graduation rates of its Division I student-athletes. It has been shown that men's basketball consistently has had the lowest graduation rates over the past 20 years (National Collegiate Athletic Association, 2008b). There has been widespread academic reform put in place during this time by the NCAA to increase the rate of graduation of all of its athletes. Some of these reforms have been in the form of initial eligibility requirements (National Collegiate Athletic Association, 2009c). Men's basketball athletes have been affected by these increased standards at a rate as high as or higher than any other sport (Smith, 2007; Takahashi, 2002).

Many of these impacted student-athletes turn to junior college as a method to earn their way back into NCAA Division I athletics. It has been questioned whether junior college students are successful upon transferring to four year colleges (Geleskie, 1998; Horrell, 1992; Pascarella, 1991).

In addition to initial eligibility and progress towards degree reforms, the NCAA has placed considerable research and funding into the development of certain educational programs designed to assist member athletic departments in their care for the academic well-being of its student-athletes. Much of this attention has been directed at the lower achieving student-athletes within NCAA Division I athletics. These junior college transfer student-athletes to be studied are among the targeted population of such programs. While encouraged and mandated to a certain extent, the level of carryout and overall funding of these programs by athletic departments varies widely between member institutions (Newsome, 2005).

Prior to this study, there were no graduation rate data of these initial non-academic qualifiers that transfer into Division I institutions upon completion of their associate's degree. This subgroup within NCAA Division I athletics was initially denied the opportunity to compete

due to academic concerns. Due to the importance placed by the NCAA on graduation rates and questions as to their overall academic progress once at Division I institutions, it is beneficial to further evaluate this already at-risk group (Wong, 2006). Upon showing that a significant difference does occur between this sub-group and the entire group of men's basketball, it would be beneficial for the NCAA to be made aware of this, as future academic legislation and support programs could be affected by such information.

It is also important to evaluate some of causes and remedies of such a problem, after a significant difference in these graduation rates is found to exist. The correlation studies looking at these specific variables put forth meaningful information into causes of such a problem as well as insight into which of these programs has the most positive effect if in place.

The NCAA has to this point used self-study, graduation rate data, and recommendations from outside organizations, such as the Knight Commission, to help shape the direction of its academic reform. Additional data, especially targeting a potential at-risk group of student-athletes can only help the NCAA fulfill its mission to enhance the "educational experience of the student-athlete" (National Collegiate Athletic Association, 2009h).

Division I member institutions also benefit from such information. Due to the implementation of the Academic Progress Rating (APR), individual institutions share some of the burden in retaining and graduating its student-athletes (National Collegiate Athletic Association, 2009e). Student-athletes who do not graduate, end up costing the member institution points in their APR. Low APR can lead to penalties including loss of scholarships or practice time allotment. Information that a certain subgroup of student-athletes graduate at a particularly low rate could lead to recruiting philosophy changes toward this subgroup by certain institutions. At the very least, such information could boost awareness among member Division

I institutions as to the extent of this sub-group's at-risk status, and enable them a better opportunity to offer increased academic support. In addition to this, the correlation evaluation of the included variables, either affirms or questions the extent of the benefits of certain programs and will help member institutions allocate resources.

The completed study addresses this particular subgroup, evaluates its specific graduation rate as compared to the rest of NCAA Division I men's basketball student-athletes, and looks at the correlation between these graduation rates and the availability of certain academic programs and institutional transfer credit policies.

Research Hypotheses

The research hypothesis for the current study is that the graduation rate of men's basketball junior college transfers into NCAA Division I institutions that were NCAA initial eligibility academic non-qualifiers is significantly lower than the whole of men's basketball Division I student-athletes who initially enrolled during the years of 2000-2004. The null hypothesis is that the graduation rate is not significantly lower than the whole of men's basketball during the studied years.

The research hypothesis for the correlation evaluations of each of the studied variables, is that there will be a positive correlation between each factor and the graduation rate of the studied-subgroup of Division I men's basketball. The null hypothesis for each of these factors is that there will either be no correlation or a negative one.

Operational Definitions

National Collegiate Athletic Association (NCAA): Organization originally formed in 1904. The NCAA is an administrative organization that oversees and regulates the majority of collegiate athletics in the USA. Membership is divided into 3 divisions based on number of

sports within an institution and overall size of athletic department budget (National Collegiate Athletic Association, 2009).

Initial Eligibility Clearinghouse: Subsidiary of the NCAA that oversees initial student-athlete eligibility for competition in athletics. Students must submit high school transcripts and standardized test scores for evaluation. Based on these scores and grade point average, each prospective student-athlete is either declared an NCAA academic qualifier or non-qualifier (National Collegiate Athletic Association, 2009).

Initial Eligibility Academic Qualifier: A student-athlete whose high school grade point average and standardized test scores fall above the needed index in order to be certified for competition in their first year of enrollment in an NCAA member institution (National Collegiate Athletic Association, 2009).

Initial Eligibility Academic Non-Qualifier: A student-athlete whose high school grade point average and standardized test scores fall below the needed index in order to be certified for competition in their first year of enrollment in an NCAA membership institution (National Collegiate Athletic Association, 2009).

Federal Graduation Rate: Rate that college students earn their Bachelor's degree. US Bureau of Education Statistics gathers this statistic. According to the United States Bureau of Education Statistics, a student is allowed 6 years to earn a bachelor's degree from his or her original initial time of full time enrollment which represents a period of 150% of the regular collegiate completion time. Overall completion after this 150% threshold decreases significantly. This statistic is evaluated as a simple fraction on a yearly basis. The number of students completed at the end of the allotted 6 year time forms the numerator of the fraction.

The total number of those that initially enrolled in the studied year forms the denominator. The rate is listed as a percentage (United States Bureau of Education Statistics, 2009).

Junior College Transfer: A student-athlete that initially enrolls in a junior college and then transfers to a four year institution (National Collegiate Athletic Association, 2009).

Team Eligibility Form: Conference specific but NCAA mandated form showing team roster with regard to each student athlete's individual eligibility. Each form shows players academic standing, where and if they transferred into the current institution, and whether or not they were an initial eligibility academic qualifier out of high school (National Collegiate Athletic Association, 2009).

Assumptions

1. The current study assumes that Federal Graduation Rate data are accurate.
2. NCAA published graduation rate data, needed for the current study, are accurate.
3. It is assumed that NCAA division I institutions report their graduation rate data accurately and honestly.
4. Administrators filling out the survey form understand what was asked of them and shared accurate and complete information.

Limitations

1. Perceived sensitivity of the information by member institutions may cut down on the overall response rate of the current study.
2. Differences in recruiting philosophies between programs may lead to wide differences in the number of studied student-athletes among individual institutions, possibly creating a

wide variation in graduation rates due to the small number of studied individuals within certain institutions.

3. Individual student-athlete characteristics including their overall desire to achieve a degree or their willingness to pursue the academic goals in place are not evaluated or taken into account within the current study.
4. Correlation evaluation between coaches' involvement and emphasis placed on the academic situation of their student-athletes is based on the opinion of an individual compliance director within the athletic department.

Delimitations

1. The current study includes only NCAA Division I men's basketball institutions with regard to graduation rate evaluation.
2. The current study focuses only on men's basketball student-athletes belonging to the specific subgroup of initial eligibility academic non-qualifiers who then transferred in from junior colleges with regard to graduation rate evaluation.
3. The current study is evaluating only the numerically reported graduation rate of this particular subgroup and the potential correlation of certain variables with this sub-group's graduation rate.

Summary

This chapter introduced the current study of the graduation rates of junior college transfer men's basketball players who were NCAA initial eligibility non-academic qualifiers, and a correlation study of certain variables which may have an effect of such a graduation rate. These student-athletes make up a subgroup within NCAA Division I athletics that prior to this study

have had no specific evaluation of its graduation rate, nor any specific information as to how certain academic support programs or institutional credit transfer policies correlate to their graduation.

Due to the importance placed upon graduation rates by the NCAA, the fact that the NCAA initially denied this subgroup the opportunity to compete in Division I athletics for academic reasons, and the availability of research calling into question this subgroup's opportunity for academic success upon transfer, there is most definitely a need for this study. Results of this study are beneficial to the NCAA as well as its member institutions with regard to future legislation or institutional policy and programs.

The following chapters will review the literature leading up to this current study as well as discuss the specific parameters of the study that has been performed.

Chapter Two

Review of Literature

Organized athletics began to become a part of American college campuses during the late 1800's. By the turn of the century, many colleges had organized clubs that competed in such sports as rowing, baseball, cricket, and the new game of American football (Chu, 1989; Lee, 1983). Industrialist business owners often sponsored these teams or certain events as the benefits of organized sport were valued in the American workplace (Gerdy, 2000; Lee, 1983).

Out of concern over the safety of American football, President Theodore Roosevelt mandated in 1905, that University presidents regulate the sport or ban it altogether (National Collegiate Athletic Association, 2009g). The NCAA was thus born. Initially a loosely aligned organization, the NCAA has grown in scope and influence, today overseeing a \$4 billion college athletics industry in the United States (National Collegiate Athletic Association, 2009g).

As the college athletics industry has grown in scope and magnitude through the 20th century, problems have come with it. Commercialization has blurred the line between the amateur student-athlete and professional sports (Johnson, 1985; Suggs, 2009). Scandals regarding pay-for-play (Berkowicz, 1991; Reynolds, 1985), gambling (Duderstadt, 2000; Reynolds, 1985), academic fraud (Duderstadt, 2000; Gerdy, 2006; Reynolds, 1985) have tarnished the image of college athletics. Even the very methods by which athletes are admitted and maintained on college campuses have been questioned (Willingham, 2009). During the modern era of college athletics (after 1960), it became widely perceived by the American public that many college athletes were not even concerned with earning a degree, but were solely attending college in an attempt to turn professional in their respective sport (Berkowicz, 1991; Reynolds, 1985).

To combat these perceptions, the NCAA has consistently attempted to evolve and reform athletics to ensure the integrity of their organization. One of the primary directions of reform has come with regard its student-athletes' academic standing. Graduation rates became a measurement by which the NCAA would attempt to show improvement through. These graduation rates of student-athletes are a measureable statistic, and one that the public could understand (National Collegiate Athletic Association, 2006a).

The following chapter will discuss the origination of the unique bond that American higher education and organized athletics share. It will then trace a brief history of NCAA academic reform measures and the research that has evaluated these measures. To complete the chapter will be an analysis of some of the results of NCAA academic reform, an explanation of what happens to students that don't meet the increased NCAA Division I requirements, and an overview of some of the variables that potentially correlate to academic success and degree completion.

American Education and Athletics

Industrialization hit the United States during the middle of the 19th century. Large businesses were mobilizing the American workforce into massive factory operations (Lee, 1983). Skills essential to these new jobs were learned outside the classroom just as much or more than inside. Fitness, dexterity, discipline, the ability to work as a team, as well as aggressiveness and competitiveness were all valued in the new American workplace (Gerdy, 2000; Lee, 1983). Major business families such as the Rockefellers, the Morgans, and the Carnegies began to sponsor athletic organizations in major cities across the country (Gerdy, 2000). These industrialist barons believed that many of these needed traits, essential to the new American

workplace, could be learned and facilitated through organized athletics (Gerdy, 2000; Lee, 1983).

This culture of organized athletics began to entrench itself onto higher education campuses during the 1880's and 1890's. The benefits of organized athletics were being valued as a good addition to the educational system (Chu, 1989; Gerdy, 2000; Lee, 1983). Qualities of leadership, discipline, and loyalty were viewed as a positive compliment to the academic learning of the classroom. The character built from athletic competition became a valued commodity (Gerdy, 2000; Lee, 1983).

The bond between higher education and athletics has been questioned since its inception. Several authors have evaluated the positive nature of sport in the American university system with varied results. The justification of sport as being valuable and a relevant aspect of our nation's educational system was called into question by Gerdy (2000), where the author described two myths regarding college sports. The first myth is that sports have educational benefits. The author argues that due to the increased professionalization of college sports and the various scandals surrounding them, in fact, these sports have detracted from the educational institutions that support them (Gerdy, 2000). The second myth is that sports make money for their institutions. This is shown to not be true, as during 1998, only 18% of Division I athletic departments showed a profit (Gerdy, 2000).

Gerdy's (2006) follow up book, *Air Ball, American Education's Failed Experiment With Elite Athletics*, took the argument further. Gerdy stated that as Division I sports have become more and more professionalized, it has undermined the academic values of the institutions. This is shown in the volume of scandals surrounding athletics such as the President of St. Boneventure College being involved in academic fraud, or the Baylor men's basketball murder

of a teammate, followed by the coach subsequently misleading police during their investigation (Gerdy, 2006). The author continues to argue that the problems surrounding college athletes, primarily due to its commercialization, are increasing, and the gap between athletics and academe is widening. It is for this reason that Gerdy explicitly recommends that college athletics be separated from the academic environment completely (Gerdy, 2006).

Preceding Gerdy's work by 30 years, Arnold Flath (1972), in his book, *Athletics in America*, expressed concern over the path of amateurism within college athletics. Flath argued that as society and the public had become more aware of college sports, sporting events had become primarily entertainment. The athletes were themselves becoming stars and losing their touch with the academic environment. Flath spoke about the choice that was to come for athletics. It would either need to regain its amateur form or become completely professional and separate from education.

A more middle-of-the-road opinion with regard to college athletics came from Duderstadt's (2000) book *Intercollegiate Athletics and the American University*. The author argued that college athletics should indeed be part of the American higher education system, albeit with reforms in place. Duderstadt questioned why an educational university should oversee such a commercial entertainment business that Division I college athletics has become. He argued that college sports must be restructured on terms that fit with the educational purpose of the institution. The alternative would be to spin football and basketball off in an independent direction from higher education (Duderstadt, 2000).

Bailey's (1991) book, *Athletics and Academe, An Anatomy of Abuses and a Prescription for Reform*, talks about college athletics in terms of being "ill". Throughout this book, the author refers to the sickness that has surrounded college athletics. According to Bailey, attempts to

solve the problems of college athletics up to this point have attacked the symptoms but not the cause of the illness (Bailey, 1991). An example of this would be to place a specific athletic program on probation, limiting television exposure or post season play. Bailey believes the causes of the problems are more deeply rooted, and that there must be a movement to bring athletics back towards the overall educational mission. The author goes on to say that this type of reform is indeed possible within the existing framework of college athletics governance (Bailey, 1991).

One other opinion that expresses concerns with the status of college athletics in higher education comes from Donald Chu's (1989) book, *The Character of American Higher Education and Intercollegiate Sport*. The author cited a lack of empirical evidence to validate claims of economic benefit and character building that sports supposedly generate (Chu, 1989). He believed that much of the problems surrounding college athletics have stemmed from institutions' conflicting conception of the overall mission of higher education. Chu goes on to state his belief that sports do, in some form, belong in the American college environment, but reform is necessary in order to end unethical behavior (Chu, 1989).

The NCAA

The National Collegiate Athletic Association was formed in 1905 in response to President Theodore Roosevelt's call upon colleges and universities to reform and regulate the newly popular sport of American football (National Collegiate Athletic Association, 2009g). Injuries were widespread and several deaths had occurred during play, causing President Roosevelt to consider banning the sport altogether (National Collegiate Athletic Association, 2009g).

Originally known as the Intercollegiate Athletic Association of the United States (IAAUS), the NCAA took its current name in 1912. In its original format, the NCAA was a loosely tied organization represented by a collection of college and university administrators (National Collegiate Athletic Association, 2009g). Since then, the NCAA has seen its membership and scope grow rapidly and become a fixture in American sports culture (Duderstadt, 2000; Bailey, 1991). It is currently the world's largest athletic organization linked to academic post-secondary institutions (National Collegiate Athletic Association, 2009g). Over \$4 Billion in revenue was generated by NCAA college athletics during 2008 (National Collegiate Athletic Association, 2009g).

Problems Surrounding NCAA Athletics

The past several decades have seen a variety of problems surround college athletics. The major revenue generating sports of football and men's basketball have seen the bulk of these problems (Berkowicz, 1991; Reynolds, 1985). St. Bonaventure University fired both its men's basketball coach and its university president in 2003 when it was proven that both had conspired to alter transcripts (Gerdy, 2006).

The commercialization of college athletics has brought media attention and fans, but has also taken college athletics to the threshold of professionalization (Johnson, 1985). In his book, *Government and Sport, the Public Policy Issues*, Johnson (1985) walks the reader through a four-part argument where he suggests that scholarship players are becoming very close to employees of the university. Spiraling expenditures have taken college athletics to a place that traditional athletic department fund raising efforts cannot keep up with. Television and advertising dollars are the only way these departments will be able to keep up with spending, thus furthering the professionalization concern (Suggs, 2009).

Gambling has been shown to be a problem within college athletics (National Collegiate Athletic Association, 2009; Duderstadt, 2000). In a study of the entire University of Michigan student-athlete population in 1997, student-athletes were asked a series of questions regarding their own gambling habits. Results of the study showed that 72 percent of the student-athletes surveyed had gambled in the past year, 45 percent on a sporting event (Duderstadt, 2000). The NCAA currently supports an anti-gambling educational program in which all Division I student-athletes participate (National Collegiate Athletic Association, 2006b).

Unethical conduct has been shown in a variety of manners by coaches and players alike. Southern Methodist University's football program was shut down for the 1986 season by the NCAA primarily for the maintaining and operation of a slush fund by coaches and program boosters in order to pay players, among other violations (Reynolds, 1985). A member of the Baylor University men's basketball program shot and killed a teammate in 2005. This was followed by the head basketball coach intentionally misleading police during the investigation (Gerdy, 2006).

One particular study evaluated the practices of NCAA division I coaches, alumni, or boosters of athletics. This study surveyed a group of 300 high school football coaches that had sent players on to NCAA Division I schools, and asked for insight into unethical behavior throughout the recruiting process (Hanford, 1974). The study revealed some of the most commonly seen rules violations perpetrated by the coaches or representatives of the athletics departments included the altering of high school transcripts, falsifying college entrance exam scores, and incentive payments made to players or family members on account of good play in games (Hanford, 1974). Results from this study lead Hanford to propose that college athletics become a piece of the accrediting process for higher educational institutions. According to

Hanford, he argued that the state of an institution's athletic department and its behavior should be included and evaluated by an accrediting association just as any other academic arm of the institution (Hanford, 1976).

As the popularity of NCAA division I athletics boomed, concern over its governance and control became an issue with the American public (Berkowicz, 1991; Gerdy, 2000; Reynolds, 1985). Public perception of football and men's basketball players became such that these athletes were being viewed as non-students and merely employees of their respective institution (Reynolds, 1985). A Louis Harris and Associates study of public perception of NCAA athletes showed that three quarters of the general public viewed many of these athletes as having no intention of earning a degree, and were simply competing in order to turn professional in their respective sport (Berkowicz, 1991). This same study also surveyed board of trustee members and university presidents, showing that 70 percent of trustees and nearly half of presidents view college sports as out of control (Berkowicz, 1991).

The Knight Commission

One organization that proposed reform of college athletics was the Knight Foundation. The trustees of the John S. and James L. Knight Foundation (known as the Knight Foundation), were concerned that abuses in major college athletics were threatening the very integrity of American higher education (Knight Commission, 1993). These Knight Foundation trustees organized a commission that would address the current issues surrounding NCAA Division I athletics and propose a reform agenda. The Commission, which would come to be known as the "Knight Commission", was to be comprised several college and university presidents, influential members of national academic and business community as well as key members of the media.

According to the Commission's initial published report entitled, "Keeping Faith with the Student Athlete", 57 of the 106 college and universities competing at the NCAA's highest level, Division I-A, were sanctioned or placed on probation by the NCAA during the 1980's (Knight Commission, 1993). Results of another survey evaluated by the Knight Commission showed that for a selected 100 major Division I athletic departments during the 1980's, 35 men's basketball programs and 14 football program had graduation rates below 20 percent for the decade (Knight Commission, 1993).

Within this initial report, the Knight Commission made a series of recommendations for the reform of college athletics. There were 24 recommendations listed in the report (Knight Commission, 1993). Two of these recommendations have particular significance with regard to the current study. The first such recommendation by the Knight Commission suggested that junior college transfers that did not meet the Proposition 48 requirements out of high school be required to sit out a year of competition upon transferring into a Division I institution (Knight Commission, 1993). This recommendation came out of concerns over these transfer student-athletes' ability to cope with the rigors of four year university level academics. The second recommendation of significance to this study suggested that athletic-academic support programs be required to be put in place by all member Division I institutions (Knight Commission, 1993). One other recommendation mirrored the aim of Hanford's 1976 proposal regarding athletics being included in the accrediting evaluation process (Hanford, 1976).

The Knight Commission's 2001 follow up report entitled, *A Call to Arms, Reconnecting College Sports with Higher Education*, was a form of progress report for college athletics. In this report, the Commission looked at recommendations that were made in the earlier report and evaluated the current state of college athletics. Unfortunately, the 1990's saw a similar number

of programs being sanctioned for rules violations. During the 1990's, 58 out of 114 Division I-A colleges and universities were sanctioned or placed on probation by the NCAA for violations (Knight Commission, 2001). This report did show that of the original 24 recommendations listed in the earlier report, 19 of those had been adopted at some level by the NCAA. The Knight Commission acknowledged that improvement and reforms had been made, but the path was just beginning (Knight Commission, 2001).

Academic Reform

A clause within the NCAA's mission statement says that the purpose of the NCAA is "to integrate intercollegiate athletics into higher education so that the educational experience of the student-athlete is paramount" (National Collegiate Athletic Association, 2009h). It has been argued that by the 1980's, Division I athletes were becoming closer to professional athletes than student-athletes (Berkowicz, 1991; Reynolds, 1985). The gap between intercollegiate athletics and higher education was widening (Gerdy, 2006). Facing scrutiny over scandals and the professionalization of its athletes, the NCAA proceeded down the path towards academic reform.

The primary direction of academic reform centered on the initial eligibility standards of its athletes (National Collegiate Athletic Association, 1993). Prior to 1984, athletes only had to graduate from high school with a 2.0 grade point average in order to be eligible for competition during their first year of full time college enrollment. The first and still the most dramatic change in NCAA Division I initial eligibility standards took effect in 1985 with the legislation now referred to as "Proposition 48" (National Collegiate Athletic Association, 1993). Proposition 48 set a new combined grade point average and standardized test score minimum. Under the new standard, a high school senior would have to graduate from high school with a 2.0 grade point average in 11 certain core classes as well as score a 700 on the SAT or a 15 on the

ACT (National Collegiate Athletic Association, 1993). Issues related to the recruitment and graduation of student athletes were cited as the primary causes leading to implementation of Proposition 48 by the NCAA (Rives, 1994).

One study that was performed after Proposition 48 was approved but before it was implemented, evaluated the proposed effect of the new academic reform. This study evaluated a sample of 140 freshman student athletes in 1984 at one particular institution against similar sample populations from 1982 and 1977 (Burns, 1986). This study aimed to evaluate the proposed standards the NCAA was to put in place in 1986. Results of the study found that high schools were not preparing student athletes any better in 1984 than they were earlier even though the standards were about to raise. The study also showed that African-American males would be the most impacted by Proposition 48 (Burns, 1986).

Several studies have been performed evaluating Proposition 48 after its implementation. One such study evaluated the intended and unintended effects of Proposition 48 (Takahashi, 2002). This study evaluated the number of recruited freshman and junior college players into 76 Division I-A programs in the years before and after the implementation of Proposition 48. It also looked at the graduation rates within this same group of institutions within the studied time frame. Results of Takahashi's (2002) study showed minimal increases in graduation rates of the studied Division I-A student-athletes after the implementation of Proposition 48. It did show, however, a significant change in recruiting trends. Many of the academic non-qualifiers according to Proposition 48 that attended junior colleges students were then being recruited into Division I football programs upon their graduation with an Associate's degree. A decrease in freshman recruiting numbers and a sharp rise in junior college recruiting numbers definitely followed the implementation of Proposition 48 (Takahashi, 2002).

Other key findings of this study suggested that grade point averages of Proposition 48 students who chose to still attend the Division I institution and sit out the year were low. Due to these low grade point averages, it was suggested that graduation rates for this group would be very low as well (Takahashi, 2002). This study recommended that the current NCAA initial eligibility requirements were too low and should be raised to ensure academic success and increased graduation rates (Takahashi, 2002).

Another study evaluating Proposition 48, showed that Proposition 48 students had a significantly lower first semester GPA and a lower cumulative GPA as opposed to non-Proposition 48 students (Judge, 1991). This study evaluated the first semester grade point averages of 130 student athletes enrolled at Indiana State University from years 1986-1991. The study also suggested that the Proposition 48 initial eligibility requirements were too low, and recommended that non-qualifying students under Proposition 48 standards should be required to attend and graduate from junior college in order to earn their Division I eligibility.

The effects of Proposition 48 with regard to graduation rates were evaluated in a 1994 study (Rives, 1994). A sample of post-Proposition 48 student-athletes was evaluated against a sample of pre-Proposition 48 student-athletes. This study showed that there was no significant increase in graduation rates after the implementation of Proposition 48. It did however show a relationship between ACT scores and high school grade point averages and graduation. Students with higher ACT scores and grade point averages graduated at a higher rate (Rives, 1994). Although not showing a direct graduation rate increase due to Proposition 48, this study tends to validate the NCAA reform track showing the relationship between standardized test score and high school grade point average and graduation.

Sheehan's 1997 study evaluating the effects of Proposition 48 on student-athletes' graduation rates looked at a large sample of general students and athletes from the years 1983-1990 (Sheehan, 1997). This took into account a sample of student-athletes that was both pre and post Proposition 48. Both groups were evaluated to get yearly graduation rates. This particular study showed that student-athlete's graduation rates increased in relation to the general student population during this time period (Sheehan, 1997). This finding is of importance as it shows not only that the reform measure caused an improvement within athletes, but also in relation to the general student population.

Not every study evaluating Proposition 48 verified the reform measure's positive effect. One particular study evaluating the effects of Proposition 48 showed no significant increases (Gambill, 2002). This particular study sampled men's basketball and football players from before and after Proposition 48. Cohort 1 included a sample from years 1979-1980. Cohort 2 included a sample from the years 1990-1991. This study showed that there was no significant increase in graduation rates or grade point averages from before to after Proposition 48 (Gambill, 2002). The author listed such potential reasons for this as a lack of improvement in high school academic preparation, as well as a potential concern over an increase in players looking at themselves as professional athletes once in college. It is important to show that there is not a consensus with regard to the effects of such NCAA reform measures such as Proposition 48.

The racial component of Proposition 48 was identified as a concern in the book, *Racism in College Athletics: The African-American Athlete's Experience* (Brooks, 1993). Brooks argues that Proposition 48 had a disproportionate effect on African-Americans. Brooks admits that African-American males as a whole suffered from a lack of basic educational skills. He also argues that the new reform measure disproportionately affected traditionally black colleges

where many of these African-American student-athletes attend college. Prior to Proposition 48, these traditional black colleges took these African-American student athletes in and offered them the remedial attention that was necessary (Brooks, 1993). This argument is interesting considering the fact that men's basketball has the highest proportion of African-Americans of any NCAA Division I sport (National Collegiate Athletic Association, 2008c).

One study that did not evaluate the effects of reforms, but focused on the direction of NCAA academic reform was completed in 1994. This study surveyed the actual availability of courses and academic opportunities in sport studies and performance at NCAA Division I-A colleges and universities (Kilbourne, 1994). The data from the survey substantiates the fact that colleges and universities have failed to teach those in sport about sport. Recommendations of this study included providing more education of its athletes in sports related classes, much like dance programs are offered by many institutions (Kilbourne, 1994). This study suggested that an increase in formal athletic education would decrease many of the current problems surrounding athletics at the time.

The next step in NCAA Division I initial eligibility reform was put into effect with the freshman class of 1996. Out of concern with regard to the potential racial bias of Proposition 48 (Brooks, 1993; Smith, 2007; Takahashi, 2002; Taplette, 2005), a new and improved model was put in place. This new initial eligibility model became known as Proposition 16 (National Collegiate Athletic Association, 2007a). The new model increased the importance of high school grade point average and decreased the importance of the standardized test score. Under Proposition 16 a student-athlete would be required to have a minimum high school grade point average of 2.0 in 13 core classes. But, under the new model, as the grade point average rose

above 2.0, the required standardized test score to accompany it was allowed to decrease (National Collegiate Athletic Association, 2007a).

One study that evaluated Proposition 16 looked at the high school grade point averages and the median admissions levels of student-athletes at Austin Peay University in the years before and after the implementation of Proposition 16 (Luckey, 1999). 148 students-athletes certified by Proposition 48 and 144 student-athletes certified by Proposition 16 were evaluated. This study showed a significant increase in high school grade point averages and a significant increase in admissions levels of student-athletes at the institution after Proposition 16. But, the study also showed that once these Proposition 16 student-athletes were on campus, their college GPA's and graduation rates did not increase as compared to those that were under the lower Proposition 48 standard (Luckey, 1999).

In another evaluation of Proposition 16, it was shown that predictors of college success were consistent with those used under the current NCAA initial eligibility model (Boudreaux, 2004). This study was performed to look into the widening gap between regular admissions standards at Louisiana State University and the NCAA initial eligibility standards put forth in Proposition 16. Student-athletes at Louisiana State University were evaluated based on pre-college predictors of success and college retention and graduation. It was also shown, however, that the further a student progressed in his college career, the less his high school predictors were relevant as predictors of college success (Boudreaux, 2004).

NCAA initial eligibility standards have been amended twice since the implementation of Proposition 16. The number of required core classes increased in 2000 to 14 core classes and in 2005 to the current model requiring 16 core classes to be completed (National Collegiate Athletic Association, 2008a).

Since the NCAA originally began the process of initial eligibility reform, there have been two other areas of academic reform that have been developed. The first other area had to do with a concept called “percentage toward degree” (National Collegiate Athletic Association, 2009e). This concept requires a student-athlete to complete a certain number of credits per academic term that count towards a specific degree. The intention of this rule was to make sure that all student-athletes are making measurable progress towards a bachelor’s degree (National Collegiate Athletic Association, 2009e).

The first percentage towards degree requirements were put in place in 1997 and amended to the current model in 2005. The current percentage towards degree model calls for a student-athlete entering his or her 3rd year of school to be 40 percent complete with a degree. A student-athlete entering a fourth year of school to be 60 percent complete, and a student entering a fifth year to be 80 percent complete (National Collegiate Athletic Association, 2009a). The primary purpose of the percentage towards degree requirements was, like initial eligibility requirements, to boost graduation rates (National Collegiate Athletic Association, 2009e).

A study regarding the increased percentage towards degree requirements was carried out in 2006. This study identified a gap between the number of junior college athletes that wish to transfer to Division I institutions, and those that actually understand the academic transfer regulations set by the NCAA (Wong, 2006). The study evaluated 195 student athletes in a Northern California community college as to their awareness of new NCAA Division I transfer requirement regarding percentage towards degree.

Of significant importance to our current study are some of the implications that are set forth in Wong’s study. One of the conclusions of this study was that the increased percentage toward degree requirements would have a negative effect on the number of junior college

transfers who would ultimately complete their bachelor's degree (Wong, 2006). A key recommendation of the study was for the NCAA to more closely monitor two-year college transfers as to their academic progress and graduation.

Another study with regard to the increased percentage toward degree requirements evaluated student athlete's academic behaviors in response to the changes. The increased standards were shown to have led to an increase in stress with regard to degree planning as well as an increase in student-athletes changing majors to stay in compliance to the percentage needs (Kulics, 2000). This study surveyed athletes from seven sports and administrators at each of six Midwestern Division I universities within the same conference. This study does not evaluate whether this form of academic reform has affected overall graduation rates.

The most recent direction of NCAA Division I academic reform attempted to place direct responsibility on the institution with regard to graduation rates. This reform measure was put in place in 2005, being called the Academic Progress Rating (APR). The APR requires a sport within an institution to retain and maintain the eligibility of its athletes at a certain rate in order to stay in compliance (National Collegiate Athletic Association, 2009e). Should a team fall below the desired APR percentage, penalties can be imposed such as loss of scholarships or practice time.

The APR is tabulated by assigning a point value to each scholarship student-athlete within an athletic program. Each academic term, each student-athlete has 2 possible points (National Collegiate Athletic Association, 2009e). An athletic program earns one point for successful retention and one point for successful academic eligibility for each student-athlete. Failure to retain or failure to maintain academic eligibility results in a loss of these potential points. A program's APR is calculated by forming a ratio of points earned to total possible

points. The APR has significance with regard to the current study. Failure to graduate results in a loss of possible points, thus affecting an athletic program's APR.

Student-Athlete Academic Support Programs

A separate arm of academic reform included the implementation of academic support programs within member Division I institutions. The NCAA Committee For Academic Performance proposed a widespread plan of action in 1996 within its member institutions, calling for a portion of revenues generated by the NCAA to be allocated to each institution for the development and carryout of student-athlete academic support programs (National Collegiate Athletic Association, 2010). The NCAA governance accepted this proposal and mandated implementation at the NCAA Convention of 1999. A pool of money was set aside by the NCAA and organized into an account called the NCAA Division I Academic Enhancement fund (National Collegiate Athletic Association, 2010). Initially each institution was to be allocated \$25,000 (Thiss, 2009). As of 2005, this figure was increased to \$58,000 per institution (Newsome, 2005).

The programs that have come about from this mandate and funding have included designated athletic academic support staffing, increased student-athlete access to technology, as well as the broadening of a student-athlete support and enrichment program called the CHAMPS/Life Skills Program which deals with academic, athletic, and social issues facing collegiate student-athletes (National Collegiate Athletic Association, 2010). Increased availability to academic support staff and technology such as computer labs offset some of the added pressures and time commitments that student-athletes face (Thiss, 2009). This added support and access were put in place to give the student-athletes added opportunity to have academic success (National Collegiate Athletic Association, 2010).

While the benefits of these programs such as formal academic support, the CHAMPS/Life Skills Program, and increased access to technology are accepted (National Collegiate Athletic Association, 2010; Thiss, 2009), there has been no tangible statistical evidence to attribute these programs to an increase in the academic achievement of Division I student-athletes. It is shown that graduation rates have increased throughout the incorporation of these programs (National Collegiate Athletic Association, 2010), but there have been no direct correlation studies to measure their impact.

In addition to this, it is also noteworthy that the money allocated to each institution to implement such programs is not enough to fully fund these programs. The purpose of this money is to assist in the carryout of academic support programs (National Collegiate Athletic Association, 2010). Additional moneys contributed by the member institutions themselves make up the rest of these programs' operating budgets. Due to this, it is necessary to point out that each member institution contributes different amounts according to their own department policy and budget situation (Newsome, 2005).

The expanse of the range in overall operating budgets within member Division I institutions is important to note when considering this difference in additional funding for academic support programs (Newsome, 2005). According to a survey carried out in 2005 by the Indy Star newspaper, the operating budget of the University of Michigan for the fiscal 2004-05 year was \$61.7 Million (IndyStar.com, 2010). Looking at a much smaller athletic department, such as Eastern Washington University, the same survey showed an operating budget of just \$7.1 Million for the fiscal 2004-05 year (IndyStar.com, 2010). It is easy to infer that due to the wide range in overall athletic department budgets, the moneys allocated towards academic support programs between institutions could be very different.

With regard to the current study, it is noteworthy to reveal that according to the NCAA, the bulk of these allocated funds set aside for academic support have been used by the individual institutions on support staffing and technology (National Collegiate Athletic Association, 2010). Due to the specific measurability of whether or not each institution employs an academic support staff-person specific for men's basketball, the current study will use this variable for correlation evaluation.

Summer School and Post Eligibility Aid for Student-Athletes

One last academic reform of note has come with regard to a rule change by the NCAA in how and what a full athletic academic scholarship would consist of. Adopted in 1990, the NCAA provided for the allowance of NCAA Division I member institutions to pay for summer school for its student-athletes (National Collegiate Athletic Association, 2009b). This allowed member institutions to provide tuition, books, student fees, as well as room and board to its scholarship athletes during the summer term.

This additional opportunity has allowed for incoming and returning student athletes to remain on campus during the summer session and take part in voluntary athletic workouts, as well as gain additional credits towards graduation (National Collegiate Athletic Association, 2009b). The rationale behind this rule change was that many student-athletes are not able to earn enough credits during the normal academic terms due to the added time commitment athletics places on them. Additional opportunity being on scholarship during the summer was seen as a way to recoup some of these credits and give student-athletes a better opportunity of graduation during their regular years of eligibility (National Collegiate Athletic Association, 2006a).

One further rule adjustment came in 1999. This new rule adjustment allowed for member athletic departments to keep a student athlete on scholarship past his or her completion of their

eligibility for competition (National Collegiate Athletic Association, 2009b). This additional aid is referred to as “post-eligibility aid”. These post-eligibility scholarships do not count against the NCAA allotted number of scholarships that a specific program is allowed per year (National Collegiate Athletic Association, 2009b). To explain this further, men’s basketball programs are allowed to have 13 student-athletes on full scholarship during one given year. A student-athlete receiving post eligibility aid does not count against the programs number and is not included in the allowable 13 scholarships available for use (National Collegiate Athletic Association, 2009b).

Both summer school and post-eligibility aid are voluntary programs up to the discretion of each member institution. Neither of these programs is mandatory and different member institutions participate in them according to their own athletic department philosophy and budgetary constraints (Newsome, 2005). Again, like with academic support programs, athletic department with larger budgets have more opportunity to participate in such expensive programs.

Also, as with the academic support programs, there is no specific data to quantify how much of a positive impact these programs have had with regard to academic success and graduation rates. Perception of these programs is positive (National Collegiate Athletic Association, 2010) but the only real data to support this is that the NCAA overall Division I graduation rates continue to improve as all of these programs grow in scope (National Collegiate Athletic Association, 2009c).

NCAA Graduation Rates

As the NCAA progressed with academic reform, Division I student-athletes graduation rates became a focal point. Graduation rates were a tangible and measurable statistic which could explain the academic progress of Division I student-athletes (National Collegiate Athletic

Association, 2001; Knight Commission, 1993). The NCAA needed something to combat negative public perception. Graduation rates became the vehicle by which the NCAA would attempt to achieve this (National Collegiate Athletic Association, 2001).

The United States Department of Education evaluates the overall graduation rates of college students in the United States. A branch of this department called the United States Bureau of Education Statistics is responsible for the recording and publishing of college graduation statistics (United States Department of Education, 2009). The “Student Right to Know Act of 1974” mandated that colleges report such graduation data to the US Department of Education (United States Bureau of Education Statistics, 2009). This information is made public through the Bureau of Education Statistics. An individual student can access the graduation rate data of particular institutions that he or she may be interested in attending (United State Bureau of Education Statistics, 2009).

The NCAA adopted the current United States Department of Education method for evaluating its student-athletes graduation rates (National Collegiate Athletic Association, 1991). Student-athletes were given 150 percent of the normal college degree plan which equals a period of 6 academic years. A freshman class entering college during a specific year would have 6 years to complete their bachelor’s degree (United States Bureau of Education Statistics, 2009). At the end of the six year period the student would either be declared a graduate or a non-graduate.

The first cohort of graduation rate data became available in 1990 as the freshman class of 1984 had exhausted their 6 year window of opportunity (National Collegiate Athletic Association, 1991). Key statistics from that first cohort were then evaluated against Federal graduation rate data of the total university student population. It was shown that student-athletes

graduated overall 1 % lower than the general student population. NCAA graduation rates of the 1984 freshman class showed that athletes graduated at a rate of 52% compared to 53% of all students (National Collegiate Athletic Association, 1991).

Areas of concern from that initial cohort were the extremely low rates of African-American male student-athletes. The 1990 study showed that African-American males graduated at a rate of only 28% (National Collegiate Athletic Association, 1993). Although it was higher than the respective male African-American general population, it was considerably lower than other groups. Also, it was shown that men's basketball and football were by far the two lowest sports according to the data (National Collegiate Athletic Association, 1993).

As the NCAA continued to increase academic initial eligibility standards, and introduce new percentage towards degree requirements, and implemented new academic support programs, graduation rates showed improvement both overall as well as in comparison to the general student population (National Collegiate Athletic Association, 2007c). Once Proposition 48 came into effect in 1986, it is noteworthy that in each year since, athletes' graduation rates have consistently been 1-2% higher than the general student population. In addition to this, all sports, gender groups, and racial groups have improved overall during this time (National Collegiate Athletic Association, 2007c). But over this time the same groups have remained at the bottom. African-American male student-athletes are still the lowest significant racial group, and men's basketball and football remain at the bottom of the sport-specific groups (National Collegiate Athletic Association, 2007c).

Upon looking at these data in the NCAA published tables, there are 3 sets of evaluated numbers as seen in Table 1. The first column is simply the raw graduation rate data for the particular freshman class as described in the previous paragraph. The second column is what is

referred to as the “4-class rate” (National Collegiate Athletic Association, 2006c). This rate evaluates the current freshman class rate along with the previous three freshman class rates. The four rates are compiled into one in order to show the current trend. The third column evaluates transfers into the respective institution in addition to native population and is only shown in the “4-class” method (National Collegiate Athletic Association, 2006c). These transfers can come from other four year institutions or from junior colleges and could have been NCAA initial eligibility qualifiers as well as non-qualifiers. They are then lumped into the school’s graduation rate data by using their 6 year academic opportunity window as well (National Collegiate Athletic Association, 2006c).

Table 1.

Example of NCAA Graduation Rate Reporting

Student-Athletes # by Sport Category	----- MEN'S BASKETBALL -----					
	FRESHMAN RATE				TRANSFER	
	97-98		4-CLASS		4-CLASS	
<u>MEN</u>	N	%	N	%	N	%
Am. Indian	3	33	9	22	7	29
Asian/Pacific/Islander	0	0	4	25	13	46
Black	445	42	1837	38	1263	36
Hispanic	15	33	45	42	33	64
White	279	48	1148	51	414	62
N-R Alien	48	42	179	42	102	58
Other	30	53	93	38	44	32
<u>Total</u>	<u>820</u>	<u>44</u>	<u>3315</u>	<u>43</u>	<u>1876</u>	<u>45</u>

Beginning in 2004, the NCAA amended its method of evaluating this data. In addition to the raw graduation rate data produced and reported as before, they also have added a new method of reporting to go along with the previous report. Due to the mobility of the student-athletes within Division I, the NCAA deemed that there were too many outliers and transfers to simply account for all of them in the previous transfer evaluation (National Collegiate Athletic Association, 2006b). Previously, the transfer column only accounted for transfers into the institution. The new method would account for such transfers not only moving into the institution but also account for those moving out toward other institutions. Institutions were not penalized according to the new method for students who transfer out to other four year institutions that were in current good academic standing. Under the old method, a student athlete that transferred to another four year institution and graduated still hurt the graduation rate score of the initial institution. The NCAA decided that was unfairly penalizing schools that lose students in good academic standing. It was also decided that this method was skewing the data and not giving a truly accurate evaluation (National Collegiate Athletic Association, 2007b).

The new method is called the GSR, or Graduation Success Rating (National Collegiate Athletic Association, 2007b). The NCAA believes this to be a more accurate reading and number than the raw graduation rate data as it evaluated every student and tracks each as one number. In the prior number, a single student-athlete could be counted more than once and, in a negative way, throw the number off.

GSR numbers are naturally higher than the earlier transfer because each athlete is only counted one time, eliminating the negative counters of transfers as long as they graduate. But, even though these GSR numbers are higher, over time, they still provide the same tools in evaluating trends and concern areas. Key findings while using the new GSR data mirror earlier

findings (National Collegiate Athletic Association, 2007b). As a whole all groups are increasing their academic success, but the same subgroups are still of concern. African American males, as well as men's basketball and football remain the lowest of all groups. This listing of yearly GSR is published along with the prior graduation rate data report.

One study that evaluated Division I graduation rates looked into the admissions standards of Division I athletic institutions (Willingham, 2009). This study evaluated a group of football and men's basketball student athletes over a period of two decades. Athletes were evaluated based on their admissions criteria. It was shown that there were a large proportion of special admissions waivers given to these athletes. The low graduation rates of football and men's basketball were seen as a result of the increase in special admissions waivers granted to student-athletes (Willingham, 2009). Many of these athletes were not prepared to deal with the rigors of college level coursework, thus leading to low graduation rates.

Men's Basketball

NCAA Division I men's basketball has consistently had the lowest graduation rate of any sport since graduation rate data has been evaluated (National Collegiate Athletic Association, 2009f). Since the first year of evaluation, men's basketball graduation rates have indeed improved. But none-the-less, every year the result has been the same: Division I men's basketball players graduate at a rate lower than any other Division I sport (National Collegiate Athletic Association, 2009f).

Several studies have been performed on NCAA Division I men's basketball players. One such study showed that football, men's basketball, and African-American student-athletes have been the most affected groups with regard to the NCAA increased initial eligibility requirements (Takahashi, 2002).

Another study of men's basketball student-athletes interviewed current and previous African-American men's basketball players, athletic administrators and current Division I men's basketball coaches as to the perceived factors and characteristics that impact graduation rates. The results of this study are consistent with findings of other studies of African-American male non-athlete students (Hatcher, 2004). Self-efficacy, lack of role models, environmental factors, and lack of preparedness were shown to be factors leading to the poor graduation rates. A key point of this study is that findings relevant to African-American male men's basketball players mirror those to the general African-American male student population (Hatcher, 2004).

Smith's study looked at factors contributing to academic success and failure of African-American men's basketball athletes (Smith, 2007). Throughout this study it was acknowledged that men's basketball consistently had the lowest graduation rate of any NCAA Division I sport. To complete this study, ten former African-American Division I men's basketball players were interviewed as to the positive and negative factors influencing their overall academic success. Results from this study showed that coaches' placement of basketball as the highest priority above academics as well as the mental/physical/time demands of basketball were decided to be negative factors towards academic success (Smith, 2007).

Other recent studies have shown that overwhelming time pressures, coaches' demands, lack of academic support, and an overall lack of preparedness has contributed to men's basketball low graduation rates (Heinel, 2008; Pendleton, 2005). According to Smith's study of junior college transfer student athletes, coaches' involvement in the academic support process is one factor that leads to academic success and retention (Smith, 2009).

This theme of coaches' care or lack thereof given to academic success has been suggested in enough places to warrant its inclusion into the current study. Overall emphasis or care given

by coaches to the academic success of their student-athletes will be used as a variable to be studied with regard to correlation to graduation rate.

Academic Non-Qualifiers

NCAA Academic non-qualifiers are those who do not meet the current initial eligibility standards upon graduation from high school (National Collegiate Athletic Association, 2009a). These student-athletes are not eligible for Division I competition during their first year and have two options to earn their remaining Division I eligibility.

The first option is to complete a year in residency at a Division I institution without participating in practice or competition, as well as not being on scholarship. The student-athlete also uses one of his 4 years of competition while fulfilling his or her year of residency. The student athlete has to pay his or her own way to school during the initial academic year (National Collegiate Athletic Association, 2009a).

The second method to earn division I eligibility for academic non-qualifiers is to go to junior college and graduate with an associate's degree. He or she is allowed to be on athletic scholarship at the junior college. Upon earning an associate's degree, the student-athlete can then transfer to a Division 1 institution and play out their remaining eligibility (National Collegiate Athletic Association, 2009a).

As the NCAA initial eligibility standards have continued to climb, there have been more and more academic non-qualifiers. This has led to an increase in the overall number of student-athletes going to junior colleges (Smith, 2007; Takahashi, 2002).

One study evaluated the effects of being declared an academic non-qualifier. This study interviewed four non-qualifiers who went on to attend junior college. The psychological effects of being labeled a non-qualifier were reported to have caused a lowering in academic confidence

and overall self-esteem (Van Alstine, 1988). Belief in future academic achievement was shown to be low in these specific student-athletes (Van Alstine, 1988).

Junior College Transfers

There are currently several hundred junior colleges and community colleges in the United States. The intent of the junior college is to provide a lower-cost educational opportunity for students (United States Department of Education, 2009). Junior colleges offer continuing education, certificate or trade programs, two year degrees designed to put students directly into the workforce, as well as two-year associate's degrees designed toward transferring to four-year institutions.

There is varied research as to how well these junior college transfers fare upon transferring to four year academic colleges and universities. Some studies show that there is very little difference in the academic success of transfers as opposed to native students. One such study that evaluated North Virginia community college transfers, showed no significant difference in native students' grade point average and the community college transfer students' grade point average (Solomon, 2001). This study evaluated 561 community college transfers to George Mason University over a five year period. The grade point average of the transfer group showed no significant difference from the group of 2057 native GMU students during the same time (Solomon, 2001).

Another study evaluated junior college transfers at Idaho State University against native students. Populations from both a public and private junior college were evaluated. It was shown that there was no significant difference in graduation rates, although natives tended to graduate earlier than transfers (Crawford, 2003).

On the other side of the debate, there are several studies that suggest that junior college transfers do not fare as well as native students at four year institutions. One study in support of this evaluated Colorado community college transfers, showing that native students at a specific four year university graduated at a significantly higher rate than the community college transfer students (Horrell, 1992). This study evaluated 654 transfer students and 4171 native students who began as freshman in 1987. The study evaluated the progress of all students involved in the study through fall, 1990. It was shown a significantly higher proportion of native students graduated than the transfers (Horrell, 1992).

Two other studies echoed this result showing that native students graduated at a higher rate than junior college transfers (Best, 1990; Morris, 2005). Morris' study evaluated a population at Morgan State University while Best's evaluated students at the University of Louisville.

In another study with regard to junior college transfers, a sample population at the University of Mississippi was evaluated with regard to predictors of success. Results of the study showed that over 65% of the transfer population studied earned Bachelor's degrees (Dickerson, 1993). It was also shown that predictors of success included high school grade point average and ACT score. These predictors of success tended to mirror those of the current NCAA Proposition 48 standards thus validating the NCAA's current standard (Dickerson, 1993).

As for the question of which is a better route for students to take, a study by the United States Department of Education evaluated what happened to initial enrolling students with regard to the difference of initial four-year college enrollees and two-year initial college enrollees. It is shown that initial four-year college enrollees graduate with a bachelor's degree at a far higher rate than initial enrollees at a two-year college (Pascarella, 1991). This study also revealed that

students of similar aptitude and achievement levels in high school show this same gap. Students initially enrolling in four-year colleges graduate at a higher rate than students of an equal achievement level who instead initially enroll in two-year colleges (Pascarella, 1991). Reasons for this discrepancy are varied. Some two year students opt to take two year degrees or certificates and go directly into the job market. The transfer situation is thought to have an effect. Some of the two year transfers do not continue simply due to the changes in environment. Another reason brought forth in this study is that the overall environment of the four year college experience is more fostering to retention and completion than the two year community college based experience (Pascarella, 1991).

Junior College Athletics Transfers

A study specifically addressing the transfer of junior college student-athletes to four year Division I universities was carried out in 2009. This study evaluated the barriers to NCAA academic non-qualifier student-athletes entering their first year of junior college by interviewing a group of 30 student athletes and 15 administrators at an Alabama junior college in the fall of 2008 (Smith, 2009). The 30 student-athletes all had aspirations of transferring to Division I universities upon completion of their Associate's degree. Barriers shown to exist included the perceived importance of the academic advisor's role in making certain that the student-athletes were not only aware, but put in a position to fulfill the Division I transfer criteria. The need for many of these students to take a number of remedial classes due to their un-preparedness for college level coursework, as well as the increased percent towards degree requirements were perceived as barriers towards successful transfer to Division I institutions (Smith, 2009).

Junior College Credit Transfer

As junior college students transfer into four-year institutions, their credits transfer according to the four year universities' transfer credit evaluation policies. These policies differ greatly from institution to institution (CollegeBoard.com, 2010). Often times different state university systems have rules governing the entire public state university system. These junior college transfer students are subjected to these policies which ultimately are a factor in determining how quickly the particular student will be able to earn their bachelor's degree from the four year institution.

Upon earning an associate's degree there are two primary evaluation methods used by four year institutions. The first method is referred to as "line item" evaluation (Washington State Board For Community And Technical Colleges, 2010). This method takes the transfer student's transcript and evaluates each class individually. Often times, in these cases, many of the classes may transfer in as elective credits, but not directly in place of a required general education course. This method can be costly to certain transfer students who wish to earn their bachelor's degree, as they will require added time to fulfill general education requirement courses. Both the State of Washington (Washington State Board For Community And Technical Colleges, 2010) and State of Oregon (Oregon University System, 2010) public universities use this method for out of state junior college transfer students.

The other method of transfer evaluation is referred to as "direct transfer." This method entails the four year institution honoring a junior college associate's degree directly (Washington State Board For Community And Technical Colleges, 2010). Under these terms, a junior college associate's degree included coursework is brought into the four year institution in its entirety, fulfilling all general education requirements. The State of Idaho public universities use this method for both in and out of state junior college transfer students (Idaho State Board of

Education, 2010), while both the Washington (Washington State Board For Community And Technical Colleges, 2010) and Oregon public universities (Oregon University System, 2010) use this method for in-state junior college transfer students only.

Which method of evaluation of transfer credits that is used can play a significant role in a junior college transfer student's overall success. This difference in the evaluation method used can have a distinct effect on our studied sub-group of junior college transfers and affect their graduation rate. Smith, in his 2009 study, pointed out the importance of transfer credit situation for a junior college student athlete and stated the importance of credit management preparing for such a transfer (Smith, 2009).

Due to the suggested importance of credit transfer with regard to junior college transfer-student success, as well as the wide differences in institution and state education policies with regard to such credit transfer, this variable will be included in the current study. The current study will evaluate the correlation between specific credit transfer policies and the graduation rate of the studied sub-group.

A Gap in Research

As suggested by Wong (2006), there is no specific research that evaluates Bachelor's degree graduation rates of junior college transfers that were NCAA academic non-qualifiers. Non-qualifiers are a group who did not meet the NCAA's initial eligibility standards. But many of these athletes find their way back into Division I athletics after graduating from a junior college. But prior to the current study, there has been no evaluation of this particular sub-group's graduation rate. Thus, the purpose of this research is to fill this gap and evaluate such graduation rates.

Summary

The bond of American education and organized sport began to form with the dawn of industrialization. Prominent industrialist families such as the Rockefellers and Carnegies funded athletic teams and events in major cities throughout the late 1800's (Gerdy, 2000). Traits learned on the field of play were seen as positives by major companies of the time. The benefits of organized sport became a part of the American college campus as the 19th century was coming to a close (Gerdy, 2000; Chu, 1989; Lee, 1983).

Out of the need for sports regulation, the NCAA was formed (National Collegiate Athletic Association, 2009g). Since its forming in 1905, the NCAA has grown to oversee a \$4 Billion annual college athletics industry in the United States (National Collegiate Athletic Association, 2009g). With added popularity and competition, problems followed. Public perception during the 1970's and 1980's viewed elite college athletes as merely employees of their respective university (Berkowicz, 1991, Reynolds, 1985). It was perceived that athletes often times had no intention of ever earning a degree (Berkowicz, 1991).

In response to this negative public perception, the NCAA put into action a series of academic reforms. The most widespread reform came with regard to student-athlete's initial eligibility standards. These standards include a combination of high school grade point average and standardized test score (National Collegiate Athletic Association, 2009e). Other avenues of academic reform have come with regard to progress towards degree as well as the implementation of a variety of NCAA sponsored academically related programs within Division I athletic departments.

Graduation rates became the measurement by which the NCAA could evaluate the progress and effect of its reforms. Student-athletes took a lead in overall graduation rates over the general student population in 1986, and have never trailed since (National Collegiate Athletic

Association, 2007a). Men's basketball continuously has had the lowest of any sport's graduation rate and African-American males have had the lowest of any ethnic/gender group (National Collegiate Athletic Association, 2007a).

It has been shown that men's basketball has been proportionately the most affected of any sport with regard to initial eligibility reform (Smith, 2007, Takahashi, 2002). That is, there have been proportionately more men's basketball academic non-qualifiers than any other sport. Many of these non-qualifiers go to junior college to try to earn their remaining Division I eligibility (Smith, 2007, Taplette, 2005; Takahashi, 2002).

Research shows mixed results as to the pros and cons of transferring from junior colleges. Some studies show that junior college transfers fare just as well as native students in four year institutions (Crawford, 2003; Solomon, 2001) whereas several others show that native students graduate at a higher rate than transfers (Gileskie, 1998; Horrell, 1992; Pascarella, 1991). Other research calls into question the ability of junior colleges to prepare student-athletes for the academic rigors of four year institutions (Kulics, 2006; Smith, 2009). Credit loss upon transferring from junior colleges and four year institutions has been suggested to be yet another potential added academic hurdle these transfer students face (Smith, 2009).

On top of all of these hurdles, it is suggested that coaches' involvement in the academic process of their student-athletes is yet another factor that influences academic success (Smith, 2009). This is just yet another potential barrier these junior college student-athletes may face.

Due to the importance that the NCAA has placed on evaluating and reporting Division I athletics graduation rates, the fact that men's basketball is the most affected sport with regard to initial eligibility standards, and the questions regarding junior college student transfer success, it would seem logical to ask as to what rate this group of men's basketball junior college transfers

is graduating with bachelor's degrees, as well as which variables affect this graduation rate in either a positive or negative manner? The NCAA initially denied this group access to Division I competition due to their academic non-qualifier status. These student-athletes then earned their eligibility by graduating with associates degrees. Prior to the current study, there has been no evaluation of the graduation rate of this specific subgroup. There also has been no specific data which evaluates the level of impact that certain NCAA mandated programs have had on these student-athletes. The study explained in chapter 3 helps to fill a gap in research that can assist both the NCAA, as well as its member institutions, in setting future legislation and policy.

Chapter Three

Methods

It has been shown that NCAA Division I men's basketball student-athletes consistently graduate at the lowest rate of any Division I sport (National Collegiate Athletic Association, 2009d). It has also been suggested that men's basketball has been affected by the increases in NCAA Division I initial eligibility standards more than any other sport (Smith, 2007; Takahashi, 2002). As the NCAA increased its initial eligibility standards upon prospective Division I student-athletes, more and more have been declared academic non-qualifiers (Smith, 2007; Takahashi, 2002; Taplette, 2005). Many of these non-qualifiers attend and graduate from junior colleges in order to earn their remaining Division I eligibility.

To attempt to raise the overall graduation rates within Division I athletics and to help give its "at-risk" student-athletes a better chance at overall academic success, the NCAA has implemented a variety of reforms and academic support programs (National Collegiate Athletic Association, 2009e). As a result of these reforms and programs, the overall graduation rate of Division I student-athletes has indeed improved (National Collegiate Athletic Association, 2009c). But up to this date there has been no research that identifies the specific graduation rate of NCAA initial eligibility non-qualifier junior college transfer student-athletes. There has also been no direct correlation research between certain NCAA implemented academic support programs and their impact on graduation rates. The following study evaluates graduation rates of NCAA Division I men's basketball academic non-qualifier junior college transfers as compared to the overall Division I men's basketball graduate rates. Secondly, the impact of specific NCAA academic support programs in relation to the studied sub-group is also examined.

Participants

There are currently 347 institutions that compete in NCAA Division I men's basketball (National Collegiate Athletic Association, 2009i). Compliance directors of selected institutions are the participants of this study for reporting purposes. A compliance director is an administrative position, often an assistant or associate athletic director, within each NCAA Division I athletic department. The compliance director's role within an athletic department is to oversee that their respective department remains in compliance with NCAA Division I bylaws (National Collegiate Athletic Association, 2006a). Part of this compliance process involves the evaluating and reporting of student-athlete academic eligibility. Therefore these compliance directors are the correct choice to be participants of this study, as they will have direct knowledge and access to the required information.

The current study includes a sample of these 347 Division I men's basketball institutions. To obtain the optimum sample size the current study will use a 95% confidence level and a 5% standard error. These levels of confidence and error are widely accepted in research studies (Kempf-Leonard, 2005; Raosoft, 2010). Using these levels, the optimum sample size for the graduation rate evaluation of the studied sub-group is 183 institutions (Raosoft, 2010).

To select the 183 institutions, a random number generator is used. Research shows that the use of a computerized random number generator is an effective and accurate method of generating a random sample (Pironio, 2010; Random.org, 2010). The random number generator used for this study is located within the Random.org website.

According to research, acceptable response rates for electronically mailed survey list 50% as average, 60% as good, and 70% as very good (Instructional Assessment Resources, 2010; Salkind, 2007). For the current study the researcher worked with a goal of a 60% response rate,

or 110 responses. A pilot study was performed for this study which included a 60 % response rate. For this pilot study, 10 institutions were included with 6 sending responses.

The time period of student-athlete classes studied includes the freshman classes of 2000-2004. These years will comprise the most recent 5 freshman classes for which graduation rate data is available and are used because of the method the NCAA uses to evaluate graduation rates. Current NCAA graduation rate evaluation allows for student athletes to take six years from their initial freshman enrollment to complete their bachelor's degree (National Collegiate Athletic Association, 1991). Therefore, according to the NCAA evaluation method, these freshman classes of 2000-2004 would exhaust their six year window of opportunity from 2006-2010. Taking into account that junior college transfers do not spend their freshman year at the current Division I institution, each of these student-athletes will be evaluated based on their date of initial enrollment at their respective junior college. These transfers' six year window starts upon initial full time enrollment at their junior college.

Instrumentation

The current study asks the compliance director of each NCAA Division I institution to report how many junior college transfers, who were NCAA academic non-qualifiers, competed for their institution in men's basketball having initial college enrollment come between fall of 2000 and fall of 2004. The survey also asks as to how many of these particular student-athletes within these years graduated with a bachelor's degree during their NCAA allotted six year window.

The survey then asks a series of demographic questions that may have an impact on graduation rates. A copy of the survey can be found in Appendix B. These questions focus on academic programs and institutional policy. All of these programs and policies are suggested to

be related to student-athlete academic success, but there have yet to be any direct correlation studies conducted to evaluate the impact each of these variables has on graduation rates (Kulics, 2006; Newsome, 2005; Smith, 2009). Each of these questions focuses on the most recent academic year, 2009-10. For instance, with regard to the availability of a specific program, the question is asked whether or not such a program was offered during the 2009-10 academic year. .

The pilot study performed addressed clarity of the survey form and accessibility to the desired information. According to the responses of the pilot study, the survey form was very clear but the accessibility of the desired information was only moderate. To determine this, responders to the pilot study were asked opinion questions that provided this information.

Procedures

For this study, a survey form was electronically mailed through *Google Docs* to the compliance director of each of the 183 institutions included in the study. With the growth of the internet and the expanded use of electronic mail for business communication, the electronically distributed study has become a more widely used study method (Sheehan, 2006). Electronically distributed studies have been shown to cut costs, expedite transmission time, and potentially quicken the response time (Shannon, 2002; Sheehan, 2006). One study showed that 96.7% of a panel of experienced survey researchers believed that studies distributed electronically would reduce costs, and 80.3% believed that these forms would be returned more quickly than those using the traditional pencil-and-paper method (Shannon, 2002). Studies distributed electronically are not without concerns. Confidentiality and privacy problems can be issues with such electronic communication (Shannon, 2002).

A cover letter accompanied the form explaining the study and its confidentiality. Responses were returned through *Google Docs*. *Google Docs* automatically places responses

into a spreadsheet which does not disclose the sender. The researcher will have no way of knowing which response is linked to which institution. There will be no marking of each individual survey form.

This study seeks to make inferences by using solid sampling techniques consisting of NCAA Division I men's basketball institutions. Arguments for studying a sample of a population as opposed to an entire population include concerns of practicality and feasibility (Kempf-Leonard, 2005). By studying a sample of 183 of the total 347 member Division I men's basketball programs, this study is increasing its practicality and feasibility.

Follow-up electronic mailings through *Google Docs* were planned as needed in order to ensure the maximum number of responses possible. The first follow-up was sent three weeks after the initial electronic mailing. A response within three weeks is acceptable for electronic mailing (Shannon, 2002), and it is listed on the survey form that a response within that time frame is appreciated. Additional follow-up mailings were sent every two weeks until the response goal was met. Included in each follow-up mailing was a reminder that each school may only submit one response and to disregard the follow-up mailing if they had already taken part in the survey.

Data Analysis

The various questions of this study include an independent and a dependent variable. One of the primary benefits of quantitative research is that in working with a sample, established values or parameters, such as mean, range, or standard deviation, can be identified to describe the population (Kempf-Leonard, 2005). The particular quantitative research to be used is descriptive in nature. It evaluates the variables without attempting to change or alter them. The

outcome only happens once for each student-athlete to be studied and once for each question (Salkind, 2007).

The specific graduation rate of the student-athletes included in this study was found by evaluating the responses of the survey form distributed through *Google Docs*. Results from the survey form produced a total number of non-qualifier junior college transfers that belong to each of the five cohorts from 2000-2004. To produce a workable statistic, the researcher coded each student-athlete so that a dichotomous variable is created (Dimension Research, Inc., 2005). The result produced a number that could be used to evaluate the graduate rate of the sampled group.

The comparison group of the current study was the overall NCAA Division I men's basketball graduation rates of the freshman classes from 2000-2004. These overall men's basketball graduation rates are published by the NCAA and are readily available. Coding each student-athlete to create a dichotomous variable also was used for this population enabling the production of a workable statistic (Dimension Research, Inc. 2005). An overall mean for this population was produced representing the graduation rate of NCAA Division I men's basketball during the 5 year time frame to be studied.

The studied sub-group is a sample of the total population of Division I men's basketball student-athletes. The test for significant difference was evaluated using a one-tailed, Z-test for a single mean (Choudhury, 2009). The one-tailed Z-test for a single mean is the appropriate test of measurement as we are working with one population mean and evaluating a sample of such population looking for a significant difference between the sample and the population mean (Choudhury, 2009). The Z-test is the appropriate test as it is used to compare sample and population means for significant differences for problems where $n > 30$ (ChangingMinds.org, 2010; Choudury, 2009). The current study used a one-tailed Z-test as the hypothesis used is

searching to confirm that the sample graduation rate is lower than the population graduation rate. As this result is one sided, a one-tailed Z-test is the appropriate evaluation. Significance level for this study will be set at $p < .05$.

The second part of the survey deals with the different programs and policies which were thought to have an impact on graduation rates (Kulics, 2006; Newsome, 2005; Smith, 2009). Each of these responses was evaluated to find the correlation to each institution's graduation rate for the studied subgroup. A correlation study evaluates how much a particular variable has an impact on a result (Statsoft, 2010; Trochim, 2006). For each variable, the researcher evaluated the impact on overall graduation rate. A number was produced as a correlation value. The correlation value can be from -1.00 to +1.00. A negative number suggests a negative impact whereas a positive number suggests a positive impact (Trochim, 2006).

There are two different correlation evaluations that were used in the current study. The first block of questions that evaluate programs and institutional policies all used the point-biserial correlation (ChangingMinds.org, 2010; Young, 1997). All of these questions looked to evaluate the correlation between the result of the different questions and the individual institution's graduation rate for the given academic year. In these cases, the answer to the different questions are all either yes or no. Therefore, these results are dichotomous, or binary. The graduation rate that these answers were correlated with, are an example of a ratio. These ratios are the graduation rates of the studied sub-group from the individual institutions. In summary, each of these correlations includes one binary variable and one ratio variable. The results of such correlations are non-linear and therefore need a test which can accommodate such circumstances. According to research, the proper correlation to be used in such instances, is the use of the point-biserial correlation (ChangingMingds.org, 2010; Young, 1997).

The last question of the survey form asked for the opinion of the individual athletic department's compliance director as to the level of emphasis or care the current coaching staff placed on academics. This opinion was recorded with a 7 point Likert scale. In this case, the proper correlation evaluation is the Pearson correlation (ChangingMinds.org, 2010). For this evaluation, neither variable is binary. The graduation rate is a ratio and the Likert scale in this case produces continuous data (Brown, 2000). This produces a linear relationship as shown by a straight line when graphing the results. For evaluations where neither variable is binary (yes or no type answers) and where the relationship is linear, the Pearson correlation is proper (ChangingMinds.org, 2010; Graphpad.com, 2010).

Conclusion

This study evaluates if there is a significant difference between the overall NCAA Division I men's basketball graduation rate and the graduation rate of a specific portion of men's basketball players for the most recent 5 year time frame. It also evaluates some of the institutional programs and policies that have been suggested to have impact on overall student-athlete academic success. The specific group evaluated in this study are junior college transfers who were NCAA division I academic non-qualifiers.

A survey form was used to obtain the needed information and a one-tailed Z-test for a single means was used to determine if a significant difference exists between the sample and the population mean. In addition to this, correlation studies were performed on each specified variable to determine the impact each has on the graduation rate of the studied sub-group of student-athletes.

The following chapters will show the results of the current study and discuss conclusions and implications for possible further study.

Chapter Four

Findings

This study focuses on the sub-group of academic non-qualifier student-athletes within NCAA Division I men's basketball, who then attended and graduated from a junior college. These student-athletes then transferred into Division I institutions to play out their remaining eligibility. The study separates the particular sub-group out of the men's basketball population, and evaluates their graduation rate over the past five years. The graduation rate of this sub group is then compared to the overall graduation rate of men's basketball during the same five year period. The hypothesis of this study is that the graduation rate of this sub-group will be significantly lower than the graduation rate of the overall men's basketball population.

In addition to evaluating these graduation rates for significant difference, this study also looks at five variables which have been suggested to have an impact on graduation rates for student athletes. These variables include the existence of a men's basketball specific academic support staff member, whether or not the specific academic institution accepts associate's degrees on a direct transfer basis from either in-state or out-of-state junior colleges, whether or not the individual athletic department fully funds either summer school or post eligibility aid for its student-athletes, and an evaluation of the level of emphasis/importance the current coaching staff places on academics. Each of these variables are measured in this study and then evaluated with the graduation rate of our studied sub-group for correlation. The hypotheses of this study are that each of these variables will have a positive correlation to the graduation rate of the studied sub-group.

The first measurement taken in the study is with regard to graduation rate of the studied sub-group. A survey was sent via Google Docs to compliance directors of 183 NCAA Division I

men's basketball institutions asking them to report the number of these junior college transfers who participated for their institution as well as the number of those who graduated. The years that were evaluated included the classes whose six year window of graduation opportunity ended with the years 2006-2010. 89 of the 183 compliance directors responded with data. This represents a 48 percent rate of return. There were a total of 417 of these non-academic qualifier junior college transfers reported to have participated in men's basketball during the studied time. Of these 417 participants, the compliance directors reported that 141 graduated. This represents a graduation rate of 0.344 for our studied sub-group. This data is presented in Table 2. Table 2 lists three variables that were measured by the survey. Participants are the student-athletes who fit the criteria of being an academic non-qualifier junior college transfer. Those that graduated are listed in the next column. The graduation rate of each individual institution who responded to the survey is the third column.

Table 2

Graduation Rate and Descriptive Statistics of Studied Sub-Group

	Number	Min	Max	Sum	Mean	Std. Deviation
Participants	89	0	12	417	4.69	2.86
Graduated	89	0	6	141	1.58	1.17
Rate	79	.00	1.00	27.19	.344	.191

In addition to the graduation rate of this sub-group there were other certain data worth mentioning as a result of this study. Of the 89 member schools that reported data for this study, 10 of them did not have a single junior college transfer participant during the studied time frame. The average amount of participants from the 89 reporting institutions was 4.69. This represents

just under one participant per year. The highest number of participants for a reporting institution was 12.

The graduation rate of the studied subgroup was then evaluated against the graduation rate of the total population of NCAA Division I men's basketball. The total number of men's basketball participants and graduates are recorded yearly by the NCAA. For comparison, the same five year window was used. According to the NCAA, the total number of Men's Basketball participants who belong in the last five years' graduation evaluation is 4151 (National Collegiate Athletic Association, 2010b). The total number of these participants that have graduated is 1947. This represents a graduation rate of 0.469.

Z test

To evaluate these two derived graduation rates for significant difference, this study used a one-tailed z test. The result of this one-tailed z test brought forth a z value of -16.11. This z value corresponds to a p value of 0.00001 which thus rejects the null hypotheses. Based on this result and the rejection of the null hypotheses of the study, the graduation rate of these junior college transfers is significantly lower than the graduation rate of the total population of NCAA Division I men's basketball.

Correlation Evaluations

The second part of this study evaluated certain variables to measure their correlation to the graduation rate of the studied sub-group. Because the hypothesis suspected this lower rate of graduation, the design of the study determined a need to evaluate these variables that have been suggested to have an impact on graduation rates.

The first of these variables to be measured was the role of the sport specific academic support staff person. The question in the survey asked each institution if there was an academic

support staff person in place for the exclusive use of the men's basketball program. This variable is listed in Table 2 as "Academic Staff". As seen in Table 2 in the "Sum" column, there was such an academic support staff person in place in 36 of the 89 reporting institutions.

Results of the survey questions for the remaining 5 variables are also explained in Table 3. Whether or not the institution accepted direct transfer associate's degrees from in-state or out-of-state junior colleges are listed in the table as "In-State Associate's" and "Out-of-State Associate's". Athletic department funding policy regarding the funding of summer school and post-eligibility aid are listed in the table as "summer school" and "post-eligibility aid". The number of institutions that have these programs in place is the number in the "Sum" column. With regard to the "Coach's Emphasis" variable, the results of this survey used a 7 point Likert scale. Table 3 shows the minimum, maximum, and mean levels of this perceived importance or emphasis placed on academics by the men's basketball coaching staff.

Table 3

Descriptive Statistics of the variables measured for correlation

	Number	Min	Max	Sum	Mean	Std. Deviation
Academic Staff	89	0	1	36	.40	.494
In-State Associate's	89	0	1	54	.61	.491
Out-of-State Associate's	89	0	1	7	.08	.271
Summer School	89	0	1	45	.51	.503
Post Eligibility Aid	89	0	1	33	.37	.486
Coach's Emphasis	89	2	7	405	4.55	1.11

Correlation between having a men's basketball specific academic support staff person in place and the graduation rate of the studied subgroup was found by using the point-biserial correlation. As shown in Table 4, it was determined that having this academic support staff person in place had a positive correlation of .273 with graduation rate. This means that there indeed was a positive relationship between having this academic support staff member and graduation rate.

Table 4

Correlation Between Academic Support Staff and Graduation Rate

		Rate	Academic Staff
Rate	Pearson Correlation	1	.273
Academic Staff	Pearson Correlation	.273	1

Showing a positive correlation between this academic support staff member and graduation rates is a good thing. It validates one of the NCAA academic reform programs as well as provides good information to administrators, coaches, and student-athletes alike. The fact that this positive correlation exists at a level of .273 shows the importance of having this academic support. It is this type of information that helps athletic department administrators make decisions as to the allocation of department resources.

The next variables to be evaluated for correlation with the graduation rate of the studied sub-group have to do with institutional credit transfer policy. The variables to be evaluated were whether each institution accepts associate's degrees from either in-state or out-of-state junior colleges on a direct transfer basis. As shown in Table 3, showing the results of the study's survey, there were 54 of the 89 reporting institutions that accept direct transfer associate's

degrees from in-state junior colleges. There were only 7 of the 89 that accept direct transfer associate's degrees from out-of-state junior colleges. Using the point-biserial correlation, Table 5 shows that accepting direct transfer associate's degrees from in-state junior colleges had a positive correlation of 0.155 to the graduation rate of the studied sub-group. Direct transfer associate's degrees from out-of-state junior colleges are shown in Table 6 to have had a positive correlation of 0.219 to the graduation rate of these junior college transfers.

Table 5

Correlation Between In-State Direct Transfer Associate's Degrees and Graduation Rate

		Rate	In-State Associate's
Rate	Pearson Correlation	1	.155
In-State Associate's	Pearson Correlation	.155	1

Table 6

Correlation Between Out-of-State Direct Transfer Associate's Degrees and Graduation Rate

		Rate	Out-of-State Associate's
Rate	Pearson Correlation	1	.219
Out-of-State Associate's	Pearson Correlation	.219	1

These positive correlation values of .219 and .155 are indeed positive and show that they do contribute to graduation rate. While their levels are below that of having a men's basketball specific academic support staff person in place, they are sufficient to acknowledge that they are positive factors to take note of.

Athletic department summer school and post eligibility funding programs were the next variables evaluated for correlation to the graduation rate of the studied sub-group. The survey asked if the athletic department fully funded either summer school or post eligibility aid for men's basketball. The study results shown in Table 3 pointed out that 45 of the 89 reporting institutions fully fund summers school for their men's basketball student-athletes, while 33 of the reporting institutions fully funded post eligibility aid. Again, using point-biserial correlation, it was determined that fully funding summer school had a positive correlation of 0.027 with the graduation rate of the studied subgroup. This result is shown in Table 7. Post-eligibility aid showed a positive correlation, as seen in Table 8, of 0.089 with the graduation rate of these junior college transfers.

Table 7

Correlation Between Athletic Department funding Summer School and Graduation Rate

		Rate	Summer School
Rate	Pearson Correlation	1	.027
Summer School	Pearson Correlation	.027	1

Table 8

Correlation Between Athletic Department Funding Post-Eligibility and Graduation Rate

		Rate	Post Eligibility Aid
Rate	Pearson Correlation	1	.089
Post Eligibility Aid	Pearson Correlation	.089	1

These correlation values for summer school and post-eligibility aid are indeed positive but their levels are lower than either the institutional credit transfer variables, as well as the academic support staff member. These variables are useful especially to the NCAA as well as athletic department administrators. The NCAA has allocated funds to each member institution to put towards paying for these two programs. While they both show positive correlations to graduation rate, their levels are low. These programs are indeed useful and do to some degree assist in boosting graduation rate, but the low levels of correlation may cause the NCAA to focus money in a more productive direction.

The last variable to be evaluated in this study was the perceived emphasis or level of importance placed upon academics by the current men's basketball coaching staff. The compliance directors were asked to rate this level of emphasis/importance on a Likert 7 point scale. The results of this question were then evaluated for correlation to graduation rate using the Pearson Correlation method. Table 3 shows that on the 7 point scale, the coaches' average level of emphasis placed on academics was 4.55. Using the Pearson Correlation it was determined that coaches' emphasis on academics had a positive correlation of 0.317 with the graduation rate of the studied sub-group. This evaluation is seen in Table 9.

Table 9

Correlation Between Perceived Level of Coaches' Emphasis on Academics and Graduation Rate

		Rate	Coaches' Emphasis
Rate	Pearson Correlation	1	.317
Coaches' Emphasis	Pearson Correlation	.317	1

This correlation level is the highest of each of the variables that were evaluated in this study. The level of .317 shows that a strong emphasis placed on academics by the coaching staff does in fact contribute to graduation rate.

Other statistical findings within this study included the number of reporting institutions that did not have any junior college transfer participants in their men's basketball program during the studied time period. There were 10 institutions of a total of 89 that responded to the survey that did not have any of these junior college transfer student-athletes. It is also worth noting the results of the additional questions to these particular 10 institutions. 9 of these 10 specific institutions employ a men's basketball specific academic support staff person, fully fund summer school, and fully fund post eligibility aid. In addition, of these 10 institutions, the average score for coaches' emphasis on academics was 6.00.

This is interesting information as it points out that these 10 institutions that did not have any of these junior college transfers had a higher proportion of academic staff persons, summer school, and post-eligibility aid. These 10 schools also had a higher average score for coach's level of emphasis placed on academics than the rest of institutions which participated in the study.

Chapter Five

Analysis and Recommendations

The NCAA has placed great importance on academic reform within the Division I member institutions over the past 25 years (National Collegiate Athletic Association 2009c). Increasing student-athlete graduation rate has been goal of this reform. Since 1984, student-athlete graduation rates have consistently improved in every sport (National Collegiate Athletic Association 2007c). Beginning in 1986, the Division I student-athlete graduation rate passed the graduation rate of the overall college student population and has not relinquished that lead since (National Collegiate Athletic Association 2007c).

While it cannot be disputed that improvements have been made, there are still concerning groups within Division I athletics. Men's basketball has had the lowest graduation rate of any sport in every year since graduation rates began to be tabulated (National Collegiate Athletic Association, 2009f). While even this sport has indeed improved during the era of NCAA academic reform, it still remains to have the lowest graduation rate. Research has shown that men's basketball has been the most affected sport of any with regard to NCAA mandated initial eligibility reform (Smith, 2007; Takahashi, 2002). This has led to the large volume of junior college transfers into Division I men's basketball institutions.

Research is mixed as to the overall success of junior college transfer students upon arriving at four year academic institutions. One such study with direct relation to student-athletes questioned their overall academic preparedness upon transferring to their four year institution (Smith 2009). Within the recommendation chapter of Wong's (2006) study, the suggestion for further study into the graduation rate of these of these transfer student-athletes was put forth.

The results of this study has shown that the graduation rate of the studied sub-group was, in fact, significantly lower than the overall graduation rate of the population of Division I men's basketball during the studied time period. In addition to this, in each of the six variables that were evaluated, a positive correlation existed with the graduation rate of the studied sub-group.

Analysis of Findings

Research has called into question whether junior college student-athletes are prepared for the rigors of four year academic coursework upon transferring (Smith, 2009). The Knight Commission (1993) went as far as suggesting to the NCAA that all of these junior college transfers be required to sit out a year, while on scholarship, allowing them time to adjust to the added demands of the four year institution. Wong's (2006) study explicitly recommended that the graduation rate of this sub-group be evaluated. The current study evaluated this graduation rate, which was shown to be 12 percent less than the overall graduation of the men's basketball population during this same time.

The next theme that needs to be pointed out is with regard to the correlation evaluations. Six variables were evaluated in this study for correlation to the graduation rate of the studied sub-group. As suggested by research (Knight Commission, 1993; National Collegiate Athletic Association, 2009b; Smith, 2009; Smith, 2007), all six of these variables had positive correlations. The hypotheses of the current study were confirmed in each case. Results of these correlations tended to put these variables into pairs. The two variables which showed the highest correlation to graduation rate were coach's level of importance or emphasis placed on academics, as well as the existence of a men's basketball specific academic support staff person. The correlation levels for these two variables were .317 and .273 respectively.

Prior research has suggested this strong bond between coaches' emphasis on academics and student-athlete academic success. Smith's (2009) study showed a strong coach's involvement in the academic process to be a positive factor for student-athlete success and retention. On the other side, the results of Smith (2007) showed that coaching demands placing the sport ahead of study to be a negative factor toward academic success. With this variable having the highest correlation to graduation rate evaluated in this particular study, this result confirms this strong bond between the coach and the academic process.

The next highest correlation between the evaluated variables and graduation rate had to do with the existence of the sport specific academic support staff person. Smith's (2009) study of junior college athletes stressed the importance of academic support for junior college student athletes while still at junior college, but there is a hole in research, evaluating these support staff members in the NCAA Division I setting. The NCAA partially funds certain academic support programs within all Division I athletic departments, but the extent of the total funding of academic support staff is up to the budgetary constraints and institutional decisions of the department administration (National Collegiate Athletic Association, 2010a). This level of correlation to graduation rate validates the NCAA in their aim to increase this form of student-athlete academic support.

The next pair of variables having positive correlation to graduation rate had to do with institutional credit transfer policy. Whether or not institutions accepted associate's degrees on a direct transfer basis from either in-state or out-of-state junior colleges were evaluated for correlation to graduation rate. The results showed that for In-state junior colleges the correlation level was .155 and for out-of-state it was .219. These correlations are positive and show a relationship to credit transfer policy but these levels are not as high as the first two variables.

The importance of this credit transfer situation for junior college transfers was pointed out in Smith's (2009) study. The current study re-affirms this. The NCAA makes no mention of credit transfer situation in any of its literature or directives.

The third pair of variables that showed positive correlation to graduation rate had to do with the funding of summer school and post eligibility aid. These two programs showed positive correlation of .029 and .089 respectively. While these correlations are positive they are the lowest of the six evaluated correlations. They do have a positive relationship with the graduation rate of this sub-group but this relationship is a slight one. To date, there has been no prior direct research evaluating how these programs affect graduation rate, although graduation rates have continued to improve since their implementation (National Collegiate Athletic Association, 2009f). The NCAA intentions of these programs are to enable student-athletes access to additional credits, furthering their path to graduation (National Collegiate Athletic Association, 2010a). While public perception of these programs is positive (National Collegiate Athletic Association, 2010a), there is no direct evaluation on record for these programs. The current study confirms a positive correlation does exist between these two programs and graduation rate, albeit a small one.

Looking further into these pairs of variables and the results that have been shown in this study leads to some simple conclusions. Of the six variables evaluated, the two that are human had the highest correlation or effect on graduation rate. The coach and academic support staff member have the largest effect on graduation rate of any of the evaluated variables. This human support quality leading to academic success, while suggested in research (Smith, 2009; Smith, 2007), has not been specifically quantified with regard to NCAA Division I student-athletes.

The two variables with the lowest correlation to graduation rates are two programs that the NCAA has allocated vast resources to over the past 15 years. Athletics departments fully funding summer school and post eligibility aid showed the lowest correlation rate of any of the evaluated variables. According to the NCAA, public perception of these programs is positive (National Collegiate Athletic Association, 2010a). But while their correlation is indeed positive with graduation rate, the level of relationship is small comparably to the other variables evaluated in this study.

Implications of Findings

The results of this study have importance to three different groups of people. First these results should have importance to the NCAA. A piece of the NCAA's own mission statements calls for the integration of college athletics into higher education so that the student-athletes' "educational experience is paramount" (NCAA 2009a). This study points out that there is in fact a problem. Junior college transfers within Division I men's basketball are graduating at a significantly lower rate than even the entirety of the lowest graduating sport within Division I athletics. This is a specific problem that has not been evaluated outright before.

The NCAA has shown that it will attempt to make improvement over time. Vast amounts of NCAA resources have been allocated to academic reform (National Collegiate Athletic Association, 2010; Newsome, 2005) and improvement has definitely been made (National Collegiate Athletic Association, 2009f). This can be seen by the consistent upward trend of student-athlete graduation rates over the past 25 years (National Collegiate Athletic Association, 2009f). Through self-study, as well as by taking information from outside sources like the Knight Commission, the NCAA has proven that it is committed to improvement. The current study brings out new information and specifically identifies a problem as well as certain factors

that are linked to graduation rate. This information should be of service to the NCAA in its future efforts toward future academic reform and progress.

This study has importance to athletic department administrators and coaches. The fact that this sub-group graduates at such a low rate may have implications or cause changes in recruiting philosophy. Also, showing the correlation that these variables have on graduation may help administrators make future decision as to allocating athletic department resources.

Between the difference in institutional credit transfer policy (CollegeBoard.com, 2010) as well as the overall budget differences (Newsome, 2005), every NCAA Division I athletic department is unique. Administrators of these departments are charged with making the best decisions for their own respective programs that fit their own departments. Showing this problem may lead administrators to further evaluate the situation that they have in place for these junior college transfers and may either lead to a range of decisions from limiting their recruitment, to re-allocating resources into programs that have been shown to have a strong correlation to graduation rate.

In addition to making decisions with regard to department funding and recruiting philosophy, the current study may lead these administrators to look more closely at their current coaching staffs as well as use this information in the hiring process of future coaches. The coaches role as a factor in academic success was put forth in prior research (Smith, 2009; Smith, 2007), as well as indirectly promoted by the NCAA through the APR (National Collegiate Athletic Association, 2009e). This bond was affirmed by the current study. Identifying that coaches indeed play a strong role in these student-athletes' academic success should provide clarity and help shape future athletic department decisions.

Thirdly, this study has importance to current and future student-athletes. This study shows that this particular sub-group is at risk of academic failure. Student-athletes that fall into this group may be able to use the results of this study to help make a more informed decision as to which institution to transfer to upon completion of junior college. The information put forth by this study could be used as a form of recruiting guide for student-athletes. Prior research suggested the importance of academic support upon transfer, as well as the importance of institutional credit transfer policy (Smith, 2009). Prior studies suggested the link between coach and academic success (Smith, 2009; Smith, 2007). The current study quantifies the correlation of these variables and graduation rate. Using the results of this study as a sort of check list, could be beneficial to prospective student-athletes in selecting an institution that best fits their individual situation.

Recommendations For Findings

This study was the first to single out this specific sub-group and evaluate its graduation rate. This course of action was specifically recommended by Wong's (2006) study, while several other studies led to the current study. There are aspects of this study that could have been elaborated on. With regard to the sample size, the current study could have used the entire population of men's basketball. While the outcome of the graduation rate may not have altered, including every Division I men's basketball institution in the study may have given the study more credibility when being looked at in the future.

In addition to this, the current study could have been strengthened by looking at multi-variate correlations to graduation rate. The current study evaluated the six variables individually. Finding the best combination of 2 or 3 variables would potentially provide additional information and assist decision makers in the various decisions that surround these issues. The

NCAA supports three of these variables directly through funding (staff, summer school, and post-eligibility aid) and one (coaches' emphasis) through policy. These are the four of the six that the NCAA has chosen to support. Finding which multiples produce the best result could enable athletic departments to maximize limited resources.

Recommendations For Future Research

The current study supported all hypotheses. The graduation rate of the studied sub-group was shown to be significantly lower than that of the total population of NCAA Division I men's basketball. In addition, all six suggested variables to have a positive correlation to the graduation rate of this sub-group were confirmed.

This study identified a problem. It also identified certain variables that have an impact on graduation rate. But this is just the beginning into looking for a solution to this problem. Many questions are drawn from this initial study. Why does this sub-group graduate at such a low rate? What factors lead to such a low graduation rate?

This study did in fact identify variables that have a positive correlation to graduation rate, but it does not look at the background which leads this group of student-athletes to fare so poorly in the four year academic environment. Further study into these junior college transfer student-athletes is recommended, especially during their time during junior college. Wong's (2006) study suggests that many junior college student athletes have a very limited understanding of what they must do to prepare for transferring to a Division I institution. Gaining a better understanding of this group of student-athletes is essential to find methods to improve their overall academic success.

Further study into the coach's role in student-athlete academic success is recommended. The NCAA has indirectly put pressure on these coaches by instituting the APR (National

Collegiate Athletic Association, 2009e), but this is at the policy level. This study showed coaches to have the strongest single influence on graduation rate of any of the evaluated variables. Additional study into this coach/student athlete relationship, as well as methods to increase this emphasis placed on academics would be beneficial to the student-athlete.

With regard to the NCAA fostered programs of summer school and post-eligibility aid, it would be beneficial to look into why these perceived beneficial programs have such a low positive correlation to graduation rate. Further study would potentially identify ways to adjust these programs to increase their benefit to the student-athlete.

In finality, there is one last course of study that, I argue, must be looked at more closely: the mandatory sitting out of a year by these transfer student-athletes. The Knight Commission (1993) recommended that these particular transfer student-athletes take a year away from competition while attending the Division I institution in order to better adjust to the rigors of the four year academic environment. This group of student athletes has been shown by this study to graduate at a significantly lower rate than the already lowest graduation Division I sport. This result, along with questions raised as to the preparedness (Smith, 2009; Wong, 2006) of these student-athletes for four year academics, tends to support this recommendation to mandate a sit out year. Allowing these student-athletes to take a year to assimilate to their new environment may lead to higher success. To date, there is no specific data that evaluates the graduation rate of student-athletes who exercise this NCAA allotted sit out year. Further study into this sit out year and its effect on academic success and graduation rate could help shape future academic reform and policy.

To conclude, this study identified a problem amongst a sub-group within NCAA Division I men's basketball. It also put forth certain variables that have been shown to have a positive

effect on overall graduation rates. Hopefully this study will be used in the future to assist in further research. While graduation rates and overall academic success of Division I student-athletes has, in fact, improved over the past 25 years (National Collegiate Athletic Association, 2009f), there is still much room for growth. The current study brings to light a group which seems to have been left behind. Hopefully future research will find the reasons for this, as well as the best path to improvement.

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Appendix A

List of NCAA Institutions Sponsoring Division I Men's Basketball

2009-10

List of NCAA Institutions Sponsoring Division I Men's Basketball
2009-10

University of Akron	California State University, Northridge
Alabama A&M University	California State University, Sacramento
Alabama State University	University of California, Berkeley
University of Alabama at Birmingham	University of California, Davis
University of Alabama, Tuscaloosa	University of California, Irvine
University at Albany	University of California, Los Angeles
Alcorn State University	University of California, Riverside
American University	University of California, Santa Barbara
Appalachian State University	Campbell University
University of Arizona	Canisius College
Arizona State University	Centenary College (Louisiana)
Arkansas State University	University of Central Arkansas
University of Arkansas, Fayetteville	Central Connecticut State University
University of Arkansas, Little Rock	University of Central Florida
University of Arkansas, Pine Bluff	Central Michigan University
Auburn University	College of Charleston (South Carolina)
Austin Peay State University	Charleston Southern University
Ball State University	Chicago State University
Baylor University	University of Cincinnati
Belmont University	The Citadel
Bethune-Cookman University	Clemson University
Binghamton University	Cleveland State University
Boise State University	Coastal Carolina University
Boston College	Colgate University
Boston University	University of Colorado, Boulder
Bowling Green State University	Colorado State University
Bradley University	Columbia University-Barnard College
Brigham Young University	University of Connecticut
Brown University	Coppin State University
Bryant University	Cornell University
Bucknell University	Creighton University
University at Buffalo, the State University of New York	Dartmouth College
Butler University	Davidson College
California Polytechnic State University	University of Dayton
California State University, Bakersfield	University of Delaware
California State University, Fresno	Delaware State University
California State University, Fullerton	University of Denver
	DePaul University

University of Detroit Mercy
Drake University
Drexel University
Duke University
Duquesne University
East Carolina University
East Tennessee State University
Eastern Illinois University
Eastern Kentucky University
Eastern Michigan University
Eastern Washington University
Elon University
University of Evansville
Fairfield University
Fairleigh Dickinson University, Metropolitan
University of Florida
Florida A&M University
Florida Atlantic University
Florida Gulf Coast University
Florida International University
Florida State University
Fordham University
Furman University
Gardner-Webb University
George Mason University
George Washington University
Georgetown University
University of Georgia
Georgia Institute of Technology
Georgia Southern University
Georgia State University
Gonzaga University
Grambling State University
Hampton University
University of Hartford
Harvard University
University of Hawaii, Manoa
High Point University
Hofstra University
College of the Holy Cross
University of Houston
Houston Baptist University
Howard University
University of Idaho
Idaho State University
Illinois State University
University of Illinois, Champaign
University of Illinois at Chicago
Indiana State University
Indiana University, Bloomington
Indiana University-Purdue University, Fort Wayne
Indiana University-Purdue University at Indianapolis
Iona College
University of Iowa
Iowa State University
Jackson State University
Jacksonville State University
Jacksonville University
James Madison University
University of Kansas
Kansas State University
Kennesaw State University
Kent State University
University of Kentucky
La Salle University
Lafayette College
Lamar University
Lehigh University
Liberty University
Lipscomb University
Long Beach State University
Long Island University-Brooklyn Campus
Longwood University
University of Louisiana at Lafayette
University of Louisiana at Monroe
Louisiana State University
Louisiana Tech University
University of Louisville
Loyola Marymount University
Loyola University (Illinois)

Loyola University (Maryland)
University of Maine, Orono
Manhattan College
Marist College
Marquette University
Marshall University
University of Maryland, Baltimore County
University of Maryland, College Park
University of Maryland, Eastern Shore
University of Massachusetts, Amherst
McNeese State University
University of Memphis
Mercer University
University of Miami (Florida)
Miami University (Ohio)
University of Michigan
Michigan State University
Middle Tennessee State University
University of Minnesota, Twin Cities
University of Mississippi
Mississippi State University
Mississippi Valley State University
Missouri State University
University of Missouri, Columbia
University of Missouri, Kansas City
Monmouth University
University of Montana
Montana State University-Bozeman
Morehead State University
Morgan State University
Mount St. Mary's University
Murray State University
University of Nebraska, Lincoln
University of Nevada, Las Vegas
University of Nevada
University of New Hampshire
New Jersey Institute of Technology
University of New Mexico
New Mexico State University
University of New Orleans
Niagara University
Nicholls State University
Norfolk State University
University of North Carolina, Asheville
North Carolina A&T State University
North Carolina Central University
North Carolina State University
University of North Carolina, Chapel Hill
University of North Carolina, Charlotte
University of North Carolina at Greensboro
University of North Carolina, Wilmington
University of North Dakota
North Dakota State University
University of North Florida
University of North Texas
Northeastern University
Northern Arizona University
University of Northern Colorado
Northern Illinois University
University of Northern Iowa
Northwestern State University
Northwestern University
University of Notre Dame
Oakland University
The Ohio State University
Ohio University
University of Oklahoma
Oklahoma State University
Old Dominion University
Oral Roberts University
University of Oregon
Oregon State University
University of the Pacific
University of Pennsylvania
Pennsylvania State University
Pepperdine University
University of Pittsburgh
University of Portland
Portland State University
Prairie View A&M University
Presbyterian College
Princeton University

Providence College
Purdue University
Quinnipiac University
Radford University
University of Rhode Island
Rice University
University of Richmond
Rider University
Robert Morris University
Rutgers, State Univ of New Jersey, New Brunswick
Sacred Heart University
Sam Houston State University
Samford University
University of San Diego
San Diego State University
University of San Francisco
San Jose State University
Santa Clara University
Savannah State University
Seattle University
Seton Hall University
Siena College
University of South Alabama
University of South Carolina, Columbia
South Carolina State University
University of South Carolina Upstate
University of South Dakota
South Dakota State University
University of South Florida
Southeast Missouri State University
Southeastern Louisiana University
University of Southern California
Southern Illinois University at Carbondale
Southern Illinois University Edwardsville
Southern Methodist University
University of Southern Mississippi
Southern University, Baton Rouge
Southern Utah University
St. Bonaventure University
St. Francis College (New York)
Saint Francis University (Pennsylvania)
St. John's University (New York)
Saint Joseph's University
Saint Louis University
St. Mary's College of California
St. Peter's College
Stanford University
Stephen F. Austin State University
Stetson University
Stony Brook University
Syracuse University
Temple University
Tennessee State University
Tennessee Technological University
University of Tennessee at Chattanooga
University of Tennessee, Knoxville
University of Tennessee at Martin
Texas A&M University, College Station
Texas A&M University-Corpus Christi
Texas Christian University
Texas Southern University
Texas State University-San Marcos
Texas Tech University
University of Texas at Arlington
University of Texas at Austin
University of Texas at El Paso
University of Texas, Pan American
University of Texas at San Antonio
University of Toledo
Towson University
Troy University
Tulane University
University of Tulsa
U.S. Air Force Academy
U.S. Military Academy
U.S. Naval Academy
University of Utah
Utah State University
Utah Valley University
Valparaiso University
Vanderbilt University

University of Vermont
Villanova University
University of Virginia
Virginia Commonwealth University
Virginia Military Institute
Virginia Polytechnic Institute & State University
Wagner College
Wake Forest University
University of Washington
Washington State University
Weber State University
West Virginia University
Western Carolina University
Western Illinois University
Western Kentucky University
Western Michigan University
Wichita State University
College of William and Mary
Winthrop University
University of Wisconsin, Green Bay
University of Wisconsin, Madison
University of Wisconsin, Milwaukee
Wofford College
Wright State University
University of Wyoming
Xavier University
Yale University
Youngstown State University

Appendix B
Survey Form

VITA

Author: Michael W. Score

Place of Birth: Seattle, Washington

Undergraduate Schools Attended: University of Washington

Degrees Awarded: Bachelor of Arts, Business Administration, 1996,
University of Washington

Bachelor of Science, Political Science, 1996,
University of Washington

Professional

Experience: Adjunct Faculty, North Idaho College, 2011-Present

Insurance Agent, Farmers Insurance, 2010-Present

Assistant Basketball Coach, University of Idaho, 2007-2010

Assistant Basketball Coach, University of Utah, 2004-2007

Assistant Basketball Coach, Eastern Washington University, 2000-2004

Assistant Basketball Coach, Southeastern Iowa CC, 1996-2000