

**FRANS, KELLY ASHLEY. Ways in Which Intercollegiate Athletics Contribute to University Success. (Under the direction of Dr. Michael Kanters.)**

The purpose of this study has been to determine the value that a winning athletic program can add to a college or university. The premise for this idea evolved from research regarding the annual *U.S. News & World Report* college rankings, in which various factors are considered, including reputation. Since the athletic department is frequently referred to as the “doorstep of the University,” the research sought to determine whether or not a winning athletic program does in fact enhance the reputation of a university, thus making it more appealing to talented students. Along with the annual rankings, a method called the Resource-Based View (RBV) was used to calculate athletic success, based on four characteristics that included win-loss record, compliance, graduation rates and financial health. Using the seven public institutions in the Atlantic Coast Conference as the subjects, the athletic departments were analyzed and ranked based on these criteria and evaluated against each institution’s ranking in *U.S. News* using Spearman’s Correlation Coefficient. Although the results of the study did not result in the strong relationship between a winning athletic department and university success that was predicted, the small sample size was a factor. This study sets up a starting point for a nationwide study of all institutions in the National Collegiate Athletic Association as a follow-up study and has great promise.

**WAYS IN WHICH INTERCOLLEGIATE ATHLETICS  
CONTRIBUTE TO UNIVERSITY SUCCESS**

By  
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## **Chapter One – Introduction and Statement of the Problem**

The relationship between athletics and colleges and universities across the United States has a long and storied history. The role of athletics within the university framework has undergone significant changes since its more humble beginnings in the mid-1800s, and the relationship has not been without controversy. What part does athletics play in a university setting? Do athletics contribute to the overall institutional mission of the university? Are athletics a potentially dangerous distraction from academic pursuits? Do the two provide support or benefit to one another or are they constantly in competition for financial resources, student interest and recognition from the outside world?

Athletics have been charged with a wide scope of results, from bringing national recognition to a university (Shulman & Bowen, 2001) and increasing donations (Shulman & Bowen, 2001) to expending enormous amounts of resources that could be otherwise directed to academic interests and becoming a commercialized monster (Shulman & Bowen 2001). The financial question consistently appears to be the crux of the debate, as college sports cost millions and millions of dollars each year to operate. Would university settings be better without competitive athletics? If so, it has been argued that many of them would also “be better off financially if they decided to eliminate comparative literature and advanced mathematics. The difficult question is whether varsity sports bring enough value to universities to offset their costs” (Noll, 1999, p. 36). Many recent research studies have attempted to discern whether or not there is a direct correlation between athletics and university fundraising. The studies generally were posed in a question such as “does a winning intercollegiate athletics program result in increased giving to the university as a whole?” The premise in support of such a study is that a university with a winning athletic program results in greater interest and greater pride in the institution, which in turn results in

an increased level of donations not only in support of athletics, but also to the university's general fund (Shulman & Bowen, 2001). Although there remains some degree of disagreement and debate concerning this topic, three highly publicized and regarded studies have surfaced very recently that firmly contend that no relationship exists between a winning athletic program and donations to the university (Shulman & Bowen, 2001; Sperber, 2000; Zimbalist, 1999). However, the topic is a little more complicated. Each of these studies, and the ones that precede them, casually and with an element of uncertainty, allude to more indirect or intangible benefits that a university may receive as a result of its athletic program such as greater exposure, enhanced reputation, increased applications and even a higher quality of applicants. These potential benefits are much harder to measure, but may nonetheless be a significant factor within the university. The purpose of this study is to determine in what ways a winning intercollegiate athletic program could make positive contributions to the university and to develop an instrument for assessing these benefits.

An intercollegiate athletic department's successes and failures are judged every day by the win-loss records of particular sports. The university in which this athletic department resides, however, may use a different measurement system to judge athletics, such as the financial health of the department, the lack of any NCAA violations and the performance of its student athletes both on and off the field. An athletics program is not the only department in an institution to go through a ranking process. Each year, *The U.S. News & World Report* releases its annual ranking of excellence among nation-wide colleges and universities. Initially created for the purpose of helping high school students and their parents determine the best institution of higher learning for their individual needs, this annual ranking system has come to be highly regarded and respected as a key indicator of institutional successes and failures. This paper seeks to determine whether or not athletic

success plays a role in university success, and whether athletic benefit to the university can be measured and compared using an athletic success ranking criteria and the *U.S. News & World Report* measurement instrument in conjunction with one another.

This paper brings forth a topic that is extremely significant, timely and often, controversial. In an era in which colleges and universities are scrambling for sufficient funds to properly educate students amongst budget cuts, more expensive technology and an uneven faculty to student ratio (Graham & Thompson, 2001), big time athletic programs are spending millions of dollars each year, oftentimes in the face of scandal, corruption and a disregard for educational principles. Therefore, it is necessary to take a closer look at the academic versus athletic situation in this country's higher education system to determine what, if any, value is brought to the table by competitive intercollegiate sports. One of the most important things about this topic is to whom the importance is in regard. The usefulness of this paper is not limited to athletic directors, athletic administrators and coaches. This paper cuts to the core of issues that are important to all who are involved in a university setting, from college Presidents to professors, to student athletes and their parents. These issues are not going to go away and must be addressed in order to ensure not only a successful collegiate athletic program, but also a successful university system going forward.

Any attempt to summarize current research on this subject would inevitably result in confusion, disagreement and mixed messages. We know for certain that colleges and universities as well as the public at large are becoming increasingly interested in pinpointing the effectiveness of all university programs as well as the cost-effectiveness of all decisions (Graham & Thompson, 2001). We know for certain that intercollegiate athletics are becoming a big business, with financial figures consistently climbing into the multimillion



range (Shulman & Bowen, 2001). We know that college sports have been plagued with scandal, unfortunate situations both on and off the field of play, as well as a move away from pure educational values (Zimbalist, 1999). What we do not know is whether the negatives outweigh the positives and how to measure such interactions. We do not know how college sports can contribute positively to a university setting and we do not know what the future holds for college sports in the university. Uncertainty is a reality and the subject is constantly debated.

The addition that the results of this research will make to this body of knowledge is that it will not only focus on tangibles such as revenues versus expenditures, but will delve more closely into intangibles such as enhanced reputation and increased visibility. To date, researchers tend to casually mention these factors, while focusing their attention on the more readily accountable items. The research will set out to effectively measure these factors, while justifying the reasons for doing so. In addition, the research will also bring together the concepts of university success and athletic success, first analyzing each ideal separately, then together, to view the interplay between the two. Finally, the research will provide a starting point for other researchers to test the method, debate the results, and come closer to resolving the uncertainty surrounding the place of athletics within the collegiate setting.

## **Chapter Two – A Review of the Literature**

The purpose of this study is to ascertain the impact that an intercollegiate athletic program can have on the university as a whole and to determine whether or not athletic success and university success are related. The importance of this topic is clearly identifiable by the enormous amounts of interest, time, money and resources spent on athletics in a university setting. As colleges and universities seek to evaluate their offerings, missions, success and reputation, taking a close look at the athletic departments they house becomes imperative, as sports programs frequently serve as the front porches of the universities, the places in which people initially identify and form opinions about these institutions of higher learning.

In order to fulfill the mission and purpose of this review of literature, there are several topics that need to be addressed. The framework of a complete analysis of the topic of an athletic department's potential for impacting the university as a whole in a positive way must include the history of higher education in America, the historical role of intercollegiate athletics within higher education and the recent developments that have contributed to such potential impact. The first section of this review will lay out the inception, framework and growth of colleges and universities. The second section will review the growth and historical significance of university sports. The third section will analyze the first signs of modernization and commercialization of college sports, ushered in around the turn of the 20<sup>th</sup> century. The fourth section will address a period of extensive growth that occurred during the 1950s and has continued indefinitely. The fifth section touches upon the financial circumstances that have resulted from the increased commercialization surrounding college sports. Section six compares the relevance of the financial side of the issue versus any related indirect factors. Section seven looks more closely at indirect factors unrelated to

financial success that play a major role in the picture of university success. Section eight turns back to the financial element in terms of the impact of a successful athletic program on fundraising. The ninth section touches upon the suggested negative consequences of athletics on the university. And finally, the tenth section will propose suggestions for finding an effective balance between college sports and the educational mission of the university. With these sub-topics in mind, a more accurate depiction of the literature can be provided.

### **1 History of Higher Education in America**

Higher education in America is undoubtedly an influential and shaping force in society. Colleges and universities are turned to for research, knowledge, guidance and the development of young adults into future leaders. The scope and framework of higher education has changed significantly since its inception in America, when it was modeled closely after prestigious forms at Oxford and Cambridge with a divine purpose (Chu et al, 1979). 19<sup>th</sup> century English theologian and philosopher John Henry Newman in his classic study “The Idea of the University” helped lay the foundations of the modern university. He regarded it as a place of impeccable honor, tranquility and reflection where “inquiry is pushed forward and discoveries perfected and verified” (Honan, 2001). In 1842, Brown University President Francis Wayland stated that the purpose of higher education was “to communicate knowledge and to confer discipline” (Chu et al, 1979, p. 39). Similarly, Princeton President James McCosh echoed that “the highest end of a university is to educate; that is to draw out and improve the faculties which God has given” (Chu et al, 1979, p. 39). Throughout the 1840’s however, this British-inspired model was challenged by a more modern German view, less focused on history and more concerned with “new learning” (Chu et al, 1979, p. 39). Science and research prevailed in these new forms of the

institution of higher learning, but slowly a more “American” view began to take shape, highlighted by practical application and service to the people (Chu et al, 1979). A utilitarian viewpoint emerged and regardless of the demands of culture or science, the primary responsibility became betterment of the human condition (Chu et al, 1979). Colleges and universities began forming across the nation, and with this growth came a charge to meet the needs of the community in which it was a part (Chu et al, 1979).

By the early 20<sup>th</sup> century, many educational models had been tried across the nation and there lacked one clear defining feature of American higher education. Educational leaders were given freedom in determining the specific characteristics of their institution, and this openness led to a business-minded model of leadership (Chu et al, 1979). New programs developed, and student recruitment and fundraising became primary goals. As such, the development of intercollegiate sport was facilitated, and sport became a resource-drawing component of higher education, as presidents believed it to attract both funds and students. The rationale for supporting athletics within the missions of colleges and universities is based on its leadership potential and its emphasis on excellence. A second justification is the impact of college sports on building a sense of community for an institution. The final justification that is most often cited is the potential revenue-generating ability of athletics (Shulman & Bowen, 2001). The challenge at this point became how to achieve the Greek ideal that holds mind and body in balance with intercollegiate athletics and academics (Honan, 2001).

## **2 Growth of Intercollegiate Sports in Higher Education**

Just as the role of American higher education in society has evolved, so has the role of intercollegiate athletics within the university framework. The relationship between athletics and the institution of higher learning in the United States dates back to 1852 when the first intercollegiate sporting event occurred between the Harvard and Yale boat clubs in Lake Winnepesaukee, New Hampshire (Zimbalist, 1999). Initially created as a student-centric activity with purposes such as school spirit and diversion, the role of athletics within the university framework has changed significantly since student-athletes first began competing in the Ivy League. As college sports began to develop, they were originally under student control (Thelin, 1994). Within a short amount of time, however, college sports showed signs of complexity that would prove to play out in a way that students, athletes and administrators could have never imagined, and the role of those sports within the university would begin a long pattern of growth, change and at times, controversy.

Although rowing, baseball and a number of other sports entered onto the university scene, football developed most rapidly throughout the 1870s and took center stage as the focal point of intercollegiate athletics (Shulman & Bowen, 2000). Historian Frederick Rudolph noted that not only did this exciting new sport “reverberate” with national character; it also foreshadowed the future of college sports more generally (Shulman & Bowen, 2000, p. 6). As football began to take shape, it seems that the “passions, rationalizations, and concerns of college sports” in the 19<sup>th</sup> century were similar to those of today, however, the marketplace was entirely different (Shulman & Bowen, 2000, p. 7). The similarities lie in the immediate importance that college sports asserted in all levels of the university. In 1870, Columbia University President Harry Barnhard stated to a group of young athletes after a victory, “You have done more to make Columbia known than all your

predecessors...because little was known about Columbia one month ago, but today wherever the telegraph cable extends, the existence of Columbia College is known and respected” (Zimbalist, 1999, p. 7). Princeton University President Woodrow Wilson told alumni in 1890, “Princeton is noted in this wide world for three things: football, baseball, and collegiate instruction” (Zimbalist, 1999, p. 7). The marketplace has changed remarkably since the days that these statements were made; yet their foresight is phenomenal. Little did these gentlemen know what the next century would bring in regard to exposure, pervasiveness and prominence of intercollegiate sports, but they proved to be right on target. Today, American college sport has become an institutional program of major significance and a prominent part of the public image of higher education as a whole (Chu et al, 1985). The “business of college athletics” has emerged and is defined as a situation in which athletes provide public entertainment, gain attention and money for their academic institution and prepare for professional careers (Chu et al, 1985).

### **3 The Modernization and Beginnings of Commercialization of College Sports**

Although the extent was not clearly assessed at the time, commercialism was creeping into college sports from the beginning. Even that first sporting event between the boat clubs of Harvard and Yale was reportedly sponsored by a local real estate promoter who was selling land in the area - the humble beginnings of sport sponsorship (Shulman & Bowen, 2000). The years that followed brought increased competitiveness, a larger audience, media coverage and a “win at all costs” attitude that would become the future motto of collegiate athletics. As early as 1905, the term “bacillus athletics” was used to describe the “disease afflicting” college sports (Shulman & Bowen, 2000, pp. 7-8). In this same year, the forerunner of the National Collegiate Athletic Association (NCAA) was formed and charged

with establishing and enforcing common rules of play (Grimes & Chressanthis, 1994). The purpose of the NCAA as defined in the original constitution was stated as:

Its object shall be the regulation and supervision of college athletics throughout the United States, in order that the athletic activities in the colleges and universities of the United States may be maintained on an ethical plane in keeping with the dignity and high purpose of education (Chu et al, 1985, p. 8).

Two major concerns emerged and have remained at the forefront: commercialization and increased professionalism of student sports and threats to academic integrity. In the 1920s, institutions of higher learning began to formally recognize athletics as part of education, placing them in physical education departments for the most part, but at the same time, critics began to attack the big business side of sports (Chu et al, 1985). In 1929, a study was commissioned by the Carnegie Foundation for the Advancement for Teaching with the purpose of examining issues including whether athletics builds moral character, how institutions should pay for facilities and how much influence booster organizations should have regarding the management of sports programs (Shulman & Bowen, 2000). The commission concluded that

“The heart of the problem facing college sports was commercialization: an interlocking network that included expanded press coverage, public interest, alumni involvement and recruiting abuses. The victim was the student-athlete in particular, the diminishing of educational and intellectual values in general. Also, students (including non-athletes) were the losers because they had been denied their rightful involvement in sports” (Zimbalist, 1999, p. 8)

This commission marks the start of a new stage in the management of college athletics from student-run clubs to institutionally managed ventures (Shulman & Bowen, 2000).

#### **4 A New Phase of Growth in Intercollegiate Athletics**

In the 1940s at the conclusion of war, intercollegiate sports entered a new phase of over-emphasis, and abuses within college athletics peaked during the 1950s (Chu et al, 1985).

More recently, television has been charged with transforming sports into an institutional product, (Hart-Nibbrig, 1984) and as college sports developed into a big business for the institutions they represent, two sides emerged debating the positive contributions of athletics within the university framework. A clear division between proponents and opponents is evident with terms such as “increased visibility,” “enhanced reputation,” “undermining of academic integrity” and “winning above learning” being analyzed and argued. The true buzzword surrounding this issue, however, is reform. The continued evolution of college sports from a student-athlete-centered activity to a big business, and how this business of sports can coexist in a meaningful way with the university was a topic on the agenda of the most recent session of the Knight Foundation Commission for Intercollegiate Athletics, a commission of business leaders, college presidents and politicians among others, formed with the purpose of reforming college athletics. The topic is often referred to as “college sports’ money race” (Barnett, 2001, p. 13C and Suggs, 2001) and the “power of money” (Shulman & Bowen, 2000, p. 228). After hearing from various athletes, athletic directors, conference commissioners and representatives from professional leagues, the Commission issued its report and proposals (Suggs, 2000).

The Commission reported that the NCAA had made considerable progress toward achieving the goals laid out in earlier Knight reports; however, they had not come far enough. The most glaring problems in intercollegiate athletics, as determined by this latest report, are academic transgressions, a financial arms race and commercialization, topics that are not new to college sports (“A Call to Action”, 2001). As a result, the Commission reformed its “one-plus-three” model in a proposal for a Coalition of Presidents, directed toward an agenda of academic reform, de-escalation of what is referred to as the arms race and the de-emphasis of commercialization (“A Call to Action”, 2001). To achieve this



model, the Commission suggests that change will be accomplished by a concerted grass-roots effort by the broader academic community with the aid of trustees, administrators and faculty (“A Call to Action”, 2001). A key theme of the report was the need to act together, in concert, due to the fact that unilateral efforts would undoubtedly be punished by loss of status and increased vulnerability. Instead, the Commission stated that change would only come when the higher education community comes together as one to collectively address the challenges it faces (“A Call to Action”, 2001). In addition to its remarks concerning Presidential involvement and academic community focus, the Commission also created additional issues for consideration which included freshman ineligibility, recruiting restrictions, need-based financial aid, reform of NBA early departure and anti-trust exemptions (“A Call to Action”, 2001). Although the commission has no power to impose its recommendations, it does have strong corporate and academic support and the backing of the NCAA (Barnett, 2001).

Questions of the appropriate balance between athletics and academics have been brought to the attention of the National Collegiate Athletic Association (NCAA) by similar reform-oriented commissions (Wheeler, 1987). Somewhere between the student-formed sport clubs at Ivy League schools and the topic of reform efforts today, college sports has turned into a multimillion dollar industry. Total expenditures on intercollegiate athletics in the fiscal year of 1997-98 ranged from \$1.2 million to over \$47 million (Shulman & Bowen, 2000), and these numbers have increased by approximately ten percent each year (Hall & Mahony, 1997). The co-chair of the Knight Commission and president emeritus of the University of North Carolina system, William Friday, posed the question, “are these schools supposed to be entertainment industries or educational institutions” (Barnett, 2001, p. 1C)?

## **5 The Financial Picture**

The financial challenge facing colleges and universities today has been attributed to three main factors: inflation, increased popularity of sports and an increase in the number of sports participants. As the number of participants has increased, so has the amount of scholarships awarded, the major factor behind increasing costs. Between 1998 and 2000, scholarship costs at public schools were thought to have increased by 70 to 80 percent (Hall & Mahony, 1997). The competition among institutions to build the best facilities for their sports programs, referred to as the “arms race,” is a prominent concern as well, which the NCAA claims they are powerless to control due to antitrust regulations (Suggs, 2000). Another reason is the fact that many administrators are hesitant or unable to fully fund athletic programs via the normal budgetary process (Stier & Schneider, 1999).

In addition to institutional support, revenue channels for athletic programs include ticket sales, student activity fees, television and radio rights fees, government appropriations, away game guarantees, payouts from bowl games, conference affiliations, NCAA events, licensing royalties, corporate sponsorships and donations from the private sector. These revenues streams weigh in against rising costs of medical and liability insurance, increased costs associated with qualified athletic staffs, team travel, scouting, recruiting and insufficient gate receipts presumably due to increased broadcasting exposure (Stier, 1994 and Padilla & Boucher, 1987/88). Coaching costs alone require millions of dollars, as 75 of the 300 NCAA Division I schools pay their men’s basketball coaches one million dollars – or more – per year (Lopiano, 2001). The projected costs associated with gender equity compliance are also a factor (Staurowsky, 1996). Given the budget restraints that colleges and universities across the nation are facing, intercollegiate athletic programs are increasingly being expected to be self-sufficient, and outside donations have been identified as having the greatest

potential for increasing revenue (Hall & Mahony, 1997). Donations to athletic department began in the late 19<sup>th</sup> century. Although many university presidents attempted to use the popularity of athletic teams to increase financial support to the university as a whole, many groups began to seek donations directly for use by the athletic department (Hall & Mahony, 1997). The importance of such support organizations as well as the significance of their involvement and contributions have quadrupled in recent years (Stier, 1994), and for some of the smaller schools, these donations may make up as much as 50 percent of the total revenue (Raiborn, 1990). Donors are often composed of the political and economic elite within the greater university setting, and therefore, issues of governance and control accompany the dollar contributions (Wheeler, 1987). One university president summed it up by stating, “Institutions that sponsor major sports programs become subservient to the interests of boosters whose primary allegiance is to the teams” (Naughton, 1998, p. A37).

## **6 Indirect Factors**

The financial equation is only a part of the controversy concerning the appropriate place of college sports within the university setting. Revenues are high, expenditures are higher and most college athletic programs lose money, even with the outside donations and contributions (Sperber, 2000). The issue then becomes one of justifying increasing athletic expenditures within an institution that cites mission statements such as “knowledge for its own sake,” “preparing flexible minds” and “education for leadership and success in life” (Shulman & Bowen, 2000, p. 2). Thus, another side of the issue comes into play. The financial scenario is important, but there is much more involved. As Zimbalist (1999) points out, indirect factors are as important, if not more so, to this topic, stating “any consideration of the athletic department’s academic impact should look at both the direct as well as

indirect financial results of its activities” (Zimbalist, 1999, p. 152). Direct financial results are oftentimes difficult to accurately quantify. Zimbalist (1999) has also reported that in college athletics, there are no universally accepted accounting principles. Another source suggests that comparisons of financial data are dangerous among institutions of higher learning because of the differences in autonomy of individual institutions as well as the diversity of institutional types (Atwell, 1980). It has also been suggested that financial information among college athletic departments is obtained using widely disparate definitions, generally gathered for some other purpose than reporting to the NCAA (Padilla & Boucher, 1987/88). For example, athletic scholarships can be charged to the athletic department or the financial aid office. Coaches’ salaries can be assigned to athletics or the faculty budget. Booster clubs and private donations can pay for some, or all, athletic department expenses without directly charging them to the athletic budget (Zimbalsit, 1999). Therefore, even when financial impacts are directly observed, broad assumptions are not easy to justify.

While studies have shown that almost all athletic programs lose money (Shulman & Bowen, 2001), the NCAA reports that many of the institutions that show expenses exceeding revenue for their overall athletic programs “certainly have excess revenue in their football programs” (Honan, 2001). These net revenues, particularly at big-time sports’ schools, often provide the resources that pay for the costs of other non-revenue generating programs (Shulman & Bowen, 2001). However, just ten years prior, NCAA Executive Director Dick Schultz reported that an estimated 70 percent of the NCAA’s Division I programs were operating at deficits (Wieberg & Witosky, 1991). A study by Zimbalist in 1999 found these deficits to be an average of \$823,000 (Zimbalist, 1999). With such disparate information in mind, a closer look at the information presented in arguments of both proponents and opponents seems prudent.

## **7 Positive Benefits of Intercollegiate Athletics for the University**

Evidence in support of positive contributions by college athletics to the university in an indirect way indicates that success, and at times, merely participation in college sports provides benefits, which include university exposure, increased financial contributions and increased student applications and enrollment. Stier (1994, p. 21) argues that

“accomplishments and achievements in sports can have a positive and lasting impact upon segments of the public and various constituencies. Past achievements can be utilized as a tool in that such accomplishments make others more receptive to being in a ‘help’ mode. Everyone wants to be associated with a winner.”

After years and years of losing season’s, the 1995 Northwestern University football team demonstrates a perfect example – a Big Ten conference championship, a berth in the Rose Bowl and one of the most remarkable turnarounds in college football history is estimated to have been worth an additional ten million dollars in revenue over the following three years (Bickley, 1995). Stories like these, however, are more the exception than the rule, sparking a great deal of debate over the accuracy and true impact of such winning seasons.

Other viewpoints place increased importance on the word “indirect,” justifying big-time programs by the claim that it is not only winning, but instead the prestige and visibility that those involved with athletics foremost seek. It has been argued that national publicity is the lifeblood of institutional prestige, and this is what college sports can offer a university (Thelin, 1994). Goff (2000) found that athletic success translated into substantially increased exposure for the university, regardless of its academic reputation, while Hart-Nibbrig (1984) also concluded that sports promotes the name and identity of the university, which is especially true if the university does not have a nationally distinguished academic reputation. And although university presidents are oftentimes associated with the push toward reform in college sports, studies have found that presidents rated athletic success as important to

“institutional fundraising”, “emotional bonding of faculty and students”, “overall university reputation” and “rate of admissions applications” (Billing, 2000) as well as an entertainment function for donors and politicians (“College Presidents Value Athletics”, 1998). Athletic success has been referred to by college presidents as “a platform from which to spread the good news about the rest of the university” (Suggs, 1999, p. A61). Thelin (1994) also supports this concept noting that a university president can entertain and influence more people at the big game than most other events on campus. A recent example was provided by UNLV President Robert Maxxon in 1993 when he launched the Year of the Library campaign to raise money for a new library building. In order to encourage potential donors to the University Library Society (ULS), Maxxon hosted 100 donors at a UNLV basketball game and pre-game dinner. It was stated, “these tickets were used to encourage people to become members of the ULS” (AmRhein & Sorokin, 1993). University presidents also use sports as a vehicle for political support, as some research has shown that athletic victories were important factors in receiving public funds from legislatures (Hart-Nibbrig, 1984).

University reputation and visibility are easy to comprehend given the vast media coverage of college sports. Indirect benefits involving admissions applications, however, requires further explanation. It has been argued that this advertising effect of college sports attracts an increased number of applications. In 1995, after a Rose Bowl appearance, applications to Northwestern University jumped 30 percent. In 1993, George Washington’s trip to the Sweet Sixteen resulted in a 23 percent increase in applicants (Zimbalist, 1999). Not all schools, however, have shown such results. Edward Gillis, dean of admissions at the University of Miami, attributes such discrepancies to the size and national exposure of the school, stating, “my theory is for schools in the national eye all the time, schools that receive a lot of publicity all the time, there’s less impact when athletics do well.” He suggests that

the bounce in applications occurs when regional schools suddenly obtain national publicity (“Winning not what it seems,” 2001). This rejects the notion of the “Flutie Factor,” referring to former Boston College quarterback Doug Flutie who led his team to an Orange Bowl upset over the University of Miami which resulted in a 25 percent increase in the college’s applications the following year. The rejection of this notion is also supported by a national poll conducted by the Art & Science Group in Baltimore, Maryland, that reported the quality of a college’s sports teams is not a major factor in college decisions. Oregon State University would disagree, however, after a Fiesta Bowl victory over Notre Dame increased the number of out-of-state applicants by 35 percent, attributable to bumps in mass-market advertising, which in this case was the exposure resulting from the win (Suggs, 2001).

At Clemson University, two economists validated Oregon State’s testimony and took it one step further when their studies reported that in years in which Clemson had winning sports teams, the institution showed not only an increase in applications, but also an increase in SAT scores among all applicants and therefore, all entering students (Thelin, 1994). However, these results are contradictory to a similar report from the University of Massachusetts in which SAT scores decreased with the increase in applicants (Zimbalist, 1999). Similarly, others have disputed the evidence that the quality of sports teams even influences prospective students, thus causing a rise in admissions with a winning program, arguing that most students are more interested in course offerings, majors and academic profiles (Suggs, 2001). In addition to such anecdotal information, one study of 44 colleges during 1971-84 tested whether an increase in the win percentage of a school’s football team led to higher SAT scores, controlling for other factors. However, this was not found to be statistically significant at the ten percent level (Zimbalist, 1999). Goff (2000), however, did

find that major athletic accomplishments seemed to spark additional interest from prospective students, regardless of the academic reputation of the university.

### **8 Impact of Intercollegiate Athletics on Fundraising**

Although the focus thus far has been on the indirect benefits of college athletics, there is one financial element that must be considered – the impact of a successful athletics program on donations. In a cross-sectional study of 56 Division I schools, Coughlin and Erekson (1984) reported that measures of athletic success including attendance, post-season play and winning percentage were factors in monetary donations to a school's athletic department. But the more relevant question is, how does a winning program affect contributions given to the university as a whole? Brooker and Klastorin (1981) found a significant positive relationship between success in intercollegiate athletics and general contributions when institutions were analyzed within homogeneous groups, such as private or public. Similarly, McCormick and Tinsley (1990), in a study of Clemson University, reported that a ten percent increase in donations to the athletic fund was correlated with a five percent increase in contributions to academics. More recently, Goff (2000) concluded that achievements in athletics appear to substantially increase general giving to the universities, and that these effects are present for both average and major improvements in athletics. Grimes & Chressanthis (1994) found a similar circumstance in which they referred to as a "spillover situation" in which intercollegiate athletics gives back to the university (p. 38). They reported that after controlling for the population of alumni, student enrollment, state appropriations and per capita income, the results indicated that contributions to academics are positively related to the overall winning percentage of the athletic program (Grimes & Chressanthis, 1994). Another study researched the impact of financial benefits



associated with not only a winning football season, but a championship victory and found that there were sizable increases the year after the championship in the donations to the athletic department as well as to the university (Daughtry & Brown, 2001). Very successful athletic dynasties such as Notre Dame University have been so athletically solvent that they are able to pour revenues such as multimillion-dollar television contracts into academics (Wieberg & Witosky, 1991). Universities with championship football programs, in particular, are shown to reap financial rewards associated with success (Daughtrey & Brown, 2000).

Such evidence has been criticized, however, by Zimbalist (1999), Shulman & Bowen (2000) and Sperber (2000) as rare exceptions and faulty information. In fact, Zimbalist cites 12 separate studies that suggest athletic success has no reliably positive impact on donations to the university's general fund. He also points out that in many instances, boosters are not alumnus of the school; rather they are local businessmen who enjoy sports (Zimbalist, 1999). Similar studies that report a correlation have been called some of the biggest myths in college athletics, and the three authors firmly assert that there is absolutely no relationship between winning athletic programs and positive giving rates to the university. In fact, some universities have even reported their most successful fundraising years in times when athletics were at a low point (Suggs, 1999). However, this is only one of the arguments in opposition to the positive contributions of college sports to the university.

### **9 Negative Impact of Intercollegiate Athletics**

Finances aside, in an earlier session, the Knight Foundation Commission on Intercollegiate Athletics reported that "big time college sports do more damage to the university, its students and faculty, its leadership, its reputation and credibility than most

realize – or are willing to admit” (“Reports of the Knight Foundation Commission,” 1993). In 1984, the NCAA created the Presidents Commission, giving university presidents more responsibility in determining the appropriate balance between athletics and academics and in 1987, the NCAA launched a large scale inquiry into intercollegiate athletics with a 1.8 million dollar grant to the American Institute of Research to examine the issues and problems surrounding college sports (Wheeler, 1987). A 1989 Harris poll survey found that eight out of ten Americans believed that college sports were not effectively controlled by colleges and universities; seven out of ten thought academic standards required of athletes were different from other students; and another seven out of ten thought that commercial interests exerted too much influence on college sports (Friday, 2001). Again, both direct and indirect consequences are cited. Directly, it has been reported that the majority of universities subsidize their intercollegiate athletic programs out of general funds, thus funneling money that could be used for educational pursuits into sports (Sperber, 2000). This claim gains ammunition as annual budgets for athletic department expenses increase by approximately ten percent each year (Hall & Mahony, 1997). Also, some argue that the revenues raised from athletic booster organizations are at the expense of contributions to the university’s academic fund (Shulman & Bowen, 2000). Again, it has been asserted that there is little, if any relationship between the success of a school’s athletic program and contributions to the school’s general fund (Zimbalist, 1999).

Indirectly, many cite the educational mission of the university as a contradiction to athletics, referred to as the “mission drift” (Shulman & Bowen, 2001, p. 278). The provost of Boston University recently stated that sports are “not at the heart of what the university is here to do, and that is to educate young people and to conduct research and advance knowledge” (Zimbalist, 1999, p. 194). Another study has suggested that the financial aspects

and institutional autonomy associated with college sports is more akin to the values of a modern corporation than to the values of an institution of higher learning (Hart-Nibbrig, 1984). According to one former athletic director, William J. Cleary, who spent 37 years as a Harvard player, coach and administrator, “money has ruined college athletics.” Cleary contends that intercollegiate athletics are being run for the one half of one percent of students rather than the other 95 percent and has been quoted as stating that “sports used to be part of the educational process and now it is the process” (Swift, p. 36, 2001). Such discontent has been associated with friction among faculty and university administrators (Noll, 1999). One widely used argument suggests that recruited athletes enjoy a “very substantial statistical advantage in the admissions process” and enter the university with “considerably lower SAT scores than their classmates” (Shulman & Bowen, 2000, pp. 259-260). It has been shown that even at academically demanding colleges, star athletes are more likely to be admitted than minority students and children of alumni (Honan, 2001). In order to ensure success on the playing fields, specific numbers of places are commonly being set aside for recruited athletes, and admissions directors are lowering academic standards to fill them (Fiske, 2001). The concept of opportunity costs has also been voiced, contending that the decision to subsidize an athlete is a decision not to admit someone who might pay full tuition (Noll, 1999). Another complaint revolves around the practice of scheduling games in order to accommodate a television schedule rather than conflicts with classes (Suggs, 2000). Former Alabama coach Bear Bryant was quoted in the 1970s as saying; “I’ll play at midnight if that’s what TV wants” (Chu et al, 1985, p. 24). This complaint reached a peak in 1983 when an institution in the Big Ten conference changed its final examination schedule so that the student body would be able to attend the football team’s bowl game (Chu et al, 1985). This complaint resurfaced again recently in the Atlantic Coast Conference

when the NCAA announced that Sunday night games would be added to the 2001-2002 schedule, causing some to question the toll this would take on the student-athletes as they attempt to balance the academic and athletic lives they lead. One of the most frequently cited criticisms of intercollegiate athletics is the increased commercialization, including sponsorships, television contracts and merchandizing contracts among others. It has even been stated that many institutions of higher learning have joined the national entertainment industry and often succumbed to corruption (Honan, 2001).

These arguments do not even begin to touch on the controversy and implications for the university that result from negative activities revolving around athletics. The media regularly reports on scandals, betting, cheating, drug use, criminal activity, excessive financial aid, poor academic performance and low graduation rates among student athletes (Noll, 1999). Just as winning programs can enhance an institution's reputation, scandal can presumably ruin it. The media plays a large role in this scenario, but cannot explain the whole picture. College sports, both good and bad, became a national obsession long before radio and television increased their exposure (Noll, 1999). Although there is no one certain cause explaining how sports in America became institutionalized within the university, three societal forces have been identified that played a role: the growth of the entertainment industry and the commercialization of athletics, the increased competitiveness of college admissions and efforts to create well-rounded student bodies and the increased competence and specialization of pre-college athletic talent (Shulman & Bowen, 2000). Viewed retrospectively over the past 100-plus years of its history, intercollegiate athletics has moved from mainly providing an avenue for student athletes and fans to enjoy sports participation to predominantly focusing on increases in revenue and institutional prestige that can be generated through a high-profile team.

## **10 Recommendations for Balancing Athletics and Academics**

The literature varies in proposed suggestions for providing a balance between college athletics and the educational mission of the university. Some encourage professionalizing college sports to bring them outside of university control (Zimbalist, 1999). Yet this viewpoint dates back to the 1800s when Stanford University's President called for an end to the abuses and deception surrounding college sports by allowing its football team to become professional, supported by alumni (Chu et al, 1985). Some have even suggested eliminating college sports altogether. The most common cited suggestion is to lower costs to control the business-like characteristics of intercollegiate athletics. Others propose that programs should be defined as either professional, semi-professional and amateur – based upon whether the purpose of the program is intended to be profit-making, educational, or a combination of both (Chu, et al, 1985). However, this is no easy challenge. It has been countered that any unilateral effort to control costs will certainly fail because of the competitive disadvantage that would result for the institution as well as the decrease in gate receipts, television income and alumni interest as well as a negative influence on the reputation of the institution (Atwell, 1980). Other impediments to change have been identified as lack of information, fear of negative reactions, fear of harmful effects on admissions, practical difficulties of acting in concert toward reform and competing institutional priorities and inertia (Shulman & Bowen, 2001).

Some reason that the key is educating college presidents and working toward a greater understanding of the role of athletics while finding a way to “reinvigorate the contribution of intercollegiate athletics to the achievement of educational goals” (Shulman & Bowen, 2000, p. 294). A viewpoint that has come most vocally from the Knight Commission, mentioned earlier, is referred to as the “one-plus-three model,” and calls for

absolute presidential control, including fiscal authority and governance within conferences and the NCAA as the “one.” The “three” refer to academic integrity, fiscal integrity and an independent certification process to monitor both (Suggs, 2000). The one thing that can be agreed upon with certainty is that there is no easy answer. Whether or not substantial change is needed, the necessity is clearly there to increase the likelihood of positive contribution to the university. As Roger G. Noll (1999) remarked, “the practical way to make the values of intercollegiate sports more closely parallel the academic values of universities is to give universities less incentive to abandon academic values” (p. 37). This must take place in action rather than in words, as stated by the Knight Foundation Commission on Intercollegiate Athletics,

“To reform intercollegiate athletics is to begin to approach, again, a true examination of American higher education’s nature and purpose. To reform that valuable dimension of an education is to begin to remember that an educational institution teaches far, far more, and more profoundly, by how it acts than by anything anyone within it ever says” (“Reports of the Knight Foundation Commission,” 1993).

After addressing the history of higher education and more specifically, how intercollegiate sport developed as part of that history and looking closely at the massive enterprise that these athletic programs have become today, the positive and negative consequences of college sports have been suggested. What these positive and negative consequences point to, however, is another significant factor that it is necessary to analyze in this review.

## **11 University Success Criteria**

Colleges and universities across the nation are striving for many things. Among them are excellent professorship, a solid academic program and student body, first-rate facilities and cutting-edge research. The most important, however, is garnering success in

the eyes of potential students. The students are, after all, the lifeblood of any institution of higher learning. Talented prospective students are essential for success, both financially and operationally. Because students are so vital, colleges and universities must continually seek ways to attract them. Colleges and universities are finding themselves competing more aggressively for students and faculty and for the increasingly scarce monetary resources needed to provide a superior educational experience (Smart & Wolfe, 2000). Over the years, a system of ranking has emerged as the best way to assess such success, and the *U.S. News & World Report* annual college rankings have taken the lead in this emergence. As the leading resource on collegiate rankings today, the *U.S. News* rankings will be the source of any mention of “rankings” in this review.

*U.S. News* defines university success through one concept, made up of sixteen key measures. The concept is referred to as “excellence” or “quality.” The sixteen factors that comprise this concept are as follows: academic reputation, acceptance rate, alumni giving, class size 1-19 students, class size 50+ students, expenditures per students, faculty compensation, faculty with PhD’s or top terminal degrees, average freshman retention, proportion of full-time faculty, average graduation rate, graduation rate performance, high school class standing, SAT/ACT scores, student/faculty ratio and yield. In order to make these factors more manageable, they have been grouped into seven key measures used to capture the various dimensions of excellence or quality. These seven include reputation, retention, faculty resources, student selectivity, financial resources, alumni giving and graduation rate performance (“Why U.S. News Ranks Colleges”, 2001). According to *U.S. News*, (<http://www.usnews.com>) the indicators include both input measures, which reflect the quality of students, faculty, and other resources used in education, and outcome measures, which capture the results of the education an individual receives. These indicators

are weighted, in order to determine the overall percentage and score. What is interesting to note, is that reputation is given the highest weight – 25 percent of the overall score an institution receives. As the literature has previously shown, an institution’s reputation is oftentimes heavily influenced by athletics, the “front porch of the university” as it has been called (Shulman & Bowen, 2001). If reputation is impacted by athletics and reputation greatly influences an institution’s ranking, this paper will seek to determine if there is a measurable, positive correlation between the two.

### **12 Resource-Based View to Determine Athletic Success**

The Resource-Based View (RBV) perspective of understanding competitive advantage, success or positive reputation has attracted the attention of a growing number of scholars and can be applicable to sport management (Smart & Wolfe, 2000). Smart and Wolfe (2000) used it to investigate the source of sustainable intercollegiate athletic program success. In their research, Smart and Wolfe (2000) address success criteria within the context of intercollegiate athletics, which this paper will attempt to link with the success criteria related to university success from *U.S. News* to provide a correlation or positive relationship between the two.

Before naming the success criteria developed by Smart and Wolfe, it is necessary to explain further the concept of the RBV. Underlying the RBV approach is the assumption that a resource, in this case athletics, with the appropriate attributes may ensure, or at least contribute to, an enduring competitive advantage, or in other words, success (Smart & Wolfe, 2000). According to Smart and Wolfe (2000, pp. 135-136), “if intercollegiate athletics can contribute to a university’s competitive advantage, applying the RBV to the athletic program gains in importance. Our logic suggests that high performing individual athletic



programs lead to higher performing athletic departments which, in turn, may enhance overall university performance both directly and indirectly.” It is the indirect benefits that will be studied in this research. The RBV also implies that sources of more lasting competitive advantages can be related to intangible resources such as organizational reputation (Smart & Wolfe, 2000), the indirect benefit that will be most relevant and important in this paper.

The authors acknowledge that the study of the RBV method as applied to intercollegiate athletics is in its infancy, and this paper seeks to further this body of knowledge by creating a method that combines both RBV and the *U.S. News* rankings. The authors also point out that “intercollegiate athletic program success” has never been definitively defined (Smart & Wolfe, 2000), but point to four outcomes that were found to be significant determinants of stakeholder perceptions of intercollegiate athletic program success by Putler and Wolfe (1999) (Smart & Wolfe, 2000). These were success on the field operationalized by win-loss records, graduation rates, athletic program ethics and absence of NCAA violations and financial performance (Smart & Wolfe, 2000). This “composite of success provides a context for analyzing links between resources and performance in college sports. The authors also highlight that the weighting of the four criteria can vary from university to university depending on the priorities of the stakeholders, bringing the concept of weighting into the picture, which is also apparent in the *U.S. News* rankings (Smart & Wolfe, 2000).

After reviewing the RBV perspective, the direction of this paper will seek to correlate the two main determinants of success that have been discussed – university success determined by *U.S. News* rankings and intercollegiate athletic success as determined by the resource-based view. The next step is to create a method that uses these two models and

seeks to provide an instrument for evaluating the contributions made by college sports to the university as a whole.

## **Chapter Three – Methods**

The purpose of creating a method that uses the *U.S. News & World Report* model for ranking university success and the Resource-Based View model for determining athletic success is to provide an instrument that can evaluate, analyze and assist in measuring any impact of intercollegiate athletics on university success, particularly the positive contributions. This chapter seeks to identify this method and the resources that will play a role in the methodical efforts.

### **1 Subjects or Data Source**

The sample that has been selected for use in this method are all public universities that are members of the Atlantic Coast Conference (ACC), a conference that participates in the NCAA Division IA system. This includes seven institutions comprised of:

- the University of North Carolina at Chapel Hill,
- North Carolina State University,
- the University of Virginia,
- the University of Maryland,
- Georgia Tech University,
- Clemson University, and
- Florida State University.

Only public schools were used in this study due to the large discrepancies in student make-up, financial resources, public reporting and size between public and private universities.

Therefore, Duke University and Wake Forest University, the two remaining members of the ACC were excluded from this study.

It is necessary to evaluate these seven universities in the overall context of its setting, size, location, history and role of athletics. The following profiles of the seven institutions will provide such information.

### The University of North Carolina at Chapel Hill

The University of North Carolina (UNC) was founded in 1789 as the first state university in the nation. The four-year public institution is located in Chapel Hill, North Carolina. There are 15,400 undergraduates in admission at UNC and the graduate enrollment is 8780, bringing the total student enrollment 24,180 (*University of North Carolina at Chapel Hill website*). The number of faculty is 2420, making the faculty-student ratio is 1/14. 82 percent of the 3400 freshmen are from North Carolina and 18 percent are from out-of-state. The UNC student body represents 42 different states and 37 countries (*University of North Carolina at Chapel Hill website*).

In regard to athletics, UNC is a NCAA Division I school with 28 varsity sports teams (*University of North Carolina at Chapel Hill athletics website*). Many of these programs have spent time at the national championship level, including men's basketball and women's soccer and most recently the 2001 National Championship in men's soccer. Students and fans pack Kenan stadium on football Saturdays and the Dean E. Smith Center on basketball game days. The University is recognized both nationally and internationally, as demonstrated by collegiate licensing data (*University of North Carolina at Chapel Hill website*). 75% of collegiate licensing revenues go to scholarships and student aid, while 25% goes to UNC athletics (*University of North Carolina at Chapel Hill licensing website*).

### North Carolina State University

North Carolina State University (NCSU) was founded on March 7, 1887. It is located in Raleigh, North Carolina and has a student population of more than 28,000. The faculty at NCSU total 1588 (*North Carolina State University website*), making the student-faculty ratio a little more than 17 to 1. The university is regarded as a leader in science, engineering

and technology. NCSU offers more than 5200 degrees in over 100 fields of study (*North Carolina State University website*).

The athletic department at NCSU is composed of 18 varsity sports. The department has won a collective 200 titles over the course of its 100-year history (*North Carolina State University athletics website*). NCSU has a new multi-million dollar basketball arena and is making significant upgrades to football's Carter-Finley Stadium, thus demonstrating its commitment to the future of athletics.

#### *The University of Virginia*

The University of Virginia (UVA) was founded in 1819. UVA's undergraduate enrollment is 12,639 with graduates totaling 5892. The faculty number is 1904. Out-of-state students make up 32 percent of the population (*University of Virginia website*). Located in Charlottesville, Virginia, UVA is nationally renowned academic institution.

In athletics, 24 varsity sports are represented at UVA. Wining several Atlantic Coast Conference and national championship titles in recent years, Virginia has finished in the top 25 in the seven-year history of the Sears Directors Cup program, which ranks the overall success of Division I athletic programs up to 20 sports (*University of Virginia athletics website*).

#### *The University of Maryland*

Located in College Park, Maryland, the University of Maryland (UMD) was one of the nation's original land-grant institutions in 1862. Students and faculty are drawn to Maryland from all 50 states and 110 countries (*University of Maryland website*). Total undergraduate and graduate enrollment is 33,189, with 73 percent being residents of the state

of Maryland. Total faculty numbers 3604, giving the university a 14/1 student-faculty ratio. UMD offers 111 undergraduate majors (*University of Maryland website*).

UMD offers 23 varsity sports. Cole Field House is recognized as one of the historic and legendary places to watch a basketball game in the nation. Byrd Stadium is the home of the UMD football team, which has experienced increased success in recent years and will attend this year's prestigious Orange Bowl (*University of Maryland athletics website*).

### Georgia Tech University

Located in the heart of Atlanta, Georgia, the Georgia Institute of Technology opened its doors in 1888, signifying the beginning of technological education in the South (*Georgia Institute of Technology website*). Today, total enrollment at Georgia Tech is 14,780 with 66 percent of those from in state. Georgia Tech offers only 39 undergraduate degree programs and has only 709 full-time faculty (*Georgia Institute of Technology website*).

Offering only 15 varsity sports, Georgia Tech is smaller than a number of the other schools in this study (*Georgia Institute of Technology athletics website*). However, athletics are important, and the football team has achieved success in recent years, finishing in post-season play consistently.

### Clemson University

Clemson University is located in a city that shares its name – Clemson, South Carolina. Founded in 1889, 17,500 students attend Clemson in one of the university's five colleges – Agriculture, Forestry and Life Sciences; Architecture, Art and Humanities; Business and Behavior Science; Engineering and Science; and Health, Education and Human Development. Over 1200 faculty members lead students in these areas.

Clemson offers sixteen varsity sports and is always strong in soccer and football. Clemson's athletic department mission is to remain a nationally prominent university in the athletic setting.

### Florida State University

Florida State University (FSU) is located in Tallahassee, Florida. The student population is 34,477, representing all 50 states and 122 countries (*Florida State University website*). The student-teacher ratio is 18/1. FSU has seventeen major academic divisions. 96-degree programs in 225 fields are offered (*Florida State University website*).

FSU sponsors 17 varsity sports programs, but it most well-known for its highly-regarded football team, that has spent many of the past ten years either as national champion or contending for the title. The team has not lost more than two games in a season for the past five consecutive years (*Florida State University athletics website*).

## **2 Instrumentation**

In order to use these seven universities to collect the data needed for the study, there are several resources involved. In regard to the first factor, university success, the indicator that is used is the highly-regard *U.S. News & World Report* annual college rankings for 2000-2001. For purposes of this study, the ranking category that was used was "Top 50 Public Universities." Since public universities in the ACC are the sample for the study, the obvious choice for comparing university success was the public university ranking. In regard to athletic success, the RBV model by Smart and Wolfe (2000) was used with the four criteria mentioned earlier – win-loss record, graduation rate, compliance and financial health. To measure these four criteria, win-loss records, compliance records, graduation rates and

financial health, it was necessary to utilize various individuals in the athletic departments of each university, including compliance officers and business managers. The instrument used to collect graduation rate information was *The Chronicle of Higher Education*, a highly regarded news source for college and university faculty members and administrators. Win-loss records were gathered from the official athletic websites of each university.

### **3 Data Collection Procedures**

Data collection consists of tallying the above information for each of the seven universities and then collecting the *U.S. News* ranking for each school as well. Therefore, five sets of data are collected for each school: one for win-loss record, one for compliance, one for graduation rate, one for financial health and one for academic ranking. For win-loss records, both overall and conference records were compiled for each school's men's and women's basketball as well as football programs. For compliance, both major and secondary infractions were recorded. For graduation rate, both the total number of students graduating and the total number of student athletes graduating were tallied, along with percentages. Only percentages will be used in the data analysis, due to the discrepancies in student populations at the various institutions. The total numbers are provided, however, for informational purposes. For financial health, the total operating budget for athletics was reported and whether or not this budget was met. If it was not met, the amount of the deficit was provided. For academic ranking, as previously discussed, only one figure was given and that was the official *U.S. News* ranking. All of the data collected for this study was from the 2000-2001 academic year.



#### **4 Proposed Data Analysis Procedures**

After collecting each set of data for the seven ACC universities, the four factors related to athletic success – win-loss record, compliance, graduation rate and financial health – will be ranked. For example, the university with the most wins and fewest losses in men’s basketball will be given a score of one and the school with the least wins and the most losses will be given a score of seven. Any ties will be ranked the same. For compliance, the school with the least number of compliance violations will be given a score of one. For graduation rate, the university with the highest percentage of students and student athletes graduating will be given a score of one. Finally, for financial health, the university with the largest athletic budget will be given a ranking of one. After analyzing and ranking each variable, a composite score will be calculated for each university. This composite score will then be compared with the academic ranking measure, and an analysis will be run on the two sets of rankings.

The proposed statistical procedure to analyze the data is Spearman’s Ranked Correlation Coefficient. Spearman’s will give a measure of the relationship between the academic and athletic variables described above, after the numbers have been converted to ranks.

## **Chapter Four – Data, Analysis and Results**

The purpose of this study was to construct a valid criterion for assessing the relationship between performance in university athletics and success of the university. In addition to including tangible criterion measures such as revenues versus expenditures, this research examined intangibles such as enhanced reputation and increased visibility. The following section presents the results of data collected on each of the criterion variables identified in chapter three. Table 1 presents a summary of the data collected on each criterion.

The seven ACC schools were ranked as follows, among the top 50 public universities:

- University of Virginia – 2
- University of North Carolina at Chapel Hill – 5
- Georgia Tech University – 10
- University of Maryland – 21
- North Carolina State University – 37
- Clemson University – 39
- Florida State University – 48

Again, these rankings were based on the criteria laid out in the review of literature.

### **1 Win-Loss Record**

As indicated previously, the win-loss records were compiled for the three revenue sports – men’s basketball, women’s basketball and football. This data for the seven institutions during the 2000-2001 seasons are below:

- **University of Virginia**  
Men’s Basketball – 20-9 overall and 9-7 ACC  
Women’s Basketball – 18-14 overall and 8-8 ACC  
Football – 6-4 overall and 5-3 ACC
- **University of North Carolina at Chapel Hill**  
Men’s Basketball – 26-7 overall and 13-3 ACC  
Women’s Basketball – 15-14 overall and 7-9 ACC  
Football – 6-5 overall and 3-5 ACC

- **Georgia Tech University**  
Men's Basketball – 17-13 overall and 8-8 ACC  
Women's Basketball – 14-15 overall and 11-5 ACC  
Football – 9-2 overall and 6-2 ACC
- **University of Maryland**  
Men's Basketball – 25-11 overall and 10-6 ACC  
Women's Basketball – 17-12 overall and 8-8 ACC  
Football – 5-6 overall and 3-5 ACC
- **North Carolina State University**  
Men's Basketball – 16-13 overall and 5-11 ACC  
Women's Basketball – 21-9 overall and 9-7 ACC  
Football – 8-4 overall and 4-4 ACC
- **Clemson University**  
Men's Basketball – 12-19 overall and 2-14 ACC  
Women's Basketball – 21-10 overall and 10-6 ACC  
Football – 9-3 overall and 6-2 ACC
- **Florida State University**  
Men's Basketball – 9-21 overall and 4-12 ACC  
Women's Basketball – 19-12 overall and 9-7 ACC  
Football – 11-2 overall and 8-0 ACC

## **2 Compliance**

- **University of Virginia**  
Virginia was unwilling to cooperate in this study. After various attempts to gather the information through the Atlantic Coast Conference and NCAA, Virginia was simply left out of the compliance section.
- **University of North Carolina at Chapel Hill**  
Major Violations – 0  
Secondary Violations – 9
- **Georgia Tech University**  
Major Violations – 0  
Secondary Violations - 3
- **University of Maryland**  
Major Violations – 0  
Secondary Violations – 20

- **North Carolina State University**

Major Violations – 0  
Secondary Violations – 6

- **Clemson University**

Major Violations – 0  
Secondary Violations – 11

- **Florida State University**

Major Violations – 0  
Secondary Violations – 12

### **3 Graduation Rates**

In looking at graduation rates, it is important not only to consider graduation rates for athletes but also for the student body as a whole. Athletes, just like other students, are a product of their environment. Graduation rates of athletes alone are not a valid measure; instead, it must be analyzed in the context of the rate in which the university graduates all students. The graduation rates that appear below are for students who entered college in 1994-1995. These are the latest rates available, because this class of students and student athletes would have completed their six-year time period in 2000-2001. The graduation data in total number of students and percentages is below:

- **University of Virginia**

All students – 2747 total students for a graduation rate of 92%  
All athletes – 95 total student athletes for a graduation rate of 84%

- **University of North Carolina at Chapel Hill**

All students – 3486 total students for a graduation rate of 79%  
All athletes – 94 total student athletes for a graduation rate of 71%

- **Georgia Tech University**

All students – 2012 total students for a graduation rate of 69%  
All athletes – 56 total student athletes for a graduation rate of 54%

- **University of Maryland**  
All students – 3636 total students for a graduation rate of 64%  
All athletes – 84 total student athletes for a graduation rate of 63%
- **North Carolina State University**  
All students – 3503 total students for a graduation rate of 60%  
All athletes – 63 total student athletes for a graduation rate of 60%
- **Clemson University**  
All students – 2376 total students for a graduation rate of 72%  
All athletes – 94 total student athletes for a graduation rate of 63%
- **Florida State University**  
All students – 3934 total students for a graduation rate of 61%  
All athletes – 71 total student athletes for a graduation rate of 54%

In analyzing the graduation rates of these select universities, it seemed that there needed to be a context in which to evaluate these figures. Since the number of credit hours tends to vary from school to school, this is something that could affect graduation rates. Duke University, for example, has extremely high graduation rates but only requires 80 credit hours for graduation. After discovering this information, it seemed relevant to consider the course requirements for the above universities in determining the value of their graduation rate variable. Upon research, however, it was found that graduation rates do not vary considerably among these seven public institutions. Each school course requirements fell between 120 and 130 credit hours. As a private institution, it seems the Duke figure was not comparable, another justification for only using public universities within the ACC in this study.

#### **4 Financial Health**

The financial health of an athletic department relates to its yearly budget and ability to meet that budget. This element is important, and sometimes controversial, given the large dollar amounts that are spent on intercollegiate athletics each year. These numbers for the seven ACC schools during the 2000-2001 fiscal year are listed below:

- **University of Virginia**  
Budget: \$31.6 Million  
The budget was not met. There was a deficit of \$42,017.
- **University of North Carolina at Chapel Hill**  
Budget: \$33.3 Million  
The budget was met.
- **Georgia Tech University**  
Budget: \$27.3 Million  
The budget was not met. There was a deficit of \$220,797.
- **University of Maryland**  
Budget: \$27.2 Million  
The budget was met.
- **North Carolina State University**  
Budget: \$26.5 Million  
The budget was met.
- **Clemson University**  
Budget: \$32.2 Million  
The budget was met.
- **Florida State University**  
Budget: \$31.6 Million  
The budget was met.

Table 1

Summary Data of University and Athletic Success Criterion Measures

University	Ranking	MBball: Overall	MBball: ACC	WBball: Overall	WBball: ACC	Fball: Overall	Fball: ACC	Major	Secondary	Grad: Overall	Grad: Athletes	# Students Grad	# Athletes Grad	Budget(M)	Met?	Deficit
University of Virginia	2	20--9	9--7	18--14	8--8	6--4	5--3	0	X	92%	84%	2747	95	\$ 31.6	No	\$ 42,017
University of North Carolina	5	26--7	13--3	15--14	7--9	6--5	3--5	0	9	79%	71%	3486	94	\$ 33.3	Yes	N/A
Georgia Tech	10	17--3	8--8	14--15	11--5	9--2	6--2	0	3	69%	54%	2012	56	\$ 27.3	No	\$220,797
University of Maryland	21	25--1	10--6	17--12	8--8	5--6	3--5	0	20	64%	63%	3636	84	\$ 27.2	Yes	N/A
North Carolina State	37	16--13	5--11	21--9	9--7	8--4	4--4	0	6	60%	60%	3503	63	\$ 26.5	Yes	N/A
Clemson	38	12--19	2--14	12--10	10--6	9--3	6--2	0	11	72%	63%	2376	94	\$ 32.2	Yes	N/A
Florida State	48	9--21	4--12	19--12	9--7	11--2	8--0	0	12	61%	54%	3934	71	\$ 31.6	Yes	N/A

Table 2

Summary of Criterion Variable Rankings for Each University

Univ	Ranking	Mbball: Overall	Mbball: ACC	Wbball: overall	Wbball: ACC	Fbll: Overall	Fball: ACC	Secondary	Grad: students	Grad: Athletes	Budget
UVA	1	3	3	3	4	5	3	X	1	1	3
UNC	2	1	1	5	5	6	5	3	2	2	1
Ga Tech	3	4	4	6	1	2	2	1	4	5	4
UMD	4	2	2	4	4	7	5	6	5	3	5
NCSU	5	5	5	1	3	4	4	2	7	4	6
UC	6	6	7	7	2	3	2	4	3	3	2
FI State	7	7	6	2	3	1	1	5	6	5	3

## Analysis

The athletic success rankings for each criterion are presented in Table 2. Using the ranked variables for both academic and athletic measures, a non-parametric correlation for ranked data, Spearman's Ranked Correlation Coefficient, was used. The first step was to convert the *U.S. News* rankings into a ranking from one to seven. The Spearman correlation was run using the actual rank, but it came out exactly the same as when ranked from one to seven. The next step was to run the *U.S. News* ranking against each of the indicators of athletic success and determine whether or not a positive or negative relationship existed between the each. Finally, a Spearman correlation will run the *U.S. News* ranking against the composite score of athletic success to determine the relationship that was ultimately sought out to be discovered in this study.

The results of the nonparametric Spearman's correlations are presented in Table 3. The results indicant that only two measures variables yielded significant spearman correlation coefficients (spearman rho > .786) when compared with overall university ranking: men's basketball overall win-loss record (rho = .821) and men's basketball win-loss record in the ACC conference (rho - .786)



Table 3

Summary of Spearman Correlations for all Study Variables

	University Ranking
Men's Basketball Overall Win-Loss Record	.821*
Men's Basketball Win-Loss Record - ACC Conference	.786*
Women's Basketball Win-Loss Record	-.143*
Women's Basketball Win-Loss Record – ACC Conference	-.491*
Football Win-Loss Record	-.571*
Football Win-Loss Record – ACC Conference	-.527*
Secondary Compliance Violations	.643*
Graduation Rate of Student Body	.714*
Graduation Rate of Student Athletes	.655*
Athletic Budget	.144*
Composite Score of all variables	.643*

\* p<.05

## **Chapter Five – Discussion**

The introduction and review of literature lay out the justification for the topic that was selected for this study. Therefore, any discussion of the study itself must first begin with the sample selected. The Atlantic Coast Conference was picked due to the location of the author. The findings are not transferable to the National Collegiate Athletic Association as a whole; however, the ACC is representative in that it is a highly regarded conference composed of nine well-known institutions of higher education as well as athletic powerhouses. Only seven of the nine ACC schools were used in the study, however, due to the many discrepancies between public and private institutions. As private universities, Wake Forest and Duke are a great contrast to the public schools in terms of size, budget, student performance, athletic emphasis and funding as well as administration. Public universities are much more standardized in terms of their practices and provide a more even measure of comparison for purposes of this study.

The next item of discussion is the use of the *U.S. News & World Report* college rankings. Although this annual ranking system does receive a fair share of criticism, it remains an important force in American higher education. The first set of rankings appeared in 1983, and since that time, the magazine has been attempting to perfect its measure of academic excellence (Cary, 2001). Fifteen additional indicators of such success have been added since then, part of these continuous efforts to capture academic excellence. When critics charge that academic excellence has not been properly measured, *U.S. News* turns to top officials at more than 1400 colleges to turn the tables and rank the quality of the magazine's measures. A majority of those who responded rated the indicators as either important or very important measures (Cary, 2001). In addition, many universities have begun using programs designed to build upon academic excellence and use the *U.S. News*

indicators to monitor their progress. With the longevity of the rankings, the support of academic administrators and the renowned publicity that the rankings receive, the author felt comfortable using *U.S. News* as the source for academic excellence and success.

In regard to measuring athletic success, there existed no one method of measurement. Although the Resource-Based View by Smart and Wolfe (2000) remains in its infancy, there is a good deal of potential for its future research ramifications. Also, it provides excellent opportunities to expand and extend the research into further studies. While Smart and Wolfe (2000) only studied Pennsylvania State University's football program, this study has delved a little deeper into the theory with a look at all public universities within a conference. The next logical step would involve a nation-wide study.

The most important topic to consider is the lack of a cause and effect relationship in this study. Despite any positive relationships that may have existed, it is not accurate to generalize these findings or to assume a causal relationship between variables. The study simply provides a statistical assessment of the relationship that may exist between the various factors under study. The reasons are several – the small size of the sample, the unique make-up of the Atlantic Coast Conference and the reliance on the accuracy of the Resource-Based View. A more broad-scale study would be needed on this topic to even begin the process of attempted generalization.

Another point of discussion is the data that was originally gathered that was not specifically used in the analysis. One such example is the number of major compliance violations. Since none of the schools in the study reported such violation for the 2000-2001 year, this item was removed from the Spearman's analysis. Another example is the actual numbers of students and student athletes graduating. Because of the discrepancies in the size of student population, these numbers were gathered only for informational purposes.

The financial component of the study is another area that may have had ramifications on the results. Discrepancies again exist in the self-reporting measures of universities; therefore it is difficult to ascertain financial data that is completely comparable. The study was able to utilize the athletic budget of each university as well as whether or not this budget was met, but that is far from a true picture of what is happening financially in these institutions. As mentioned in the review of literature, there are many ways to view differences in athletic financial reporting. Coaches' salaries, for instance, can be credited either directly to the athletic budget, or to payroll. Large scale fundraising arms or booster clubs of university athletic department raise millions of dollars that may or may not be accurately reflected in an athletic budget. This study or a similar one would certainly benefit from more precise accounting procedures in relation to the financial element of study. Devising a way to adequately meet the challenge with financial information would be a huge asset to this area of study.

Turning to the results, because the sample size was so small, the significance level was much higher than it would have been with a larger sample. It is interesting to note that academic ranking versus compliance violations, graduation rates of both students and athletes, budget as well as the athletic composite score were all positive numbers close to one. Perhaps if a larger sample was used in a future study, these factors may prove to be significant.

The results of the study were quite different from the anticipated outcome. Significant relationships were predicted for aspects of athletic success versus academic success. The only factors that resulted in significance were relating to men's basketball. Because the Atlantic Coast Conference has always been regarded as a conference of "basketball schools" with nationwide success in this sport year after year, this finding was

quite interesting. As Florida State University entered the conference for the purpose of trying to turn the conference into a football conference, this goal may not have been achieved yet. Women's basketball success and football success were even found to have negative correlation coefficients with academic success in this study. Contrastly, men's basketball seems to impact academic success, likely through the "reputation" criteria found in the *U.S News & World Report* rankings.

Implications for future research are many. This study merely breaks the surface of potential and analysis in the area of intercollegiate athletics within the university framework. As the Knight Commission has recently shown us, the end of the controversy is nowhere in sight. College sports are a huge business, worth billions of dollars. The emphasis is not declining, and actually, the opposite may very well be true. This year, the NCAA and Fox Television announced an agreement to host Sunday night college basketball games, something that has never been done before. Every day, the sports pages and local newspapers are writing of some sort of scandal, financial situation or commercialization of college athletics. CNN recently reported on the widening gap between the "haves and have nots" in college sports, forcing all colleges and universities to try to keep up with the top Division IA teams, many of which have much larger resources, both human and financial, to pull from in order to achieve success (Isidore, 2001). In a report on college athletics, one school's accounting officer stated, "There's a lot of pressure on [the] expense side to build more facilities and pay for more coaches, and on the revenue side you hit the ceiling" (Isidore, 2001, p. 1). Statements such as this are nothing new, however, it seems that the constant reporting, coupled with the recent Knight Commission results, are causing those on the academic side of college campuses to become more attuned to and involved in the situation. The faculty in higher education in America has often been overlooked in this

debate, as administrators, coaches, players and fans are the outspoken parties involved. But that may be changing. At the University of North Carolina, one of the seven institutions in this study, a panel of faculty and students, another voice that has not historically been vocal, told Knight Commission leaders that they should call on teachers to correct the tone and priorities of college sports (Barrett, 2001). But will it be so easy to bring athletics back under the faculty control that was a short-lived part of its historic roots?

As this situation continues to play itself out, it could be guided and supported by more research in this area. Before the perfect solution can be found, the exact problem needs to be determined and supported by current research. Do successful intercollegiate athletic programs contribute to or compete against academic success? What exactly is the relationship between the two? Research is the answer. Nationwide studies with clear parameters and precise financial information are necessary, even crucial to the future role of college sports within the university. The Resource-Based View must be tested out and against other theories to justify its implications. The collegiate ranking system needs to be evaluated more carefully and statistically to determine its fate. And finally, the ramifications of intercollegiate athletics need to be tested and analyzed with consequence rather than debated with no evidence. The future of higher education in America is too important to be weakened by a debate over athletics. Instead, the relationship athletics play must be discovered, and then maximized for any sort of positive impact on our nation's educational institutions. As John Dewey once said, "Education is not preparation for life; education is life itself."

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