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Impacts of Collegiate Athletics on a University and their Potential Benefit to the overall University

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This starred paper submitted by Chad A. Eickhoff in partial fulfillment of the requirements for the Degree of Master of Science at St. Cloud State University is hereby approved by the final evaluation committee.

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IMPACTS OF COLLEGIATE ATHLETICS ON A UNIVERSITY AND THEIR POTENTIAL BENEFIT TO THE OVERALL UNIVERSITY

by

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B.S., University of Minnesota, 2006

A Starred Paper

Submitted to the Graduate Faculty

of

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree

Master of Science

140031S1

St. Cloud, Minnesota

July, 2014

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INTRODUCTION

Collegiate athletics has long been a part of the American university setting. It is difficult to argue that athletics does not have an impact on the overall university. However, there is much debate as to whether the overall impact of collegiate athletics on a university is beneficial, and to what degree. As universities invest resources toward the betterment of athletic programs, it is important to critically analyze whether this is a worthy investment for a university as a whole. This paper provides an analysis of the impact of collegiate athletics on a university, looking primarily at return on investment both financially and in regards to admissions initiatives.

THE BIRTH OF THE FLUTIE FACTOR

One of the commonly cited benefits of collegiate athletics for a university is the potential to increase student applications. Roy, Graeff, and Harmon (2008) noted that both Sperber (2000) and Zimbalist (1999) found that "the potential for athletics to spur student applications has been touted as the primary financial benefit athletics can provide to an institution" (Roy et al., 2008, p. 13). The phenomenon of intercollegiate athletic success increasing applications to a university is often times referred to as the "Flutie Effect" or "Flutie Factor" within popular culture and even academia. Sperber (2000) did an excellent job describing the dawn of this belief:

> For college sports fans, particularly the new ESPN generation, Doug Flutie's last-second "Hail Mary" pass in a nationally televised Thanksgiving weekend game, enabling Boston College to beat heavily favored Miami, was one of the most memorable moments of sports theater during the 1980s. Flutie also won the Heisman Trophy that year (1984) and, according to media commentators, put his school "on the map," especially for younger sports fans. A surprising result of Flutie's triumph, never previously seen in American higher education, was that applications for admissions to BC spurted upward during 1985-86; hence the term "Flutie Factor" for application jumps sparked by nationally televised college sports victories. (p. 60)

In reference to the "Flutie Factor," Mary Burgan, the executive secretary of the American Association of University Professors, shared her opinion:

> Suddenly, with television's saturation coverage of collegiate sports, small schools could gain national reputations . . . The applications for admission to Boston College rose 25 percent in the year following Doug Flutie's exploits as quarterback. Athletic success on the small screen would mean increased enrollments. (as cited in Sperber, 2000, p. 60)

Burgan's opinion is not unique as higher education administrators throughout the country saw the potential of duplicating the "Flutie Effect" on their own campuses (Frank, 2004). "From the mid-1980s on, many admissions officers have prayed for the "Flutie Factor" to hit their schools, and many university administrators have invoked it to justify their excessive spending on college sports" (Sperber, 2000, p. 60).

TRYING TO MEASURE THE FLUTIE FACTOR

Many of the firmly held beliefs about the potential effects of collegiate athletics on a university are opinion or perception based. According to Goff (2000), "There exists, however, minimal work concerning the extent of indirect impacts of such [athletic] turnarounds across different campuses using rudimentary descriptive statistics,

much less using sophisticated statistical analysis" (p. 90). Over a decade later, Getz and Siegfried (2012) shared the same sentiment when they stated, "Systematic evidence concerning the effect of success at Division I sports in attracting the interest of prospective students is ambiguous at best" (p. 55). With the large investment many universities are making toward athletics, it is surprising that there is not more hard statistical evidence. However, it is important to look closely at the research that does exist. In what is seemingly a straightforward topic, definitive results are surprisingly limited. Studies within this field have challenges trying to establish causal relationships between athletics and an institution's metrics such as application numbers and financial giving (Frank, 2004).

Most of the studies that will be referenced in this paper define success as national championships, and the most common focuses of these studies are limited to Football and Men's Basketball. With only one team winning a football championship and one team winning a basketball championship each year, this tends to be a very narrow definition of success, which few schools ever will attain. When athletic success is defined this way, effects on applications and enrollment are relatively minimal. Jones (2009) tried to expand upon looking only at champions. He not only looked at whether a team appeared in a post-season bowl game, but also the television ratings of that particular bowl game. Jones then looked for relationships between these data and an institutions application numbers and admissions yield data. We will look at Jones' results as well as the results of other researchers later. Like Jones, anyone who attempts to research the Flutie effect will have to come up with their own definitions of athletic

success. Frank (2004) believes that limitations in the available data as well methods of statistical inference make researching a causal relationship difficult.

EXPOSURE AND FINANCES: THE BIG NUMBERS

The magnitude of the numbers associated with collegiate athletics adds to the attraction of their pursuit for a university. These numbers come in the form of exposure through viewership and dollars coming into the university. More than 47 million people attended a collegiate football game in 2006 (Johnson as cited in Roy et al., 2008). The 119 National Collegiate Athletic Association (NCAA) Division I institutions accounted for the majority of this attendance with 36 million fans in attendance (Johnson as cited in Roy et al., 2008). It is clear that in America the public has a profound fascination and passion to follow their collegiate sports teams.

Many institutions pursue athletic prowess to increase their name recognition. Regardless of the actual academic quality of an institution, athletics serves an important role in putting an institutions name on the map. "Athletics is an integral source of name exposure for almost every university and often the only frequent source of exposure for schools possessing little in the way of academic reputation" (Goff, 2000, p. 91). Sperber (2000) stated that "the most amazing part of the situation – a triumph of media images over reason--is that many high school seniors confuse winning in sports with academic quality" (p. 62). If Sperber is in fact correct, it is understandable why investing in athletic programs is a so important for institutions. Essentially, to take it a

step further, without athletic success students may mistakenly believe that an institution is not strong academically.

The potential financial impact is just as enticing for institutions. The impact of a stand-out athlete has the potential of making an economic impact just like Doug Flutie did for Boston College. Brown (1993) calculated that a star division one football player, defined as one that is drafted into the NFL, can be responsible for $538,760 of annual revenue. As a result "over a 4-year career a premium player could therefore generate over two million dollars in revenues for his college team" (Brown, 1993, p. 679). With the potential of large economic gains it is not surprising that institutions are tempted to pursue increasing the athletic profile on their own campuses.

RECENT EXAMPLES AND ANECDOTAL EVIDENCE OF THE FLUTIE FACTOR

If a program that is not usually in the athletic spotlight finds success, more profound impacts are frequently observed. Previously mentioned was the well-known example of quarterback Doug Flutie and at the time little known Boston College's win over Miami. In 1985, the year following Boston College's big win, Boston College saw an increase of 4,000 applications compared to the previous year (Getz & Siegfried, 2012). Another great example shared by Getz and Siegfried was that of North Carolina State University's NCAA men's basketball championship win in 1983. In this example, North Carolina State University experienced a 40% rise in their application numbers (Getz & Siegfried, 2012). These types of historical case studies document the significant potential effect of intercollegiate athletic success.

There are many recent examples of this phenomenon as well. A prominent recent football example includes Boise State University's surprising run of success (Croxford, 2008). In men's basketball, a recent example includes success at George Mason University (Croxford, 2008). George Mason University's (GMU) Final Four run in 2006 created some impressive free exposure for the university. Thomaselli (2007) estimated that GMU received as much as $50 million worth of exposure and publicity (Thomaselli, 2007). The exposure resulted in a 350% increase in admissions inquiries (Wolverton, 2008). According to an article by Croxford (2008) in *Hawaii Business*:

> In 2006, the school saw freshmen applications increase by 20%, while the number and size of campus tours for prospective students and parents nearly tripled. In addition, online registration to GMU's alumni directory grew 52%, which resulted in a 24% increase in alumni e-mail addresses on file and a 25% increase in alumni activity. (p. 1)

According to the same article, Boise State University also had substantial enrollment increases as a result of their football program's success. To sum up the numbers, Boise state experienced a 135% increase in online inquiries and 10 times the application inquiries in their graduate college (Croxford, 2008). This added interest resulted in an overall increase of 9.1% in applications and a 3.5% increase in enrollment (Croxford, 2008). These recent examples provide some staggering evidence to the potential of success, and will likely help shape the future academic research in this field.

FLUTIE FACTOR GENERAL RESEARCH RESULTS

Increased alumni giving and increased applications are two of the most frequently cited benefits of athletic success to a university (Frank, 2004). However, the actual effect on these benefits has been questioned (Frank, 2004).

> Perhaps the only firm conclusion that can be drawn from the review of the empirical literature on the indirect effects of athletic success is that each of the competing claims regarding these relationships is likely to be true under at least some circumstances. (Frank, 2004, p. 25)

Studies have often found contradictory results, and those that have found that athletic success has the intended positive impacts often find that it is by a small margin (Frank, 2004). A study such as Brooker and Klastorin's (1981), which looked at alumni giving, found varying results for different universities and cautioned against relying on athletic success for institutional finances. The varying results definitely support the idea that there is not overwhelming evidence on either side of the argument.

In regards to the increases in applications, "Successful athletic performance appears to boost applications at winning colleges and universities, but aside from a few isolated examples—such as the often cited but largely exaggerated "Flutie Factor"—the effects are typically quite modest" (Desrochers, 2013, p. 2). In the study mentioned previously, Jones (2009) concluded that there is a positive correlation between appearing in a bowl game as well as for bowl games with higher television ratings. However, Jones further established that although statistically significant, the magnitude of the relationships was small. Much of the research shows the effect on applications to

be fairly limited outside of the realm of the miraculous Cinderella type stories that are in the forefront of our memories (Frank, 2004).

Most research looks specifically at football or basketball success. Toma and Cross (1998) believe that the effect of football and basketball are different due to the timing of their seasons. Football, being a fall sport, is thought to be more likely to affect applications for the following year. Whereas in basketball, which concludes in March, may have a delayed reaction until the following admissions cycle, especially for selective schools with early application deadlines. Their results showed that there is a difference between the effect of football and basketball success on applications (Toma & Cross, 1998).

In the realm of alumni giving, there are mixed research results as well. Brooker and Klastorin (1981) found an example of this in their study which found positive effects on alumni giving at some universities and negative at others. Grimes and Chressanthins (1994) looked specifically at Mississippi State University and found that there was actually a negative association between the football program's winning percentage and alumni giving. Financial giving research, much like the research on applications, has not convincingly shown that athletic success has a significant impact.

HOW LIKELY IS IT? A CLOSER LOOK AT RETURN ON INVESTMENT

Even if athletic success does in fact increase alumni donations or applications, there are still questions about what part of the institution the donations actually benefit as well as the academic quality of the applicants. If alumni donations are increased due

to athletics at all institutions, no competitive advantage results (Frank, 2004). Frank (2004) stated that if the benefit of increased alumni giving occurs everywhere, "A new equilibrium results in which both the expected number of athletic programs and the expected level of total expenditures in each become larger than before" (p. 13). Frank believes that this same concept of an increasing equilibrium would be observed when trying to use athletics as a device to increase applications as well. The effects of increased revenues from alumni donations as well as growing television contracts will entice more institutions to pursue big-time athletics and the institutions already invested to invest even more (Frank, 2004).

Assuming athletic success does attract more applicants, the question still remains about the type of students that are attracted to athletically successful institutions. "The best evidence suggests . . . that athletic success increases applications but does little to improve the academic credentials of the general student body" (Getz & Siegfried, 2012, p. 55). Getz and Siegfried (2012) speculated that "this may be because big-time sports [are] unattractive to more academically orientated students" (p. 55). Tucker and Amato (1993) did find a statistically significant correlation between football success and SAT scores, but found that basketball success had no impact on SAT scores. A study by Mixon (1995) calculated that at most the average SAT scores of an entering class increase by 1.7 points for every tournament round the basketball team advances. Frank (2004) made an important point about the relativity of selectivity. "It is mathematically impossible for more than ten percent of all schools to be among the ten percent most selective" (p. 14). For universities looking to raise the academic

profile of its applicant pool, investing in athletics may not be the most productive means of accomplishing this goal. "The same funds used to boost athletic performance could be used in other ways that make schools more attractive to potential applicants—financial aid, for example, or increased direct marketing, or improved academic programs" (Frank, 2004, p. 14).

The magnitude of the impact is likely also not as large as what is depicted in the rare Cinderella type stories. Murphy and Trandel (1994) found that a football team in a major conference increasing from winning 50% of its games to winning 75% of its games would expect to see an increase of 1.3% on its number of applications. Considering the funds that would likely need to be invested to create a winning percentage increase of that magnitude, there likely would be a more productive technique to increase applications.

The potential of collegiate athletic success increasing financial giving to a university is the other frequently referenced benefit. However, it is arguable whether such giving is to the benefit of the university as a whole. Stinson and Howard (2007) believe that, "As both academic and athletic programs have become increasingly reliant on private support, the relationship between academic and athletic fund-raising has drawn increased research attention" (p. 235). Essentially, the question has become whether athletic program donations are coming at the expense of the academic side of the university. Stinson and Howard found that an "analysis of allocation patterns indicated that an increasing percentage of total dollars donated was directed to athletic programs" (p. 235). This was the same result that was found over 20 years earlier by

Sigelman and Brookheimer (1983). Their results found that athletic success was only correlated with donations directly to the athletic department (Sigelman & Brookheimer, 1983). In this regard financial giving due to athletic success would not have a profound impact on the institution as a whole, but rather would just be poured into the increasing athletic expenditures.

Beyond simply determining if athletic success does increase alumni giving, the next question is to what degree. In terms of magnitude, Sigelman and Brookheimer (1983) estimated that "a 10% increase in football winning percentage sustained over a four-year period would increase donations to the athletic program by more than $125,000 in 1983 dollars" (Sigelman & Brookheimer as cited in Frank, 2004, p. 22). Institutions need to weigh the fact that there are no guarantees to the likelihood or scale of alumni giving due to athletic success.

DRIVEN TO EXTREMES: RULE BREAKING

With so much on the line, institutions are driven to gain a competitive edge. Brown (1993) argued that with the large potential benefit of a big-time recruit, it can create a lot of temptation for athletic departments to break NCAA rules. "Accordingly, policies aimed at reducing NCAA violations and other abuses must lessen these incentives and/or raise the costs of cheating by sufficiently monitoring teams and penalizing offenders" (Brown, 1993, p. 682). In other words, in order for the rules to be effective, the penalties need to outweigh the potential gains.

One of the most extreme examples of penalties handed down by the NCAA took place at Southern Methodist University (SMU). At SMU, they were given the "death penalty" due to repeated NCAA rules violation. As a result, they were unable to compete in football in 1987 and 1988 in addition to other penalties. Due to this unique situation, SMU serves as an interesting case study on the effect of an institution no longer competing in football as well as the effect of NCAA sanctions. In his research of SMU, Goff (2000) estimated that this resulted in a 7% decline in the 3-year average of applications after the death penalty was imposed. Goff concluded that dropping football can have negative impacts on enrollments and possibly other factors such as financial giving. The "death penalty," although an extreme example, gives us insight into the effects of NCAA penalties and sanctions.

Other studies have looked specifically at the effect of NCAA violations and probation on annual giving. Grimes and Chressanthins (1994) looked specifically at Mississippi State University in their study and estimated a loss of $1.6 million in donations in 1982 dollars would result from a year's football sanction. Rhoads and Gerking (2000) also looked at the effect of violations and estimated a reduction of $1.6 million in 1987 dollars on annual giving as a result of probation due to a basketball violation. The potential of NCAA violations adds an additional component of risk to the intended positive financial impacts of an athletic program. Every institution that enters the arena of collegiate athletics has to weigh the impact and plan for the possibility of NCAA violations.

THE ETHICAL QUESTIONS

Even beyond the possible implications of NCAA violations, there are more general questions about the overall ethics of collegiate athletics. Specifically, questions arise about the impact of collegiate athletics on the individuals participating and institution as a whole. Duderstadt (2000 as cited in Benford, 2007) believes that "big-time college sports have threatened the integrity and reputation of our universities, exposing us to hypocrisy, corruption, and scandal that all too frequently accompany activities driven primarily by commercial value and public visibility" (p. 13). The over commercialization of collegiate sports is at the root of many arguments about the current state of collegiate athletics. William Dowling (as cited in Benford, 2007), a Professor at Rutgers put it bluntly by stating:

> The fans who view the Tostitos Fiesta Bowl on television are watching not only a football game but a demonstration that the same culture that generated the Jerry Springer Show and cable-TV wrestling has been able to perpetuate, and to hollow out from within, the university as an institution. (p. 13)

The potentially negative effect that collegiate athletics may be having on higher education has definitely inspired many to speak out on the issue.

The argument can be made that student-athletes are not fairly compensated for the revenue that they create. Roher (2011) has this belief, and revisited the study completed by Brown in 1993, to form the basis for his argument that student-athletes should be paid. Roher's study changed some of the methods and used more current data. After analyzing the data, Roher concluded that premium college football players

have a possible value of $409,652.60 to $1,038,657.38. Roher went on to argue his opinion that this shows that compensation for student-athletes is in order, and that by fairly compensating collegiate athletes there would be less under the table money exchanging hands. Collegiate athletics operates within an interesting economic situation.

> The primary contradictions within the NCAA and, in particular, its top revenue producing schools is that, on one hand the amateur rules apply to the athletes and on the other, the rules of the market apply to the school's athletic departments with the big exception being their labor costs. (Meggyesy as cited in Benford 2007, p. 15)

The concept of paying student-athletes is something that the NCAA will need to continue to monitor.

Outside of the question of paying athletes, there are other ethical questions about the exploitation of collegiate athletes. There are questions as to whether athletes are able to receive a quality education while they are under the demands of their athletic commitments.

> Sports reform activists not only express concern for the economic and physical exploitation of athletes; they also point out that the athletes are cheated out of the one thing they were promised in return for their athletic performance: a college education. (Benford, 2007, p. 15)

Benford (2007) listed complaints about collegiate athletics within the realm of academics. One of the primary complaints is that athletes are urged away from various majors due to the difficulty of the program or scheduling conflicts (Benford, 2007). Another complaint listed by Benford is that athletes are done a disservice by the way they are treated. It is argued that they develop a "learned helplessness" as a result of the

hand-holding they experience during their time at an institution (Benford, 2007, p.15). National Public Radio commentator Pias Kamau (as cited in Benford, 2007) was frank in his description of the exploitation of athletes:

> Colleges that recruit young men with the expressed objective of educating them have no such intention. Colleges rob athletes: first, by not educating them; and second, by not sharing with them a portion of the money they bring into college budgets. The substitute is liquor and easy sex. And the ultimate modern intoxicant—a gladiator's adult adulation. (p. 15)

The current state of collegiate athletics evokes many ethical dilemmas about the role of athletes in the business of collegiate athletics.

SHAPING THE STUDENT BODY THROUGH ATHLETICS

Another potential benefit of athletics on enrollment is that collegiate sports teams "may draw more students from under-represented groups, thus enriching the college life for all students" (Getz & Siegfried, 2012, p. 53). One example given by Getz and Siegfried is that Shenandoah University reviving their football program in order to attract more males to their campus which had a large female population. In another example, Getz and Siegfried cited that Stevens Institute of Technology accomplished the opposite effect by introducing women's athletics to their predominately male institution. Getz and Siegfried made the important point that athletics can be used as a vehicle to increase diversity on a campus.

As mentioned earlier, athletic success especially of little known institutions can bring a great deal of exposure. One of the biggest effects is on the geographic reach of a schools recruiting program. Athletics may have the potential to increase the draw of

out-of-state students. Mixon and Hsing (1994, as cited in Goff, 2004) used a statistical model to look at this concept and determined that membership: "In a statistical model explaining the percentage of out-of-state students across universities, the estimated that membership in the NCAA's highest division increased the percentage by 2-4 points after controlling for a number of other university characteristics" (p. 95). Geographic diversity enriches a university environment, and appears to be aided by the draw of Division 1 collegiate athletic programs.

Many small schools are not necessarily waiting for athletic success to drive enrollment, but rather are using the actual recruitment of student-athletes for their teams to bolster enrollment. Junior Colleges are frequently in this position. Robert Keys (as cited in Ashburn, 2007), President of Rockingham Community College, went as far as saying: "A lot of people think that if you don't have an athletics program, you're not a real college" (p. 59). Frequently at community colleges the actual athletes make up the enrollment growth that the institution experiences (Ashburn, 2007).

WHAT IS THE COST?

In the 2010 fiscal year, Division I athletics was a $6 billion enterprise, and the costs continue to rise (Desrochers, 2013). The average institution competing in the Football Bowl Subdivision (FBS) spent roughly $45 million on athletics in 2010. Other Division I institutions spent around $10 million during that same year (Desrochers, 2013). The expenditures on collegiate athletics continue to grow in what is frequently being referred to as an athletics arms race. A calculation of athletic spending per

student at each institution was made, and, "On average, between 2004-05 and 2008-09 school years, real total operating revenues per full-time equivalent (FTE) student rose from $1,718 to $2,064; a 20% increase" (Denhart & Vedder, 2010, p. 6). In terms of a university's core expenses, that represent a growth from 6.9 to 7.4% (Denhart & Vedder, 2010). Denhart and Vedder went on to use these data to calculate what they refer to as an "athletic tax" which is "calculated by dividing a school's total subsidy to athletics by the number of FTE students attending the institution" (p. 7). Using this method for the same dataset from the 2004-05 season to 2008-09 season assessed earlier, an increase from $395 to $506 per FTE student was observed which equates to a 28% increase (Denhart & Vedder, 2010). Unfortunately, these increases in athletic expenditures have come at the same time as cuts in university funding from the state governments and growing tuition costs (Desrochers, 2013).

During tough economic times, many institutions have continued their athletic expenditures while freezing or cutting academic spending (Desrochers, 2013). On average, athletic departments spend three to six times as much per athlete compared to a typical student (Desrochers, 2013).

> Among Football Bowl Subdivisions (FBS) institutions, median athletic spending was nearly $92,000 per athlete in 2010, while median academic spending per full-time equivalent (FTE) student was less than $14,000 in these same universities. (Desrochers, 2013, p. 2)

There has been an explosion in athletic expenditures as they have increased twice as fast as academic expenditures from 2005 to 2010 (Desrochers, 2013). This equates to an increase of $6,200 per athlete per year compared to about $500 in additional spending

per FTE student each year during this time period (Desrochers, 2013). This vast discrepancy in spending would probably come as a surprise to many.

Not all institutions are spending at the same rate, and significant variances can be found when comparing athletic conferences. For example, in 2010, the Southeastern Conference spent a median of $163,931 per athlete, whereas the Sunbelt Conference had a median of $41,796 per athlete (Desrochers, 2013). "Much of the difference in conference spending is related to television contracts and conference payouts, which played a leading role in the spate of conference realignments that occurred in 2011 and 2012" (Desrochers, 2013, p. 7). The disparity will likely continue to grow in the coming years as "the top five conferences ([Atlantic Coast Conference], Big 10, Big 12, Pacific-12, and [South Eastern Conference]) current media contracts are expected to generate more than $1 billion per year, with average conference revenues ranging from $12 million to $20 million per school per year" (Desrochers, 2013). Surprisingly, despite these increases in outside funding, athletic departments have increased their reliance on institutional support (Desrochers, 2013).

Frequently, there is the perception that men's basketball and football create revenue that supports the rest of the athletic department. In reality, "more than 40% of FBS football and men's basketball programs were unable to fully support their own programs in 2010; in the remaining Division I schools, only a handful of these programs were self-supporting" (Desrochers, 2013). The data unfortunately does not support this commonly held belief about the two sports frequently cited as "revenue generating."

WHO PAYS FOR IT?

Despite the incredible sums of money being spent on collegiate athletics, it seems surprisingly infrequent that anyone ever asks about the source of the funding. Likely much of the general public would be surprised to know the answer. A candid article in an Athens, Ohio newspaper by journalist Sara Brumfield (2011) gave a weighty example of who pays the bill. In the article, Brumfield compared athletic power house Ohio State University to the lesser known athletic programs at Ohio University. Despite the fact that Ohio University has a lower tuition than at Ohio State University, after student fees are factored into the equation, the cost at Ohio University surpasses that of Ohio State University.

The Brumfield (2011) article further cited a survey given by Denhart and Ridpath (2011) to students at Ohio University that addressed the student fees being assessed to students. Ohio University students are charged a quarterly "General Fee" that is distributed amongst various groups. The students that were surveyed on average thought that $187.47 of their quarterly fee was going towards athletics, but in actuality it was $255 per quarter in subsidies (Denhart & Ridpath, 2011). One of the most staggering numbers that the survey provided is that "if a student attends the average 5.8 sporting events a year, paying $765 a year in athletic fees, a student who attends the average number of athletic events would pay over $130 per event" (Denhart & Ridpath, 2011, p. 9). Richard Vedder (as cited in Brumfeld, 2011), Director of the Center for College Affordability and Productivity, commented on the survey results by saying that

"we have been concerned in our organization—nationally, broadly—about the effect that increasing subsidization of intercollegiate athletics is having on universities, on the affordability of the universities, on the academic programs, et cetera, et cetera" (as cited in Brumfield, 2011, para. 15).

Ohio University is far from a unique case. "Athletic costs at American universities continue to soar year-after-year. With generated revenues failing to keep pace, athletic departments increasingly require large subsidies" (Denhart & Ridpath, 2011, p. 13). Desrochers (2013) calculated these subsidies on a per-athlete bases which showed a median subsidy of $20,000 to $30,000 per athlete. Student fees are frequently the largest source of these subsidies (Denhart & Ridpath, 2011). Numbers compiled by Berkowitz and McCarthy (2010) for *USA Today* were published in a chart analyzing the percentage of tuition going towards the funding of athletic departments. One would likely be surprised by how much of a student's tuition dollars are going towards supporting the intercollegiate athletic departments at their respective schools. A quick perusing of the list shows that it is not uncommon for over 10% of a student's tuition to go towards subsidizing an athletic program's budget, and there are a handful of universities with over 20% going to the athletic department (Berkowitz & McCarthy, 2010). Furthermore, "subsidies rose nearly as fast as athletic spending between 2005 and 2010, suggesting that the institutions themselves have contributed to the rise in athletic spending during this time" (Desrochers, 2013, p. 7). With the rising costs of college, it is somewhat surprising that students are not up in arms at these universities about the subsidies they are paying towards intercollegiate athletics.

Much of the divide can be witnessed when comparing various athletic conferences. For the 2008-09 season, "the average Big-10 student subsidized athletics to the tune of $67 per FTE. At the other end of the spectrum, the MWC (Mountain West Conference) had an average subsidy of $1,177 per FTE, more than 17 times greater" (Denhart & Vedder, 2010, p. 8). Interestingly, the conferences and universities most frequently criticized for excessive coaching salaries, commercialization and scandals are typically the universities and leagues that are requiring the least subsidies from their students (Denhart & Vedder, 2010). In other words, "the conferences with the smallest subsidies by all measures are the ones with institutions that spend the most on athletics and compete at the highest levels" (Denhart & Vedder, 2010, p. 11). Denhart and Vedder (2010) went as far as saying that "when it comes to imposing the athletics tax, the lesser conferences stand at the apex of the athletics scandal" (p. 11).

Denhart and Vedder (2010) took a deeper look at exactly who is most affected by this dependence on subsidies.

> Rich, famous and athletically well-known schools have only been trivially impacted at the institutional level by the explosion in [Intercollegiate Athletic] costs, while a significant number of schools that are, on average, poorer, less prestigious, and athletically more marginal have been clobbered. (p. 4)

Their reference to "poor" applies both to the resources of the institutions and the income of the students (Denhart & Vedder, 2010). In regard to the neediness of students, the four conferences with less than 20% of students receiving Pell grants have average tuition taxes under 4%. Whereas, in the case of the four conferences with over 25% of their students receiving the Pell grant, each of them has an average tuition tax over

13.8% (Denhart & Vedder, 2010). Thematically, across athletic conferences, schools with the neediest students are burdening their students the most by having them help subsidize a hefty athletic bill. Furthermore, the heavily subsidized universities are not getting the same return on their investments.

THE ECONOMICS: A LOSING GAME?

"The decision to spend more money to compete at a higher level cannot have the goal of increasing the university's winning percentage" (Getz & Siegfried, 2012, p. 55). Getz and Siegfried (2012) explained that when spending is increased proportionately across competitors, then no net gain in winning percentage should be expected. Frank (2004) described this phenomenon as well by saying that undesired results will likely occur in markets that rely on relative quality. This type of market is termed as a "winner-take-all" market by Frank, a market where profit is auctioned to the highest bidders, but the losers still have to pay as well. "The logic of competition in winner-take-all markets suggests that participants in these markets are likely to experience much less favorable economic results than they had expected at the outset" (Frank, 2004, p. 11). Denhart and Vedder (2010) reported that only "13 of the 99 public FBS schools that they had data for reported a pre-subsidy net profit, with the average loss being $8.4 million for each athletic department" (Denhart & Vedder, 2010, p. 6). The economic outcomes of intercollegiate athletics are frequently not favorable and undoubtedly a risky financial endeavor.

Universities frequently engage in the pursuit of athletic success with excessive optimism. "There is abundant evidence that potential contestants are notoriously optimistic in their estimates of how well they are likely to perform relative to others" (Frank, 2004, p. 8). Some of this optimism comes from the fact that individuals tend to estimate the likelihood of events by the number of similar events they can easily remember. Since successful teams are given more exposure, and as a result are more memorable, individuals begin to incorrectly believe that success comes at a greater frequency then failure (Frank, 2004).

> If the university administrators who decide whether to launch big-time athletic programs are like normal human beings in other domains, they are likely to overestimate the odds that their programs will be successful. The upshot is that many more institutions are likely to launch big-time athletic programs than would be warranted by unbiased profit-and-loss estimates. (Frank, 2004, p. 10)

The fact that the vast majority of athletic programs fall far short of creating enough revenue to cover their own costs strongly supports the idea that there is a bias towards overconfidence in the frequency of success. Also, insufficient revenues show that colleges are trapped in a market where expenditures are driven by the pursuit of a difficult to attain competitive edge (Frank, 2004).

> In fact only the programs at the very top of the FBS subdivision generate more money from athletics than they spend. Fewer than one in four of the 97 public FBS athletic departments generated more money than they spent in any given year between 2005 and 2010. (Desrochers, 2013, p. 10)

NOT UNIQUE TO ATHLETICS

Institutions have not solely relied on athletics to accomplish many of these goals. In general, higher education institutions have been trying to increase their name recognition, and in many ways have begun to operate even more like a business (Bunzel, 2007). Vice President of Stamats, a higher education marketing group, Robert Servier (as cited in Bunzel, 2007) clearly spelled out the situation by saying:

> There are 3,600 two- and four-year colleges in the United States. Even as a member of the academy, how many can you name? How many can your prospective students name? Or prospective donors? Can they name yours? Will they? (p. 153)

As a result, universities have resorted to large scale marketing and rebranding, and many have hired outside firms to take this on. Oftentimes universities will create a new logo, or may even change the name of the university altogether in order to rebrand themselves (Bunzel, 2007). Higher education institutions have started allocating large amounts of university resources in order to keep their name in the forefront of the public's memories (Tucciarone, 2007).

Rankings are one of the biggest driving motivators within higher education. Universities will work hard to rise up the various rankings to increase name recognition and perception. *US News & World Report* has several rankings for higher education institutions within the academic realm, and arguably they have the most coveted ranking lists that universities strive to find a place on. Interestingly, much like athletics, schools that are already at the top of these lists remain at the top, and other schools will have a hard time breaking into this echelon.

> The top ten university "brands" in 2001 were essentially the same five years later in 2006. Two universities Cornel and University of Chicago, which were tied for tenth place in 2001, did not make this group in 2006. If you consider the top 25, there were no changes. (Bunzel, 2007, p. 153)

Investing in a large scale branding effort may not have the desired impact, and may be most beneficial for universities that are on the cusp of ranking lists (Bunzel, 2007). "The truth remains that the universities have to learn [an] important business concept—return on investment—to determine if there are benefits of branding [to] justify the costs" (Bunzel, 2007, p. 153).

Many similarities between institutions' athletic pursuits and research pursuits can be found. With financial incentives tied to research, universities scramble and compete for the brightest students and best research faculty. This parallels the competition for the most talented athletic recruits and best coaches. Universities have poured money into their research programs to accomplish this goal. Much like the disparity in athletic expenditures, in 1995, 120 institutions accounted for 85% of academic research funds (Geiger, 2004). Geiger (2004) noted that there is a loop where the best students are attracted to the best research institutions, and the best students help produce the best research resulting in a cycle where the top schools remain at the top. This has a striking resemblance to the top athletic institutions that continually attract the top athletes, resulting in more wins which attracts better athletes. Interestingly, institutions are facing similar battles between each other in their research labs as they are on the athletic fields.

Brand (2006) pointed out that athletics are not the only part of a university relying on subsidies. Cross-subsidization is common, with one major example being undergraduate programs subsidizing graduate programs (Brand, 2006). Reliance on subsidies at institutions of higher education is not unique to intercollegiate athletics.

NOT THE ONLY MODEL

The American athletic model is not the only approach to athletics, and in many ways it is vastly different. Comparative work between North American and European sports organizations generally focus on the vast differences (Fort, 2000). However, Fort (2000) argued that there are more similarities than we realize, and that all sports organizations strive to field the most competitive team they can afford; however, the economics powering these ventures vary. Kesenne and Jeanrenaud (1999 as cited in Fort, 2000) summed up the overall differences by saying: "The most important difference between the United States and Europe is that American clubs are business-type companies seeking to make profits whereas the only aim of most European clubs so far is to be successful on the field" (p. 440). Collegiate athletic programs in the United States usually invest any revenues that they experience back into their program in the hopes of creating even more wins, unlike European programs (Fort, 2000). The big difference in funding comes from the fact that North American athletics are much more influenced by television broadcasting revenues compared to their European counterparts (Fort, 2000). The model of collegiate athletics in the United States is

significantly influenced by finances, and any evaluation of its current structure needs to be viewed through this lens.

CONCLUSION

Since the dawn of the "Flutie Factor," many institutions have attempted to duplicate the results on their own campuses (Frank, 2004). Institutions hope that athletic success will result in increases in applications and financial giving (Frank, 2004). The expectation of these outcomes has justified increases in athletic expenditures (Sperber, 2000). The use of these justifications has continued despite a lack of convincing research as noted by Goff (2000) and Getz and Siegfriend (2012).

Memories of Cinderella stories often ignite perceptions of the impact of collegiate athletic success (Frank, 2004). Croxford (2008) and Wolverton (2008) listed the recent examples of athletic success at Boise State University and George Mason University, and the profound impact this success had on interest in their schools. Despite the excitement surrounding these types of examples, Cinderella story type results are rare (Frank, 2004).

The impacts of collegiate athletic success typically are not as large as institutions had hoped for when beginning the pursuit of their athletic ambitions (Frank, 2004). The impact of collegiate athletic success on increasing applications is typically small (Murphy & Trandel, 1994). Also, even if athletic success increases financial giving, Stinson and Howard (2007) and Sigelman and Brookheimer (1983) found that increases in giving would typically only support athletic programs rather than the

institutions as a whole. The results of research on athletic success do not overwhelmingly show benefits when it comes to increased applications or alumni giving (Frank, 2004).

The pressure to have a successful collegiate athletic program has led to institutions breaking rules to gain an advantage (Brown, 1993). Goff (2000), Grimes and Chressanthins (1994), and Rhoads and Gerking (2000) all stated that rules violations can have negative financial impacts on an institution. Duderstadt (2000) questioned the ethicalness of collegiate athletics, even outside of the confines of NCAA rules. Roher (2011) believes that athletes are being exploited and that financial compensation is justified. In addition to these arguments of exploitation of athletes, Benford (2007) shared complaints that student-athletes are not receiving the education that they deserve. There are many ethical questions regarding the current state of collegiate athletics (Benford, 2007).

Collegiate athletics has become a massive financial enterprise (Desrochers, 2013). The expenditures continue to grow rapidly (Denhart & Vedder, 2010). Within collegiate athletics, there is a great discrepancy in expenditures between the various NCAA Division I leagues (Desrochers, 2013). Interestingly, the leagues that spend the most on their collegiate athletic programs require the least subsidies (Denhart & Vedder, 2010). Desrochers (2013) believes that the current growth in athletic spending will not slow down anytime soon, and disparities between programs will only grow with increased revenue from media sources.

The economics are not favorable for institutions looking to enter the arena of collegiate athletics (Frank, 2004). This is largely due to the fact that collegiate athletics operate in a "winner-takes-all" market (Frank, 2004). Also, when spending on athletic programs is increased proportionally, there is no net gain in athletic success (Getz & Siegfried, 2012). Denhart and Vedder (2010) as well as Desrochers (2013) found that very few athletic programs are self-sufficient much less profitable.

Within higher education there can be many similarities found between an institution's pursuit of athletic endeavors and other endeavors such as research. Bunzel (2007) showed that institutions are competing for coveted spots on ranking lists, which are largely driven by research success. Brand (2006) also pointed out that athletics is not the only portion of a university that requires subsidies.

Frank (2004) did not argue that universities should cut their athletic programs, nor does Frank criticize institutions' desire to pursue athletic success. There are many inherent benefits of a collegiate athletic program (Brand, 2006). However, it is likely that the spectator experience and student-athlete experience can be kept at a high level while moderating what has been an explosion in expenditures (Desrochers, 2013). Desrochers (2013) shared this sentiment by saying:

> For student spectators, college sports offer a common rallying opportunity and often provide a sense of community. And for student athletes themselves, sports clearly provide an opportunity to learn about skill development, teamwork, competition, and, of course, healthy exercise habits. But even small programs can impart many of these same benefits, especially with athletic costs becoming a growing concern. (p. 4)

Lipsyte (2004 as cited in Benford, 2007) took it a step farther than Desrochers in the language used to express a similar belief.

> What thrills us—the pulsing arenas and the Cinderella upsets, the buzzer beaters and the cheerleaders, and the painted faces and the sheer joy of energy unleashed—comes from the game itself. It does not come from the sewer of greedy colleges, con-man coaches, and college kids who can do everything with a basketball but read its label. (p. 22)

Denhart and Vedder (2010) believe that changes to collegiate athletics will have to come from the outside, as institutions are too strongly pitted against each other in the athletic arms race. There are current and historical examples of rules and agreements across institutions that help to regulate athletic expenditures. Current NCAA rules on scholarship limitations per team help to create a more level playing field. This bares some similarities to the salary caps imposed by various professional sports leagues (Murphy, 1996). The intention of the salary cap is to help smaller market teams compete with large market teams, and avoid a bidding war (Murphy, 1996). A historic example can be found with the Ivy League which once created a rule banning spring football practice; however they have since lifted that ban (Murphy, 1996). Murphy (1996) stated that "The extra practice time does not increase the total number of winners, it just increases the time student athletes lose to studies" (p. 25). Although, this would hold true within a league, unfortunately it would hinder their ability to compete with team outside of their league. Hence, it is necessary for these types of regulations to come from a higher level if they are to have the desired effect on a large scale. It is possible for these types of rules to have a profound impact in changing the landscape and direction of collegiate athletics.

Intercollegiate athletics has become a complicated beast. There are many parts intertwined and their reach goes far beyond the actual higher education institutions and athletic departments (Benford, 2007). With so many parties and varying interests involved, collegiate athletic reform will certainly not come easily.

It is very apparent that an athletic arms race is sweeping collegiate athletics at American universities. If business people in the corporate world were choosing to enter such a winner-takes-all market, it would be on them and they would have to weigh the costs versus potential benefits. However, unfortunately in the case of intercollegiate athletics, indirectly students are frequently fronting the money in this highly risky investment. Furthermore, even if a university were to win big on their intercollegiate athletics gamble, one could argue that unlike the business world the benefit of the winnings would not be distributed back to the students that made the investment.

In a world of competing priorities and limited budgets, society needs to make sure that intercollegiate athletics are not being funded at the expense of the core mission of higher education. If universities are funding athletics at the expense of educating students or advancing research that will benefit society, a serious priority adjustment needs to be made. Even if universities are not directly taking away from those important pursuits, it can definitely be argued that the level of expenditures on collegiate athletics has become excessive.

Leagues with the most parody are the most entertaining (Fort, 2000). If control on spending is not established, the risk of losing parody would likely grow, and it will

be increasingly difficult for new teams to rise from the bottom to the top. America loves its underdogs; we need to make sure the athletic arms race does not destroy them.

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