The Impacts of Winning in NCAA Athletics

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

Impacts Far Beyond the Field

The National Collegiate Athletic Association (NCAA) is one of the most influential and polarizing entertainment businesses in America, collecting over \$1 billion in revenue each year from college sporting events (NCAA 2018). However, the impacts of the athletic programs that make up the NCAA are not limited to solely financial success. Fielding successful sports teams has been shown to result in a rise in applications, increased national recognition, and a boost to public perception for a given university (Silverthorne, 2013). Rallying behind a successful team is also proven as an effective way to unify a student body and increase reported happiness levels for students (Silverthorne 2013). In return for the value they provide to their school, studentathletes can receive compensation in the form of scholarships for tuition and other fees, and access to team gear and facilities. As universities become increasingly aware of the many ways that offering competitive college athletic programs can benefit them, there has been a corresponding rise in efforts to secure the best recruits, provide better facilities, and offer elite coaching and medical staffs (Blue, 2019). However, as more money is spent on and generated from these teams, detractors calling for the NCAA to allow student-athletes to share in the profit that they are largely responsible for creating continue to grow louder and gain nation-wide support. Many of these detractors argue that the NCAA unfairly exploits those who participate in college athletics by severely limiting their ability to prioritize their education, and thus education they receive does not adequate compensation when considering the value created by these student-athletes when playing their respective sports.

In order to analyze a massive and complex network such as the NCAA, this research employs the Actor-Network Theory (ANT), first developed by scholars of science, technology and society (STS) Bruno Latour, Michel Callon, and the sociologist John Law (Banks, 2011). This research addresses the true value of success in NCAA sports, in regards to both financial and social benefits received by a given university and surrounding community, in hopes of encouraging a more informed and beneficial environment surrounding college athletics and the NCAA.

Understanding the Value of College Sports and the NCAA

This research seeks to assess the true value of winning NCAA games. To adequately perform this research, the question should be partitioned into its two most relevant aspects: the financial impact and the social benefits. In order to quantify the effect of college sports on a university's financials, some statistical analysis is necessary to determine if the revenue produced, merchandise sold, and donations received due to these games make a significant impact on the amount of money that a given university makes. Due to limits in publicly accessible data, especially for sports other than basketball and football, significant literature review was also conducted in order to summarize works done by those with other resources. This research also seeks to examine how sensitive these financial impacts are to the wide range of possible team success in each sport, as well if this differs across different sports. As the vast majority of NCAA revenue comes from schools playing in Division I, this research focuses on this group for financial analysis. In order to understand the social impact that a successful college sports program has on a community, existing literature, similar research, and anecdotal evidence on the subject is examined and summarized. The Actor-Network Theory is also employed to examine the networks and actants involved in this network, in hopes to further understand the social impact of NCAA sports. Once these networks have been identified and examined, network analysis is utilized in order to describe and understand the structure of this organization and the unique relationships of its actants. This method is an appropriate one to

apply to this problem, as ANT and network analysis are effective methods to use in order to describe social processes occurring in huge, heterogenous networks such as the one resulting from NCAA sports.

Discussion and Controversies Surrounding College Athletics

There are more than 460,000 college athletes in the United States, participating in 24 National College Athletic Association (NCAA) sports every year (NCAA, 2019). NCAA competition is portioned into three Divisions, with Division I being the most competitive and highest grossing. While most sports seasons only last for a few months, student-athletes often spend several hours participating in practice, meetings, film study, and other mandated team activities every weekday of the school year. Many Division I athletes dedicate 40 hours or more every week to their sport (O'Shaughnessy, 2011), or the equivalent of a standard full-time job. Considering the serious time commitment, and the physical and mental tolls high-level athletics can take on an individual, it is no surprise that many student-athletes do not find the time or energy to devote themselves fully to their field of study. Compounding this issue, some universities have allowed, or even created, cultures in which student-athletes are expected to put little to no effort into their academics. An excellent example of this phenomenon is the University of North Carolina, which was sanctioned and reprimanded after it was discovered that they enrolled football and basketball players in fake courses and knowingly allowed tutors to complete their athletes' assignments (Gamin & Sayers, 2014). Another example of a university not valuing commitment to academics was at Syracuse, where the basketball program was penalized after it was discovered that multiple academically ineligible athletes had been allowed to compete (Zocalo Public Square, 2015). This culture is extremely problematic considering that even a Division I athlete has only about a two percent chance to play professionally (Manfred,

2012). According to the NCAA, student-athletes are compensated through scholarships that allow them to earn an education for free or for reduced costs, as well as through room and board and some other smaller perks. However, when the education these athletes receive is as limited and sub-optimal as it is in many cases, it often results in the NCAA making huge profits off of players while having to provide little of value in return.

Several members of the national media, such as journalist Jemele Hill, have put further pressure on the NCAA and called for changes to be made in other facets of college sports. In her article for The Athletic, Hill called for elite African American athletes who are going to play in the NCAA to consider committing to play their respective sports at Historically Black Colleges and Universities (HBCU's) as opposed to Predominately White Institutions (PWI's). She argues that the shift in athletic power structure in college sports would not only result in far more revenue received from sports for HBCU's, but would also increase these schools' national recognition and standing, allowing them to provide top-level facilities and faculty. Hill posits that this change in mentality of athletes would have massive and far-reaching impacts in African American communities, affording them far better education and more avenues to success (Hill, 2019). This is just one example of the possibilities of social impacts from college sports that are not fully understood and that this research will seek to examine, as well as another reason that athletes properly understanding the value that they provide to universities is important.

Actor-Network Theory and College Sports

College sports, and therefore the NCAA, may not be thought of as traditional fits within the fields of Science, Technology and Society (STS). Considering this, it is not surprising to find that, while there have been efforts to address the financial value of college sports, there have not been many studies on the NCAA that approach it from this perspective. However, when

considering the massive network including athletes, coaches, doctors, fans, broadcasting companies, colleges, laws, alumni, and surrounding communities that are involved in the production and consumption of NCAA sports, it is apparent that an STS based analysis employing Actor-Network Theory would be applicable based on the wide-reaching social impacts of the NCAA. This theory revolves around the concept of a heterogenous network made of inseparable social and technical components. Once a network, as well as any component that has influence within it, has been identified, network analysis is employed to describe and understand the dependencies and relationships of those within the network, as well as the social structures that occur due to the network. It is important to note that these components, commonly referred to as actants, are viewed as equals within their webs regardless of if they are people, ideas, societal norms, or any other identifiable concept that has influence on the actions and decisions made in the networks. The result of this equality is that not only people, but technology, laws, and countless other organizations are viewed as having the possibility of effecting change within society.

Critics of ANT, such as philosopher Sandra Harding, argue that it struggles to accurately assess the impact of social factors such as gender, race, and class. Sociologists David Bloor and Sal Restivo offer similar thoughts, positing that the language and analytical tools employed by Actor-Network Theory only allow scholars to describe power structure, not to challenge them (Elder-Vass, 2015). Others believe that ANT may be unable to describe explanations for some social processes due to its descriptive nature, or that analysis using it can often end in a researcher identifying endless connections and networks. Considering these weaknesses, ANT lends itself best to interpretative and critical research as opposed to positivist research. A

boundaries, in hopes to limit the identified connections and actants to a manageable amount. In this case, ANT is particularly useful for analysis due to its propensity for describing and analyzing the relationships and impacts of vastly different actants in a heterogenous network such as the one involved in NCAA sports.

Social and Financial Impacts of Successful NCAA Programs

The impacts of winning NCAA games can range in scale, but have been shown to be largely beneficial from both social and financial perspectives for a respective university. It is important to note that these effects vary based on a number of factors, with the most notable benefits occurring for schools that are successful in football or basketball while playing in a major Division I conference (Chung, 2015). Increases in impacts due to winning are found to be less significant for larger schools and for schools that are perceived to initially have lower quality education (Holland, 2015). Considering financial benefits, victories in these revenuedrawing sports have been shown to lead to increases for a respective university in: donations from alumni and others (Anderson, 2016), enrollment and applications (Chung, 2013), as well as increases from overall revenue at the athletic events, including merchandise, ticket sales, food and other items (Pamintuan, 2016). The social benefits that occur in universities and their surrounding communities following victories in major conferences are also prone to variance, but have been shown to include increases in: quality of a school's average applicant (Anderson, 2016), academic and overall reputation (Vedder, 2016), and rises in reported levels of student happiness and institutional identity (Zook and Holm, 2016). As college leaders and administrators have become increasingly aware of these benefits, there has been a corresponding rush from universities to secure top facilities, trainers, doctors, coaches, and, above all else, recruits.

College sports is a multi-billion-dollar industry, with several schools reporting athletic revenue above \$100 million annually and some universities bringing in \$200 million annually (Pamintuan, 2016). In 2016, of the 117 schools that belonged to the most lucrative division in college sports, Division I Football Bowl Subdivision (FBS), their earnings from football ranged from \$800,000 to \$113 million. At those same universities, revenue from basketball programs ranged from \$123,000 to \$44 million (Chung, 2015). Considering the range of these values, it is apparent that the value of winning college sports games can have large variations depending on the university in question. Universities that play in major subdivisions within Division I such as the Atlantic Coast, Big Ten, Big 12, Pacific-12 and Southeastern Conferences (Power Five Conferences) not only generally experience greater success in athletics, they also tend to produce the most revenue at these events. Established schools that compete in these conferences earn more than four times the average athletic revenue of other FBS schools (Chung, 2015). For some top programs, a difference of one win during the football the regular season can result in a change in revenue approaching \$3 million (Pamintuan, 2016), or several times more than smaller programs, even within the FBS, produce annually. Programs in these less lucrative conferences tended to enjoy significant increase in revenue during the year following an invitation to a nationally broadcasted playoff or bowl game (Chung, 2015). Considering these facts, it seems clear that success in NCAA sports, especially football and basketball, tend to result in increases in overall revenue from a universities' athletic department.

The financial impact of winning NCAA games is also evident when examining donations received by respective universities, from alumnus and others. Studies examining the financial benefits of Division I FBS programs determined that increases in success for a respective program directly influences alumni donations to athletic programs. These findings estimate that,

for a university's football program that experiences an increase of three regular season wins (the difference between a median team and a team with 85th percentile success rate), donations to the athletic program can be expected to rise by \$409,000, or 17% (Anderson, 2016). This means that, on average, a win for programs that fall into this category is worth about \$136,000 in alumni donations.

Success in major college sports has also been shown to be linked to rises in applications for a given university, as well as increases in enrollment, especially from in-state students. The possibility to use college sports as a method of advertisement to attract potential students was first considered after the legendary quarterback Doug Flutie's game winning touchdown pass for Boston College while playing against the University of Miami in 1984 during a nationally televised game. In the proceeding application season, Boston College saw an increase of 16% (from 12,414 to 14,398), then another 12% the following year (up to 16,163). The term "Flutie Effect" or "Flutie Factor" was first used to describe this phenomenon in a USA Today article in 1987 (McDonald, 2003). In the time since, there has been significant steps taken towards investigating the legitimacy of this claim. For universities playing football in Power Five conferences, a jump from winning half of their games to winning ten out of twelve results in an average increase of 18.6%. Keeping all other factors constant, to obtain a similarly potent effect, universities would have to decrease annual tuition by approximately 3.9%, or increase the quality of faculty by 5.1%, as measured by their pay in the academic labor market (Chung, 2013). Other studies show that, for FBS programs, the expected result of any win in a college football season was an average increase in applicants of 1% (Anderson, 2016). Considering these facts, schools that experience a significant increase in NCAA success, most notably while playing football in major conferences, should expect to see some tangible increase in the number of applications

received. This phenomenon not only produces more revenue for the school, but also leads to social benefits by increasing resources and allowing schools to be more selective in choosing their students.

The social benefits of winning NCAA games can be numerous, but, like those of financial nature, they also vary significantly based on several factors, especially the sport that is being played and what conference the university in question competes in. One of the most influential social impacts that these universities receive is a rise in the quality of its applicants as a result of athletic success. For those schools that play in major conferences, significant increases in regular season success while playing football or basketball has been shown to lead to a decrease in a university's acceptance rate, while simultaneously increasing the average SAT scores of applicants. For example, if a football team in a Power Five conference experiences an increase of three wins during the regular season, that school can expect their acceptance rate to drop by 0.8%, as well as an increase in 25th percentile SAT scores of around 2.4 points, or 0.2% (Anderson, 2016). Considering these facts, as well as the proven increase in received applications for schools in this scenario, it seems apparent that fielding successful football and basketball teams at Power Five conference schools can lead to higher quality applicants for a university due to the increased exposure, and, therefore, can lead to a higher baseline of quality for the students of a university.

Spillover effects from athletics have also been shown to reach into academic reputation. Forbes and the Center for College Affordability and Productivity (CCAP) performed a study that examined the impacts of highly successful football or basketball programs on Forbes' annual ranking of colleges' academic reputation. According to Forbes and the CCAP, they "look at how students like their classes and university setting, how they fare in the real world after graduation,

the debt load the student likely will incur, and a variety of other things," (Vedder, 2016). After statistical modeling that attempted to account for other confounding variables, researchers found that while a mid-quality school that does not participate in Division I-A, that same school might rank nearer to 300 in Forbes' ranking (Vedder, 2016). While this is not an entirely scientific metric to measure academic reputation, it serves as a good benchmark, and further suggests that a university that experiences athletic success, especially in football and basketball while playing in major conferences, should expect to see some significant increase in academic reputation.

Many schools seek athletic success today in hopes to achieve numerous other social benefits, although there are not always proven facts to back up some of these supposed benefits. For example, many colleges cite college popular football and basketball programs as providing students with a unique sense of institutional identity and school pride. This phenomenon has been shown to positively impact student bodies in ways such as leading to decreases in drug use, as well as increases in academic performance and graduation rates (Zook and Holm, 2016). Fielding highly successful football and basketball teams can also have wide-reaching economic and social impacts to the surrounding communities of a university, as well as positive financial impacts to America as a whole. An excellent example of this can be observed in Tuscaloosa, where Nick Saban and the University of Alabama's football program have enjoyed a period of remarkable success including five national championships and six SEC titles since he took over as head coach in 2007. The local community, especially small businesses and construction, have also been experiencing corresponding success economically.

"From hotels to the new federal courthouse, the changes have been eye-popping. According to the Chamber of Commerce of West Alabama, Tuscaloosa has seen more than \$3 billion in new construction since 2005. Like with the football team there are no signs of slowing down. 'There have been all kinds of business and opportunities that

benefit from success on the field,' said Ken Gaddy, Director of the Paul W. Bryant Museum. 'Our attendance here reflects that. We can chart it pretty easily, up years and down years.'" (Walsh, 2017)

The University of Alabama Center for Business and Economic Research also found that the Tuscaloosa area receives a financial boost of \$19 million for every game at Bryant-Denny Stadium (up from \$13.9 million before Saban was hired) (Walsh, 2017). These points demonstrate the remarkable ability of successful college football teams to impact their local communities directly. However, the effects of high-level athletics are not limited to the communities in which universities are present. For example, the predicted economic impact of the 2020 College Football Playoff National Championship for the surrounding community in New Orleans is at least \$150 million, but values may reach above \$200 million (Davis, 2020). While that may be on the higher end of possible economic impacts from sporting events, it demonstrates the impact that high-level athletic programs can have on their local communities. The social impacts that follow an influx of money such as this are difficult to exactly quantify, but can include increases in revenue for local businesses, tax dollars for schools and public services, as well as short-term job creation and many other possible benefits that come from success in college sports.

Actor-network theory (ANT) and network analysis can also be employed to further analyze the unique relationships and effects of college sports. In analyzing a network of this complexity, it is important to comprehensively identify the most influential actants present. The number of people, institutions and organizations that are affected directly and indirectly by the network of college athletics surely ranks in the thousands. Some of most imperative stakeholders in this network include the student-athletes, the universities, and the NCAA, as well as its body of governing rules. These groups combine to provide the product, college sports games, to be consumed, mostly via television or other broadcasts, by another influential part of this web: fans

of college sports. These consumers provide huge amounts of revenue to the NCAA, mostly through avenues such as purchasing game tickets and merchandise, as well as watching games online, on television, or through other broadcasts such as streaming services. The massive demand for college sports today provides funding for universities and the NCAA to build stadiums, practice facilities, team stores, dining halls and other physical artifacts in hopes to provide the best possible experience for fans and encourage optimal performance from studentathletes. These buildings, stadiums and other facilities aid in the recruitment of top-tier students, student athletes and faculty. Schools that are successful in athletics and profit also are also granted the ability to pay higher wages to faculty, possibly recruiting higher quality employees and thereby further improving the future prospects of the university as a result of athletics. Other groups of people influenced by these sports include the communities the universities are located in, as well as alumnus and the current student body and of the school. As discussed above, college sports can have massive impacts on the businesses, opportunities, and lives of those who live in the surrounding area. As new stadiums and facilities are created, construction workers, contractors, and other vendors and full-time positions are created, causing even more intricate links between local communities and college sports programs.

While the findings described above are substantial, there are several limitations that can be identified that challenge the ability of this research to represent the scope of this issue in its entirety. Of these limitations, the resources available are possibly the element that result in the most constraints, especially when considering time. This study has been completed over the course of approximately nine months by one full-time student, stratified by many other assignments and responsibilities. In regards to the findings on social impacts of college sports, one constraint is that the information presented in this research is almost entirely limited to

literature review and network analysis. This limitation allowed this study to summarize vast effects over hundreds of different communities, but also relies on the assumption that prior research was, and is still, accurate. Another limitation to this research was the inaccessibility of much of the data that could be used to perform statistical analysis on the financial impacts of winning NCAA sports games. As a result, this study is comprised entirely of publicly accessible data, much of which is summarized or not able to be differentiated into respective revenue streams such as ticket or merchandise sales and booster donations. Considering this fact, it should be understood that there can be some small inherent degree of variance between numerical figures presented in this research and their actual values. One other constraint of this research that must be considered is the extremely limited amount of data regarding the impacts of NCAA athletics in smaller programs outside of Division I FBS schools, as well as how impacts differ across sports other than basketball and football. Due to the massive amount of media exposure and attention generated by these events, revenues and other impacts are likely larger and more easily estimated than those of other sports.

This research has been completed in hopes of aiding and encouraging future works regarding the same and other similar subjects. In particular, it may be particularly beneficial for the NCAA or universities, as individuals or groups, to contract researchers in order to quantify the impacts of winning college sports games in more specific contexts. This could allow a more accurate financial analysis than one based on public data, as figures would be more exact, and the researcher would be able to more precisely qualify when donations and other revenue is received as a result from a win in college sports. Working in union with these universities could also provide a researcher with a more optimal opportunity to quantify the social benefits of wins, both within the university and in the surrounding communities. A university-sponsored

researcher would have the opportunity to survey students before and after sporting events, along with receiving insight regarding the businesses and organizations that are most effected by college sports in the surrounding communities. Other future researchers could also take the opportunity to better quantify the effects of sports that are not football or basketball on different universities, as information regarding this subject is sparse. Using instances of the implementation of a new sports team at a university, and examining how the impacts differ across different sports and divisions could provide some very valuable insight on this area of research. Extending this research further, another avenue that could yield interesting results is attempting to model the value of college athletes on a more individual level, so as to provide better estimates of an individual's worth to a university. Possible future works, such as the ones discussed, would further aid in the proper evaluation of the value that elite college athletes provide to their respective universities.

Conclusion

The benefits that a university stands to gain from fielding a highly successful sports program in a Power Five conference, especially football or basketball, have been shown to be numerous and extensive. Financial impacts identified in this research include increases in: significant impacts to the economy of local communities (Walsh, 2017), donations from alumni and others (Anderson, 2016), enrollment and applications (Chung, 2013), as well as overall revenue at athletic events, including merchandise, ticket sales, food and other items (Pamintuan, 2016). The social impacts of winning in college sports are likely more variable and harder to quantify, but are proven to include rises in: the quality of a school's average applicant (Anderson, 2016), academic and overall reputation (Vedder, 2016), and rises in reported levels of student happiness and institutional identity (Van Holm & Zook, 2016). As college sports and the NCAA continue

to become increasingly influential, many continue to call for more adequate compensation for student-athletes. This research was conducted with the goal of properly informing the conversation of the worth of elite college athletes, considering both social and financial elements, in hopes of encouraging a more beneficial system for the student-athletes who make the NCAA as incredibly entertaining and important as it is today.

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