HOW FOOTBALL PERFORMANCE AFFECTS ALUMNI DONATIONS TO COLLEGIATE ATHLETICS AT MTSU

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by

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I dedicate this research to my parents who have invested so much for me to be in such a fortunate position today. This could have not been possible without your constant love and support. I love you both.

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ABSTRACT

Athletic fundraising is one of the primary sources of revenue for NCAA Division I athletic departments. Thus, it is considered to be the foundation of any successful collegiate athletic department. Through the decades, economical turndowns and excessive increase in academic and operating costs have created large deficits in the annual budgets of many athletic departments, making athletic departments for the most part self-efficient (Knight Commission, 2010; Hall & Mahony, 1997). The NCAA (2018) reported all Division I colleges and universities outside of the "Power 5" conferences to have exceeded their total generated revenues with their expenses. In fact, many Division I institutions, including Middle Tennessee State University, still continue to increase fundraising efforts in support of intercollegiate athletics. The purpose of this study is to examine how the performance of the most revenue generator sport - football - at MTSU affects alumni donations to the general fund and football-specific gifts through the Blue Raider Athletic Association. The study found no statistically significant relationship between football team performance over the course of ten years and alumni donations to the BRAA general fund and football-specific gifts. The results open the door to further studies at MTSU, to determine how to improve the fund raising strategies that target alumni donations used by the BRAA, and to analyze the reasons why alumni give to general fund and sport-specific.

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CHAPTER ONE

INTRODUCTION

Athletic fund raising is the foundation of any successful collegiate athletic department. For decades, fund raising has been considered one of the primary sources of revenue for college athletic departments, and it continues to become increasingly important as every year goes by. In the last two decades fundraising contributions jumped from being the second largest source of revenue for NCAA Division I programs accounting for 17% of total revenues, to being the largest source of total revenue programs: 24% of total revenues (Fulks, 2000; Fulks, 2008). According to the most recent report on revenues and expenses ran by the National Collegiate Athletic Association (NCAA) in 2018, schools in the "Power 5" conferences generated enough revenue through ticket sales, broadcast rights, NCAA and conference distributions and other sources to outweigh the expenses. The NCAA (2018) reported the rest of Division I schools outside of the Power 5 conferences to have exceeded their total generated revenues with their expenses. In other words, a large number of Division I institutions still continue to increase fundraising efforts in support of intercollegiate athletics.

Towards the end of the 20th century, the majority of U.S. colleges started to deal with increasing budget constrains. Thus, most athletic programs turned to be for the most part self-efficient (Hall & Mahony, 1997). In the last fifty years, the importance of having a strong and successful annual giving program has become vital for most NCAA Division I schools (Hall & Mahony, 1997). The significant investment in athletic fund raising from Division I schools goes hand in hand with the increased need for private funding needed to support the core educational mission of

every institution (Stinson, 2017). There are several revenue channels for intercollegiate athletics. Some of these are money received through government and institutional support, ticket sales, television and radio rights fees, game guarantees, payouts from bowl games, sponsorships, donations, athletic fees, conference affiliation and NCAA events (Fulks, 1994; Sperber, 1990, Hall & Mahony, 1997). Nonetheless, even when most athletic departments benefit from these revenue channels and from the exposure to prospective recruits and professional scouts, more than half Division I football programs are still losing money by failing to turn a profit (Fulks, 2000; Orlando, 2012). Despite the many ways schools can generate revenue, the financial burden has become quite significant since many public universities have seen less state support in the last 20 years. At the same time, schools have experienced an increase in academic costs, new facilities, coaches' salaries and Title IX compliance. Essentially, colleges have been forced to primarily rely on budget based on tuition and private support.

Although fund raising in American colleges have always played a big role to academic programs, universities have begun to introduce development offices solely for the purpose of raising money for athletics. Before the introduction of development offices to generate revenue, athletic departments used "booster clubs" and athletic support groups that raised money entirely for athletic needs. Though booster clubs contribute to fundraise money, they are oftentimes not consistent enough to provide revenue for athletic scholarships, staff salaries, and other major needs. Therefore, one of the jobs of athletic departments is to always find new strategies to raise money.

Amongst the many people who donate to an institution, alumni giving is one of the most important source of support. Athletic departments categorize alumni giving in general alumni and student-athletes alumni. Former student-athletes are

generally the most targeted because of their existing relationship with the athletic department. Maintaining a relationship with former student-athletes is extremely important as it can lead to future voluntary support (Shapiro et. Al, 2010). Other sources of revenues are sponsorships and private donors who generally donate to support their local institution or their alma mater. Creating and maintain a relationship with private donors is of vital importance to athletic departments.

Throughout the decades, economical turndowns in the United States caused schools to experience less donations than usual, in a time where revenue was needed the most. The declining of donor support for public educational institutions in the United States started with the economic recession that began in 2008, which severely affected athletic departments in a large number of universities across the U.S. (Kelly & Vamosiu, 2020). The consequences led to many athletic programs being cut due to the lack of money to pay athletic scholarships for student-athletes, as well as a having to reduce staff members and employees in athletics. The schools that have proven with their fund raising to be less likely to experience donor fatigue are schools in the "power five" conferences – Atlantic Coast Conference (ACC), Big Ten Conference, Big 12 Conference, Pac-12 Conference, and Southeastern Conference (SEC). The study on fund-raising at Middle Tennessee State University (MTSU) is extremely important as the school sits just outside of the "power five" conferences. Middle Tennessee is placed in a group of schools that belong to the "group of five" conferences, which are the Division I schools that depend on fund raising the most. According to Walker (1994), the belief that big-time athletics programs in the power five conferences generate more revenue than any other Division I athletic program across the country has contributed to an increase in emphasis on fund raising.

TYPES OF GIVING

There are many forms of giving in college athletics. At Middle Tennessee State University, the athletic department targets three main types of funds: general fund, sport-specific gifts, and gift-in-kind. The athletic department at MTSU leans on these three types of giving as the pillars of fundraising. For the purpose of this study, only general fund and sport-specific gifts will be used to examine the variables of the research.

1.1 General Fund

General fund at MTSU is considered the most important form of giving. The money raised through general fund can be very flexible in terms of spreading funds to different area of needs within the athletic department. In fact, general fund is used to finance scholarships, equipment, staff salaries, and any other expense needed for the daily operation and maintenance of the athletic department. Because this fund pays for all kinds of necessities, it is considered the most vulnerable out of three significant types.

1.2 Sport Specific gifts

Sport specific gifts are considered just as important as general fund donations. Sport specific gifts give the opportunity for donors to contribute directly to a certain sport. The money donated to a specific sport is spent on the discretion of the respected sport's Head Coach. This type of giving plays an important role in fund raising as it gives the opportunity to former athletes and alumni to re-connect with their alma mater. By donating directly to a sport, this type of giving prevents the depletion of the general fund.

PURPOSE OF THE STUDY

At MTSU, The Blue Raider Athletic Association (BRAA) is in charge of

developing fund raising programs, collecting donations, and continue building relationships with the community. The money raised by this association help the success of teams, recruiting, and the improvement of many areas within collegiate athletics. Thus, the essential job of the BRAA is understanding what motivates potential donors to voluntarily give to the MTSU Athletic Department, developing strategies to increase the number of contributions, and maintaining those relationships through effective communication. The purpose of this study is to examine how football performance affects alumni donations to the BRAA. More specifically, this study will try to determine the effect of football performance on alumni donations to general fund and football specific gifts.

SIGNIFICANCE OF THE STUDY

MTSU Athletic Administrators can use this study to further understand the influence of the most revenue generator team on alumni donations. In addition, this study can be utilized as a foundation for future research studies at MTSU on contributions to the Athletic Department.

The dependent variable for this study is the amount of alumni donations to the BRAA. This will include both donations to the general fund, as well as football specific donations.

The study's independent variable is the football team performance total score. Though there will be one single football performance score, three factors will be used to calculate this score. three factors are used to determine team performance as a single total score. These are football total wins, team point differential, and whether the team made it to the Bowl Game in a given year.

HYPOTHESES

The research study involves statistical hypothesis testing, therefore the study will present a null hypothesis and an alternative hypothesis.

- Null hypothesis (H0): There is no significant relationship between football team performance and alumni contributions to general fund and football specific gifts.
- Alternative hypothesis (H1): The football team performance has a positive effect on alumni contributions to general fund and football specific gifts.

CHAPTER TWO

HISTORY/REVIEW OF THE LITERATURE

The history on athletic departments donations began in the course of the 19th century. In the related literature, the earliest data recorded was in 1965, when the total athletic department revenue at big-time football schools provided by donors was only 5% (Fulks, 1994). Since then, the percentage of private donations rose through the years in most schools across the country. According to Fulks (1998), athletic donations consumed 14.7% of the total institution gift in 1998. In effort to alleviate consuming funds to the institution, many athletic schools have started to conduct large campaigns centered entirely on athletics. Council for Aid to Education (2016) reported U.S. colleges and universities in 2015 to have received \$40.3 billion in charitable giving, with \$1.2 billion coming from private donations to collegiate athletic departments. According to Stinson (2017), institutions now raise an average of 15% of the athletic budget from private fund raising.

Studies conducted over 30 years ago predicted annual budgets for athletic departments to increase 10% every year, and for scholarship costs to increase at public schools up to 80% by the year 2000 (Raiborn, 1990; Krupa & Dunnavant, 1989). The comparison to studies conducted a decade ago show that these predictions were true. As a result of excessive costs in intercollegiate athletics and economic turndowns, large deficits in athletic departments annual budget forced many universities to reduce expenses by eliminating many varsity sport programs (Skolnick, 2011). More recently, the number of varsity sport programs cut increased even more in 2020 due the economic turndown that followed the "Great Lockdown" of the Corona Virus. Although no Power Five school has dropped their sport programs, 17 Division I schools across the country eliminated minor varsity teams in 2020. Some

of these schools include Appalachian State (men's soccer, men's tennis, men's indoor track & field), Cincinnati (men's soccer), Florida International (men's indoor track & field), Furman (baseball and men's lacrosse), and East Carolina (men's and women's tennis, men's and women's swimming and diving). At the same time, athletic departments that were able to keep all the varsity sport programs operating, have either spent a substantial amount of money to remain competitive or have been forced to cut their athletics budget.

The effects of the 2020 Coronavirus Pandemic have been very significant across the collegiate sports landscape. In March 2020, the spread of COVID-19 caused all collegiate sport who were competing in spring season to be cancelled nationwide. The cancellation of sports not only impacted student-athletes and their team, but athletic departments as a whole. The Great Lockdown led to a financial crisis which caused many problems in athletic departments. For instance, the cancellation of March Madness and all conference tournaments led to a significant reduction in NCAA financial distribution to all Division I schools. The NCAA generates most of its revenue from the Division I Men's Basketball Championship (March Madness) television, marketing rights and ticket sales (NCAA, 2020). According to the NCAA, before the pandemic started, Division I revenue distribution for 2020 was budgeted at \$600 million (NCAA, 2020). After the cancellation of all NCAA events, the Board of Governors revised financial distribution and finally voted in June 2020 to distribute \$225 million to Division I college athletics. (NCAA, 2020). As mentioned previously, many institutions had to consider reducing numbers of sports programs. However, all the Division I institutions who were able to keep all their sport programs had to find other ways to manage this situation. For instance, the Athletic Department at Middle

Tennessee State University asked each sporting team to cut their budget between 3 and 5% for their 2020-2021 season.

Although the literature provides enough data to indicate the increase and progression of private donations to institutions and athletic departments over the last 50 years, the topic of fund raising has not received much scholarly attention. Many athletic departments tend to treat contribution data as proprietary information, making it extremely difficult to conduct high quality studies. In fact, studies conducted on Division I athletic programs are oftentimes questionable because they either utilize data reported from a single source, or they only examine data set in "big-time" college athletic programs (Wells et al., 2005).

The existing literature on Division I collegiate athletic departments focuses on four main research topics that researchers have analyzed on fund raising. First, some research articles have addressed donor motivations. Secondly, research have examined what kind of affect these variables have on athletic departments fund raising. The third focus of researchers has been determining the relations between football winning percentage and contributions to athletic fund raising. Finally, the fourth focus of research has been the effects of successful athletic performance on donors' contributions. Particularly, many studies have been focusing on the relationship between alumni giving and athletic performance.

2.1 Donor's motivation

Previous researchers acknowledge donor contributions as the largest revenue generator and most valuable source in the NCAA Division I athletics (Coughlin & Erekson, 1984; Stinson & Howard, 2010; Fulks, 2017). According to Shapiro et al. (2010), donor motivations have been the most investigated area regarding donor behavior in collegiate athletics. Athletic donations are affected by numerous factors.

Factors that have an influence on a large scale are the constant fluctuations of the American stock market, economic turndowns, the competition within the 600,000 charitable organization, and the non-regular habit of giving to institutions and athletic department. Additional factors that affect an individual's donation to the Athletic Department are the winning percentage of the institution's most revenue generator sport (e.g. football, basketball), appearances to Bowl games and Championship tournaments, Conference tournaments affiliations, and athletic performance. There are also other variables that drive people to donate. According to Tsiotsou (2007), athletic programs have such an influential role because they represent a means by which people identify with an institution, as well as constituting a way to enhance emotional ties with their alma mater.

In the existing literature, researches have used different methods to examine donors' motivation. Older studies conducted by Billing et al. (1985) and Staurowski et al. (1996) developed the Athletics Contributions Questionnaire (ACQ) and the Athletics Contributions Questionnaire Revised Edition (ACQUIRE-I). Through the Questionnaires, the combination of the two studies identified six motivations for private donors: benefits, philanthropic reasons, social reasons, success of athletic program, curiosity and power. Curiosity, which was developed as the individual's inherent interest in an event, did not show as significant factor in the analysis. However, the analysis showed benefits, philanthropic reasons, social reasons, success of athletic program, and power to be significant factors to influence athletic donors' motivation. Another method of analysis developed and used by Verner et al. (1998) was the Motivation of Athletic Donors (MAD-1) scale, which contained 11 factors. Most of the factors analyzed were the same as previous research, with the addition of motives such as collaboration, change and creation. However, one limitation of this

study was the fact that the importance of these motives was not analyzed. The study conducted by Gladden et al. (2005), used a quantitative survey with an open question that asked the most important reasons why participants donate. Results from the survey showed the most important reasons for donors to be the desire to support and improve the athletic program, help student-athletes, and received benefits such as priority seating. A more recent study by Stinson & Howard (2010) used a qualitative investigation based on interviews with open answers to examine the important influences and motivations for donor behavior. The results of the study identified four main themes: intercollegiate athletics acts as a "window" to the institution for both alumni and non-alumni, initial support of athletics programs is commercially driven (e.g. gifts secure priority on tickets for donors), donors who give to secure tickets oftentimes transition to becoming endowment donors, and academic units may benefit from leveraging the emotional connection generated by athletic programs to cultivate gifts (Stinson & Howard, 2010).

Other studies on donor motivations provide that the most common variables that influence a person to donating are tax deductions, professional and social contacts, ticket priority for away games and football bowl games, parking privileges, special recognition, license plates, and membership plaques (Hammersmith, 1985; Webb, 1989; Tucker, 2004). Overall, the main reasons that seem to drive an individual to donate are benefits such as ticket priority and privileges, special recognitions, philanthropic and social reasons.

2.2. Variables and their effect on athletic fund raising

Understanding variables on contributions and their significance is crucial for athletic departments in order to maximize their fun raising revenue (Brannigan & Morse, 2020). Overall, ticket sales are considered by many researchers to be the most

significant contributor to athletic departments (Hall & Mahony, 1997; Wells et al., 2005). According to Wells et al. (2005) and Stinson (2017), this may be explained by the common requirement for donations when purchasing a ticket. The use of priority seating is also another significant variable used to increase annual giving and success of donor programs (Hall & Mahony, 1997). The study carried out by Hall & Mahony (1997) found that the number of living alumni and the size of an athletic department's prospective donor list are significant predictions of donor contributions to an institution as well. In addition, other studies showed a positive relationship between an athletic fund raising staff years of experience and donor contributions (Wells et al., 2005; Brannigan & Morse, 2020). Football winning percentage and athletic performance are also two specific variables that have been examined by many researchers.

An interesting variable that is oftentimes not discussed as a contribution to athletic departments – as many don't even know of its existence – is the athletic fee imposed by athletic departments to each student. In an article published in 2017, Rosenstein unveils the story behind the mandatory student fee passed in 1997 by the University of Illinois to help the athletic department pay off a \$1.4 million dollars' debt. Though the mandatory \$34 per semester per student was voted against by the UI student body by a margin of 88% to 12%, the fee was still passed by the school (Rosenstein, 2017). Through the years, the UI athletic department was not only able to pay off the \$1.4-million-dollar debt, but was also able to double its revenue from \$45 million in 2004 to \$96 million in 2016 (Rosenstein, 2017). To the surprise of many current students and employees of the school, still to this day the University of Illinois charges the same athletic fee to every student, hiding it under the category of "General Fee" (Rosenstein, 2017). The athletic fee used by UI is not to say that every

school imposes an additional student fee to generate more revenue for its athletic department. In fact, Rosenstein (2017) cites in his article "the 2016 USA Today report showing four of the fourteen schools in the Big Ten Conference did not charge use any student fee to benefit athletics".

Amongst those schools who do have some sort of "athletic fee" that help boost revenue for their athletic department is Middle Tennessee State University. The Huffington Post and Chronicle of Higher Education (2016) took a further investigation on how public university are really able to pour millions of dollars into their athletic departments. Their analysis took place between 2010 and 2014, and it primarily focused on requesting public university's athletic revenue and expenses. Their efforts in obtaining these reports were not an easy task. Though every university has to send annually information about their revenue and expenses to the NCAA, the association's reports are considered to be private (Shifflett, 2015). In addition, out of 234 Division I public universities, 33 of them did not respond to the Huffington Post's efforts to collect their data (Shifflett, 2015). The Huffington Post's analysis took a look at each university's subsidies in order to understand "how much each school really invests in their athletic departments to make up for a lack of earned revenue" (Shifflett, 2015).

Their analysis of MTSU shows that between 2010 and 2014, the athletic department was financed 5% by ticket sales, 7% by NCAA distributions, 19% by other revenue, and 70% by subsidy (The Huffington Post and Chronicle of Higher Education, 2016). According to Shifflett (2015), the subsidy includes three sources: student fees, institutional support and government support. The total subsidy income of Middle Tennessee between 2010 and 2014 was of \$95,454,042, which included

42% of student fees, 58% of institutional support, and 0% of government support (The Huffington Post and Chronicle of Higher Education, 2016).

An additional source on the athletic fee is the Middle Tennessee State University Current Fund Revenues form showing the July Budget of 2019-20. The form shows the July budget of Athletics in 2019-20 which summed up to \$18,145,865 (Middle Tennessee State University, 2019). When dividing that total by the exact number of students at the beginning of Fall 2019 – 21,715 students – the result is a \$831 fee per student going into the Middle Tennessee's Athletic Department pockets as another form of revenue.

2.3 Winning percentage and its effect on athletic fund raising

The importance of winning in college athletics does not only bring a sense of pride for teams, fans, and the community as a whole; but it also seems to lead to revenue generation (Hill & Qu, 2019). Although winning/losing is an uncontrollable variable for athletic departments, winning has been reported as a factor that increases attendance and more donations (Brannigan & Morse, 2020). According to Hill & Qu (2019), winning performance over a three-year time period is the most adequate period of time that captures winning "in the moment during the time period of interested".

Early studies analyzed the impact of various athletic success variables and their effect on giving to a university's annual fund-raising. A study conducted by Sigelman & Bookheimer (1983) used simple correlation statistics and a multiple linear regression (MLR) to examine the winning variable effect on fund raising. Results showed that only football winning success had a positive relationship with increasing contributions. On the other hand, Coughlin & Erekson (1984) found that only basketball win/loss percentage had a significant effect on donors' contributions.

A third study by Snyder & Hoover (1986) showed findings which indicated win/loss percentage not to have an impact on contributions. However, more recent studies showed much more consistent results. These reported that the Division I winning percentage of football teams leads to an increase in donor support to athletic programs (McCormick & Tinsley, 1990; Brannigan & Morse, 2020). Hill & Qu (2019) used a quantitative assessment to identify football winning percentage and its influence on athletics in power 5 and non-power 5 football schools. Results showed that football winning percentage in power 5 schools had a greater effect on athletic departments (e.g. securing head coaches salary and creating better environment for recruiting process) than for non-power 5 schools.

2.4 Athletic performance and its effect on athletic fund raising

A substantial amount of research has been done on the influence of the performance of athletic programs and donors' contribution. Generally, a successful athletic performance goes hand in hand with the outcome of the athletic result. Stinson & Howard (2008) reported significant findings on the athletic component and its influence on athletic gifts, which are consistent with several studies conducted on Division I schools (Grimes & Chressanths, 1994; McCormick & Tinsley, 1990). However, another study by Stinson & Howard (2010) determined that successful athletic fund raising is more dependent on the institutional fund raising structure and strategy than athletic performance.

According to the literature, there seem to be a positive relationship between athletic success and alumni giving (Frank 2004; Litan et al., 2003). Meer & Rosen (2009) developed a study using unique data on individual alumni donations, to both general funs and athletic programs, provided by an Anonymous University. Researchers of this particular study examined the effect of athletic performance on

alumni giving. The research found that football and men's basketball were less determinant of giving than the success of an alumnus's own team. It needs to be noted that the study came with some limitations, as it was conducted on a single institution which made questionable whether or not the results generalized to other schools. In addition, the anonymity of the University in this study is another evidence of the fact that data extracted by an institution's development office are oftentimes proprietary and sensitive. Another study on predictions of alumni giving at Mississippi State University found winning percentage and television appearances to be significant factors on alumni giving (Grimes & Chressanths, 1994). Stinson & Howard (2008) also reported the effect of athletic performance on giving to be more pronounced on alumni than non-alumni.

ENVIRONMENTAL FACTORS

Overall, the studies carried out on annual giving programs have examined primary motives of why individuals donate to an institution's athletic department and the factors that impact fund raising success. Nonetheless, there are several more important factors that shouldn't be left unnoticed in the literature. These can all be grouped into the environmental factors. Hall & Mahony (1997) defined environmental factors as any existing condition that may impact the effectiveness of annual giving program within an institution's athletic department. Their study used a qualitative methodology based on 10 interviews discussing 16 Division I athletic annual programs, in which 11 environmental factors were identified. These were: type of school (e.g. metropolitan, small college), status of the institution (public vs. private), support of the top administration, level of competition, winning percentage of the revenue-producing programs, graduation rate of student-athletes, community support,

tradition, apprehension or resistance to change, state of the local economy, and relationship with alumni office and the university foundation.

The majority of the studies in the literature focus solely on the understanding of why individuals donate to an institution's athletic program, however, the full understanding of the question cannot be achieved without the studying the human behavior in a variety of contexts. Another study by Verner et al. (1998) analyzed social cognitive theory and its influence on donor behavior. Results of this study reported that behavioral and environmental factors create more underlying motivations among athletic donors. These factors can be used to answer the questions that researchers often ask: how much donors give, why they give, and to which program they give (Verner et al., 1998).

DONOR CONSTRAINTS

In order to provide athletic departments with the full picture on donor motivations, athletic contributions barriers need to be investigated as well. In the existing literature, only few studies have analyzed possible donation constraints. Research on donor constraints includes constraints from a marketing perspective, donor constraints within the non-profit sector, athletic alumni donor research, and former student-athletes' constraints.

2.5 Purchase constraints

The earliest research that attempted to understand individuals' behavior from a marketing perspective was outlined by Lepisto & Hannaford (1980). Their study examined consumers purchasing process and marketing strategies with the intention to find potential barriers that may prevent a purchase transaction. Their research identified five purchase constraints: marketing constraints (barriers created by the failure to provide product, price, place, and promotion effectively to the consumer),

cultural constraints (cultural norms that influence purchase decisions), personal constraints (internal forces within each individual that affect purchase behavior, e.g. importance of having the product), social constraints (purchase decisions influenced by an individual's family or friends), and structural constraints (external forces that may act as a barrier for a purchase). The authors of the study concluded by suggesting that the decision to make a charitable donation is mainly influenced by the combination of internal and external forces, as well as social and cultural norms. The "controllability" of these constraints was also examined in the study and were applied to donation barriers. According to the authors, some constraints can be easily controlled, others are semi-controllable, and others cannot be controlled at all. The challenge for managers is to be able to identify those purchase constraints that are not controllable in order to develop strategies for semi-controllable and easily controllable constraints, with the final goal to maximize revenue.

2.6 Donation constraints in the non-profit sector

More recent studies have explored donor constraints in the non-profit sector. Sergeant et al. (2006) identified five contributions barriers: time (or lethargy), cost, inconvenience, insensitive marketing (being contacted too often or not at all), and insufficient funds. Authors of the study found that many of these barriers were caused by misinformation. They concluded by suggesting that fund raising managers should improve information and communication with potential donor population. A similar study conducted by Madden (2006) focused on donor motivations and constraints for the population of Australia. Although this study didn't find cost to be an issue, results showed that potential donors didn't see the need to give to certain non-profit organizations, or felt unsatisfied with the management of these organizations. Again, information issue and lack of need were identified as main constraints factors.

Even though there is a lack of literature on donor constraints related to college athletic giving, the common barriers identified in these two studies (lack of need, information, insensitive marketing) provided insight on donation constraints in the non-profit sector which translated to the sport-related research by Shapiro & Giannoulakis (2009).

2.7 Athletic alumni donor research

The importance of student-athletes' alumni is based on the fact that this population represent an important segment of potential donors for athletics (Shapiro et al., 2010). Much research has been done through the years on athletic alumni. The study conducted by Shulman & Bowen (2001) compared athletic contributions of former student-athletes and general alumni population. Results indicated that general population gives back to athletics at a much higher rate than athletic alumni. Authors of the study noted that this might be the case due to feelings of hostility from former student-athletes towards their athletic department. Although the study showed athletic alumni being more likely to donate to athletics than academics, only 5% of athletic alumni made contributions to their athletic departments.

Another study by O'Neil & Schenke (2007) focused on athletic alumni contributions as well as their behaviors regarding charitable donations. The model developed by the authors examined athletic alumni attitudes and giving patterns based on four potential factors that could influence donations: 1) lack of identification with their alma mater, 2) the student-athlete experience, 3) feeling of isolation as an athlete, and 4) feelings that former athletes have already given to the athletic department through practice and competition. Results from the study indicated that former alumni feel they already contributed to their alma mater on the field, therefore they no longer owed anything to the school. In addition, authors reported that the

reason why former athletes don't donate as much as the general population is because they were not paid for the service. O'Neil & Schenke (2007) also found that colleges might need to develop specialized marketing communications programs in order to reduce student-athletes' alumni perceptions of not needing to donate because they already served the school by competing. Although this study was valuable in terms of evidence provided on unique experiences and their influence on former athletes' donation, its limitation laid on the fact that the authors only examined attitudes of former athletes who were currently donors.

2.8 Former student-athletes' donation constraints

Because former athletes represent an important category of potential donors to athletic departments, it is important to include in the literature former studentathletes' donation constraints. However, not many scholarly studies have focused on donation constraints that analyze solely for alumni student-athletes. The first study to specifically investigate student-athletes' donor constraints was performed by Shapiro & Giannoluaski (2009). Their qualitative study was based on personal semi-structured interviews with former student-athletes who were non-donors during a four-month period. The authors selected a diverse group of athletic alumni in order to gain results on a broad perspective. Participants consisted of eleven former athletes with a diverse background (gender, age, level of competition and sport played). Findings of the study provided an in-depth understanding of former athletes' barriers that prevent them to make charitable donations to their athletic department. The qualitative analysis identified four donation barriers: Importance, Connection,

Communication/Knowledge, and Experience. Importance was defined as the former athlete's feelings of priority in terms of charitable causes. Connection referred to the lack of connection between the former athlete and the athletic department or

institution. Communication/Knowledge pointed at improper or lack of communication between the athletic department and former athletes. Experience focused on the overall experience and relationship between former athletes and their institution.

The study of Shapiro & Giannoluaski (2009) was extremely valuable as it was the first study on former student-athlete's constraints with a source used in the the scale of development process. With the foundation that this study set, Shapiro et al. (2010) were able to develop the Former Student Athlete Donor Constraint Scale (FSADCS) which used the four barriers identified by Shapiro & Giannoluaski (2009) (Importance, Connection, Communication, and Experience) to further investigate former athletes' constraints. Their findings showed that all four factors have a significant influence on donor constraints. More specifically, their investigation suggest that oftentimes former student-athletes are not informed about the donation process and the importance of donations to their institution or athletic department. The research provided that lack of importance, miscommunication and disconnect were all donation barriers for former athletes. Though this research study provided positive findings, its limitation was in the unique aspect regarding student-athletes' experience, which made the same of the study not to be representative of a diverse population of alumni athletes.

CHAPTER THREE

METHODOLOGY

Understanding the motivation behind alumni contributions to athletics is at the foundation of the Blue Raider Athletic Association at MTSU. The purpose of this quantitative study is to explore whether there is a relationship between football athletic performance at MTSU and alumni donations to general fund donations and football-specific gifts. The null hypothesis is that there is no significant relationship between football team performance and alumni contributions to general fund and football specific gifts. According to the Middle Tennessee Athletic Department, football is the sport that account the most revenue for the department, followed by men's basketball and women's basketball. Many researchers identify football success as a crucial factor in athletic contributions. However, the idea behind this study is to analyze some of the variables that measure a team's performance over just its winning record and, furthermore, identify if those variables affect donations in a positive significant way.

In order to measure team performance, three independent variables are used in this study. Because winning games are considered to be the main objective for many coaches and athletic departments to analyze team performance, the first outcome variable is the team's total win (Roach, 2016). The other outcome variables used for this analysis are also related to winning games. The second variable is the team's point differential, which is the the number of points the team scored during the season minus the number of points the team allowed. The third variable is used to indicate whether the team made the Bowl game in a given year. The methodology for this analysis was inspired by a study conducted by Roach (2016) on head coaching experience and its effect NFL team performance. According to Roach (2016), using a

team's point differential as independent variable takes away idiosyncratic shocks such as luck and injuries. In addition, reaching the playoffs or Bowl game for a team is of great value for a number of reasons. Not only the playoffs provide additional games, but it increases fan interest level as well as raising the profile of the university (Roach (2016).

Each independent variable used for this analysis is translated into a total score in order to be used in a statistical regression and correlation through SPSS. Given that a team's total win and a team's point differential are already numerical data, they will both be used as they appear. To translate the third variable into numerical data, the football team is awarded 25 points for their appearance in the Bowl game in a given year, and 0 points for not being invited to the Bowl game. In order to have a single total score for a team's performance each year, the numerical scores of each variable are then added together (See Table 1).

Validity and reliability are taken in consideration in this study. The study is valid because the Athletic data used which was provided by the University, measured exactly what it was intended to measure – the amount of alumni donations to the athletic department each year. The reliability of this study, which is the consistency of the results, is showed through the accuracy of the SPSS regression test. Moreover, reliability for this study can be interpreted as test-retest reliability, meaning results can be replicated as long as the same data set is used.

DATA ANALYSIS

The data used for this analysis is provided by the Middle Tennessee State University Development Office which receives and keeps track of donations from alumni, friends, current and former staff members, and corporate partners. The data set was requested through a Banner Advancement Data Request Form. In order to

receive the data set, a Banner Advancement Data Confidentiality Agreement was signed as well.

The Athletic Gift Data provides all donations to the BRAA – general fund, and all gifts to each individual sport from January 2010 to December 2019. The data set includes the gift date, gift amount, department or sport, zip code of the donor, and primary relationship of the donor with the university. Donor's names were not requested in the data set for this research. Though much information is included in the data set, only three factors are used in this study. These are donations to general fund, sport-specific gifts (football), and primary relationship of the donor with the university (alumni).

Because the data contains variables in a time frame of 10 years, both depended and independent variables are considered to be continuous. A correlation was conducted between alumni donations to general fund and football team performance, as well as alumni football specific donations and football team performance from 2010 to 2019. In addition to running a correlation test between the two continuous variables over the course of ten years, a regression model was also conducted between alumni donations to general fund and football team performance, and between alumni football specific donations and football team performance. This regression model provides additional results through a significant score and an R squared value.

	Team Total	Point		Team performance
Year	Wins	Differencial	Bowl games	total
2010	6	-21	0	-15
2011	2	-174	25	-147
2012	8	-17	0	-9
2013	8	36	25	69
2014	6	1	0	7
2015	7	96	25	128
2016	8	51	25	84
2017	7	11	25	43
2018	8	18	25	51
2019	4	-43	0	-39

Table 1 – Independent variables, Team Performance

CHAPTER FOUR

RESULTS

The main results of the correlation model are represented in *Table 2* and *Table 3*. The quantitative assessment performed through a correlation between the two continuous variables – alumni donations to BRAA general fund and football performance, shows a Pearson's coefficient of -0.3. Even though these results indicate a moderate to weak relationship between the two variables, the scatterplot *Graph 1* shows that the points don't fall on the trend line. The downward slope represents a negative relationship between alumni donations to BRAA general fund and football performance in a ten-year time frame. The negative coefficient indicates that as football team performance increased over the years, alumni donations to general fund decreased. Thus, findings indicate that although there is a relationship between the two variables, the relationship is not significant.

Similar results are showed in *Table 3*. The correlation between alumni donations to football and football performance, shows a Pearson's coefficient of -0.1. This indicates a negative weak relationship between the two variables. The scatterplot *Graph 2* also shows that the points don't fall on the trend line, indicating the relationship to be non-significant. The downward slope indicates that as football performance increased, alumni donations to football decreased over the course of the ten-year period. Therefore, the relationship between the two variables was not significant.

A regression analysis was additionally performed to further analyze the statistically significant relationship between the two continuous variables. In order to understand the statistically significant relationship, the P-value is observed in both *Table 4* and *Table 5*. The usual significance level that indicates a statistically

significance between two variables is 0.05. As observed in Table 4, the P-value (0.39) is greater than 0.05. This indicates no statistically significant relationship between alumni donations to general fund and football performance. In *Table 4*, the R-squared value (0.09) is also observed as an indicator of how well the lineal regression model fits the data used. Generally, the larger the R-squared value, the better the regression model fits the observation. The R-squared value showed in *Table 4* indicates that only 9% of the variation in alumni donations to general fund is explained by football team performance.

Similar findings are showed in *Table 5*, where the P-value (0.77) is greater than the statistically significant value 0.05, showing no statistically significant relationship between alumni donations to football and football performance. The Rsquared value (0.01) observed in *Table 5*, indicates that the model explains only 1% of the variation in alumni donations to football gifts is explained by football team performance. Table 2.

CORRELATION BRAA DONATIONS-FOOTBALL TEAM PERFORMANCE						
	BRAA (\$)	Team performance total				
BRAA (\$)	1					
Team performance total	-0,304068602	1				

Table 3.

CORRELATION FOOTBALL DONATIONS-FOOTBALL TEAM PERFORMANCE

	Football (\$)	Team performance total
Football (\$)	1	
Team performance total	-0,105604167	1

Table 4.

REGRESSION BRAA DONATIONS-FOOTBALL TEAM PERFORMANCE SUMMARY OUTPUT

Regression Statistics					
Multiple R	0,304068602				
R Square	0,092457715				
Adjusted R Square	-0,020985071				
Standard Error	238462,8783				
Observations	10				

ANOVA

	df		SS	MS	F
Regression		1	46345528161	46345528161	0,81501626
Residual		8	4,54916E+11	56864544333	
Total		9	5,01262E+11		

	Coefficients	Standard Error	t Stat	P-value
Intercept	876114,6618	77477,77621	11,30794796	3,3668E-06
Team performance total	-933,5542307	1034,085421	-0,902782509	0,3930117

Table 5.

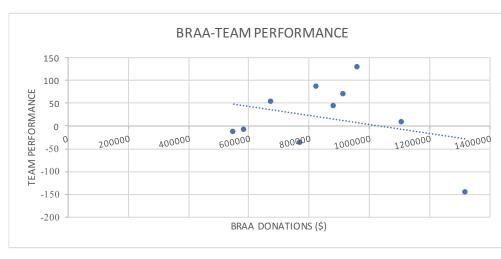
REGREESION FOOTBALL DONATIONS-FOOTBALL TEAM PERFORMANCE SUMMARY OUTPUT

Regression Statistics					
Multiple R	0,105604167				
R Square	0,01115224				
Adjusted R Square	-0,11245373				
Standard Error	1692,757562				
Observations	10				

ANOVA

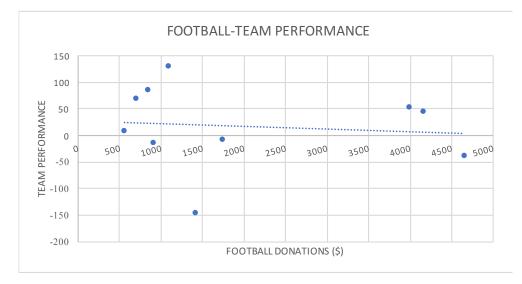
	df		SS	MS	F
Regression		1	258530,7379	258530,7379	0,09022412
Residual		8	22923425,3	2865428,162	
Total		9	23181956,04		

	Coefficients	Standard Error	t Stat	P-value
Intercept	2050,131527	549,9853582	3,727611102	0,00580761
Team performance total	-2,204914362	7,340580336	-0,300373303	0,77154996





Graph 1



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CHAPTER FOUR

DISCUSSION

Summary

Fundraising is one of the primary sources of revenue for college athletic departments. However, The NCAA (2018) reported all Division I schools outside of the "Power 5" conferences to have exceeded their total generated revenues with their expenses. Thus, many of Division I institutions, including MTSU, still continue to increase fundraising efforts in support of intercollegiate athletics.

The excessive increase in operating costs in intercollegiate athletics has caused many Division I athletic departments to deal with large deficits in annual budgets (Knight Commission, 2010). As a consequence, athletic departments had to primarily rely on private support and contributions. To balance increase in academic costs, new facilities, staff salaries, Title IX compliance, and now expenses to contain the spread of the 2020 Corona Virus, many schools across the country had to reduce expenses by eliminating varsity sports teams and reducing the number of student-athletes participating in intercollegiate sports. Even the schools who were able to keep their all their sport programs operating, had to find other solutions to manage their budgets. Thus, over the last decades, most Athletic Departments have continued to face challenges related to their budgets.

In such difficult times for Division I Athletic Departments, it was important to further understand how sporting teams affect and keep on affecting private donations to intercollegiate athletics. The method chosen for this study was to conduct a correlation and a regression model that analyzed the relationship between the most revenue generator sport at MTSU (football) and its effect on alumni donations. The study had major importance because MTSU sits just outside of "power 5" Division I

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schools, which are the schools that depend of fund raising the most in situations of struggles and crisis.

The results achieved in this study show no significant relationship between football team performance and alumni contributions to the Blue Raider Athletic Association General fund and football specific gifts. Surprisingly, the findings show that as football performance increased over the course of the ten-year period, alumni contributions decreased. In addition, results showed that football team performance accounts only for 9% of alumni donations to general fund, and only 1% of alumni donations to football donations. This result is important because it shows that team performance is actually just a very small portion of factors that influence donations to the athletic department at MTSU. The findings raise some important questions worth analyzing in further research at MTSU.

- 1. What are the fund raising strategies that target alumni used by the BRAA at MTSU?
- 2. How can these strategies be improved to raise more funds when major teams such as football are being successful over the years?
- 3. What are the primary motives of alumni contributions to the BRAA general fund and to sport-specific, and what factors other than football team performance affect these contributions?

Limitations

There are numerous potential limitations when interpreting the results of this study. The data set received from the MTSU Development Office only included donations from alumni, non-alumni, friends, and staff members. Money raised through college football revenue games, ticket sales, television and radio rights fees, and sponsorships was not included in the amount of donations analyzed in this study.

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For instance, some of the football revenue games for MTSU include games against Vanderbilt, Georgia and Kentucky in 2018, where the Blue Raiders received a total of \$3.105 million (Fleser, 2018). Although football generator games are not considered "donations", they generally occur every football season, being the main reason that the MTSU football team is considered the most revenue generator team for the University.

In addition, the correlation and regression tests ran between football performance and all the alumni donations to the BRAA general fund did not take in consideration the effect of the all the other varsity sports who may have had a significant effect on alumni donations to the general fund. This limitation is probably one of the reasons why the results show alumni donations based on football performance to account only for 9% of all alumni donations to general fund.

Another limitation of the study is that it utilizes data from a single source (MTSU development office). While this provides extremely helpful findings for the BRAA at MTSU, results of this study cannot be generalized to schools who are outside of the "power 5" conferences.

Future Research

Future research on alumni donations to intercollegiate athletics at MTSU should examine the fund raising strategies used by the Blue Raider Athletic Association, as well as all the external factors that may have an influence on significant alumni donations in a given year (e.g. a senior donor passing away, economical turndowns, new football coach). The results of this study show just a small portion of the of the big picture on alumni donations at MTSU. A qualitative or quantitative study should uncover crucial factors that help determining why MTSU alumni contribute to general fund and football sport specific, by analyzing all the

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comprehensive factors that play a role in such decision for alumni donors. Although many scholarly research articles have already examined the reason why individuals contribute to the athletic department of an institution, a study that investigates this question at MTSU may provide additional information to improve strategies used by the BRAA to raise more money from alumni. Moreover, a further study may allow to further examine the different reasons in which some individuals donate to general fund and some other to sport-specific, or both.

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