

# An Investigation of the Relationship Between Minimum Gift Requirement and Number of Fundraising Staff on University Athletics Donors

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Many prior studies examining fundraising within university athletics programs have explored the effect of donor motivations and athletic success on giving, but such factors are beyond the control of department fundraisers. The current study sought to examine the effect of two key mutable factors for athletic departments, namely the minimum gift amount required to become an official donor and the total number of fundraising personnel. Specifically, this research investigated the relationship between several key variables, including minimum gift amount and number of fundraising employees, plus several common immutable factors, on the total number of donors at the lowest reward tier within NCAA Division I athletics departments. The research team used hierarchical regression to develop four models to examine these relationships. Independent variables utilized included university conference affiliation, institutional factors, athletic success factors, and the variables of interest, which were minimum gift amount required to join the donor program and the total number of fundraising staff. The dependent variable examined was total number of donors at the lower reward tier. The final model explained 73.1% of the variance in number of donors at the lowest reward tier. The variables of interest (minimum gift requirement and total number of staff) explained 20.8% of the variance when controlling for key factors such as athletic success and conference affiliation.

*Keywords:* fundraising, development, minimum gift, personnel

## Introduction

Many sport organizations solicit donations as part of their funding or revenue structure. National Collegiate Athletics Association (NCAA) Division I athletic departments in the U.S. are a primary example as they rely on financial gifts from individuals for a large percentage of their operating budgets. In a recent NCAA report, donations accounted for 17% of all athletics department revenues among NCAA Division I universities, the third highest revenue source (second highest “generated



revenue” source) behind institutional support (28%) and media rights (22%) and significantly ahead of revenue streams such as ticket sales and licensing (NCAA, 2020). In the same report, among Football Bowl Subdivision (FBS) autonomy schools, donations account for 23% of all revenues, second only behind media rights (35%). While university athletics departments rely heavily on donor funding to sustain their operations, nearly all academic investigations related to fundraising have focused on donor motivations and behavior (Gladden et al., 2005; Ko et al., 2014; Mahoney et al., 2003; Staurowsky et al., 1996; Tsiotsou, 1998; Verner et al., 1998) or the impact of athletic success on giving patterns (Humphreys & Mondello, 2007; Reynolds et al., 2017; Rhoads & Gerking, 2000; Stinson & Howard, 2004; 2008; 2010). Even though the relationship between donor motivation and giving or the relationship between athletics success and giving are important, athletics department fundraisers can do little to affect those key factors (Murphy, 2018). Instead, the current paper argues college athletics researchers should also investigate factors athletics department personnel can influence or control. Factors such as the benefits donors receive for giving, the manner in which development personnel prospect for donors, the number of interactions fundraisers have with donors, the minimum giving amounts required to become a donor, the number (and experience level) of fundraisers employed, and the leadership style of development directors are all examples of factors which may be tied to donor giving levels, but have received minimal attention in the literature (Murphy, 2018; Wanless et al., 2019; Wells et al., 2005).

An examination of the relationship between these facets of fundraising and their effect on overall giving would be quite valuable to development staff. For example, if a relationship exists between the minimum donation required and the likelihood of a donor giving, development staff could strategically set a minimum gift amount to encourage greater giving or entice more individuals to donate. Sport organizations conduct similar analyses examining ticket sales, with many teams now monitoring and adjusting ticket pricing (particularly on the secondary market) to maximize both revenue and attendance (Drayer et al., 2012; Shapiro & Drayer, 2014). Yet such “pricing” studies within college athletics fundraising are non-existent. Ironically, donor solicitation within college athletics is designed to produce greater giving, primarily through the use of tiered reward giving (Lipsey et al., 2021), but scant evidence exists indicating to what degree tiered rewards and minimum gift requirement levels actually effect donor behavior. Prior research suggests small and medium sized non-profit organizations are typically slower to embrace analytical and data-driven donation-generating strategies (Nageswarakurukkal et al., 2021). Thus, the primary purpose of the current study is to examine the relationship between the established minimum gift requirements of the lowest level reward tier (the entry-level point for most donors), and total number of donors at that tier, utilizing a dataset comprised of NCAA Division I athletics development programs.

Similarly, prior research in the area of sport ticket sales has suggested the number of salespeople employed has a positive relationship with ticket revenue generated (Popp et al., 2020; Difebo, 2008). While the notion of more people selling a product would result in a greater number of sales seems logical, prior studies exam-

ining donations to universities have found conflicting results. Curry et al. (2012), for example, found the size of development staff did not predict fundraising performance at Christian-based universities. And in their investigation of college athletics donors using data from 2000, Wells et al. (2005) indicated the number of athletic development staff was not a positive predictor of total donation amount collected by the school's athletics department, although the length of time the department had employed full-time fundraisers was. Wanless et al., (2019), however, found college athletics donors who were contacted more frequently by fundraising personnel were less likely to end their giving behavior, which would suggest a greater number of development staff should result in lower donor churn. And in other non-profit settings, having a larger and better resourced or trained development staff resulted in a greater percentage of revenue coming from donors (Betzler & Gmur, 2016; Zappala & Lyons, 2006). Thus, a secondary purpose of the current study is to examine the relationship between the total number of development staff and number of donors at the lowest giving tier among college athletics development programs.

## Literature Review

### Intercollegiate Athletics Fundraising

Researchers have studied fundraising within U.S. collegiate athletics departments for decades (Park et al., 2016). Early work in this field focused exclusively on donor motivations (Gladden et al., 2005; Mahoney et al., 2003; Staurowsky et al., 1996; Tsiotsou, 1998; Verner et al., 1998) and produced conflicting results, some of which suggested donors primarily give for transactional reasons, while others suggested altruism as the primary motive. For example, both Mahoney et al. (2003) and Wells et al. (2005) found access to ticket-related benefits was the top motivation among respondents, but Tsiotsou (2007) suggested intangible factors such as sense of belonging, trust in leadership, and vision of the university as top motivations. A handful of researchers have also investigated the relationship between donor characteristics and giving behavior, including explorations of gender (Shapiro & Riding-er, 2011); geographic distance between the donor and the institution (Jensen et al., 2020), and the age at which donors first identify with the sport program (Popp, et al. 2016).

A second line of research in this space examines the impact of athletic success on giving levels (Humphreys & Mondello, 2007; Reynolds et al., 2017; Rhoads & Gerking, 2000; Stinson & Howard, 2004; 2008; 2010). Results of these studies have been somewhat mixed, but the majority suggest football and men's basketball success do produce higher levels of giving. For example, Stinson & Howard (2008) found at NCAA I-AA institutions, an appearance by the men's basketball team in the national tournament equated to an increase of over \$400 per donation (a nearly 50% jump) to the athletics department in the year following the appearance. A few of these studies have also explored additional environmental variables in their predictive modeling. For example, in his study of 35 NCAA Division I programs, McEvoy (2005) found football and men's basketball home attendance, university athletic conference affili-

ation, and type of institution (public or private) all were statistically significant predictors of fundraising contributions, in addition to football winning percentage. Similarly, Wells et al. (2005) developed a model which explained more than 75% of the variance in total donations across 80 NCAA Division I institutions. In this study, the number of years the director of development had served in that capacity, the length of time a department employed full-time development personnel, the number of alumni from the university, and the number of people on the prospective donor list were all statistically significant predictors, in addition to total number of football season tickets sold. Of note, the number of development personnel employed and football team winning percentage were not statistically significant predictors (Wells et al., 2005). Using more recent fundraising data, Brannigan and Morse (2020) found conference affiliation, regional population, and school enrollment were all significant predictors of total athletic donations, along with measures of athletic success such as football winning percentage and game attendance.

### **Fundraising Structures and Institutional Isomorphism**

While studies examining donors' behaviors and characteristics can help in the development of predictive models, they have limited utility for fundraising personnel given many factors are outside the athletics department's control. For example, few athletics administrators can affect on-field success, donor characteristics, or market variables. This leads to a question of what factors might significantly impact donor giving and *are* under the development team's control. One such factor is the design and structure of the donor program, which typically consists of a tiered giving format, in which donors receive greater benefits as they contribute greater amounts. Until recently, little research has investigated development program structure (Lipsey et al., 2021; Sattler et al., 2019), including the number of reward tiers, the minimum gift amount required to reach each level, and the associated benefits of each tier, within college athletics departments.

Lipsey et al. (2021) opine when university athletics fundraisers establish pricing tiers for their fundraising programs, they likely behave according to the organizational theory of mimetic isomorphism (DiMaggio & Powell, 1983). Institutional isomorphism helps explain why organizations with a variety of backgrounds become more similar to one another when they are confronted by the same environmental factors. Mimetic factors are one of three common constraints leading to isomorphism among universities--specifically college athletics departments--along with coercive and normative forces (Ward, 2015). Mimetic isomorphism postulates when organizations are unsure of the path in which to achieve organizational objectives, the best alternative is to imitate similar others, even though no evidence suggests such actions will lead to greater organizational efficiencies. Prior research has substantiated the pervasiveness of mimetic isomorphism within college athletics through the assessment of a variety of factors such as the value of nonrevenue Olympic sports sponsorship (Cooper & Weight, 2011), the process for hiring athletics directors (Smith & Washington, 2014) and the creation of departmental mission statements (Ward, 2015). In the current context, given that athletics fundraisers have not empir-

ically analyzed the effects of price setting for reward tiers in order to create the most effective structure, it is quite possible development structures such as reward tier menus are based primarily on environmental factors and similar “others” rather than achieving organizational goals or efficiencies (Lipsey et al. 2021).

The primary motive for businesses or organizations to employ tiered reward levels is to incentivize consumers or members to donate or purchase more, in order to receive the benefits provided in higher tiered reward levels (Tanford, 2013). For example, in a college athletics context, Malone (2011) suggested donors to an NCAA Division I athletics department were more likely to give beyond their minimum gift when the additional donation resulted in improved seat acquisition for football games. In addition to generating more revenue, tiered reward levels can lead to improved brand commitment among members because it establishes a sense of identity within each tiered reward level (McCall & Voorhees, 2010). In fact, it is important for fundraising managers to differentiate interactions with low-level and high-level donors, given the two groups behave differently. For example, donors who give at lower levels tend to be more incentivized by tangible benefits (Park et al., 2016) and are more sensitive to price (Wei Shi, 2018). Therefore, it is critical for athletics development teams to establish the correct financial entry point and benefits associated with each tier. As Boenigk and Scherhag (2014) note in their study of donors to non-profit organizations, development officers:

...should carefully determine which benefits to offer to the different donation levels to ensure strong donor satisfaction. Fundraising managers might consider expectations of the different donation levels as well as their varying motives, to determine which offers will be perceived as beneficial.” (p. 326).

Meanwhile, it appears high end donors are motivated by socialization benefits more than tangible perks (Park et al., 2016). When upper-level donors are given greater priority through servicing and marketing efforts, revenue per donor increases at a greater rate (Scherhag & Boenigk, 2013).

While athletics departments employ a variety of benefits and set minimum donation amounts for various tiers within their giving menu to incentivize greater giving (Malone, 2011), fundraisers must first encourage donors to give an initial gift to enter the donor funnel. Yet scant research has examined the impact of adjusting reward levels and tier pricing on donor behavior (Simons et al., 2017), particularly at donors’ point of entry. McCardle et al. (2009) examined gift amounts of donors to a private high school and found donors typically give the minimum, or just over the minimum, required to join a tier level; almost no donation in the dataset was close to, but below, the maximum of a reward tier. Their findings suggest minimum gift requirement and reward tier structure is highly influential on gift amount, echoing the results of Harbaugh (1998) and his work examining law school donors. Studies investigating the impact of tier level pricing have typically focused on a single case study (Malone, 2011; McCardle, 2009), in large part because of the high variability among number of tiers and minimum donation requirements within those tiers, when examining multiple institutions (Lipsey et al., 2021). A good starting point for a

macro-level examination of donor behavior among multiple institutions, such as the current study, would be to solely examine the effect of minimum gift requirement at the base reward tier. This is the most common entry point for donors and all development programs have a lowest-level tier.

### **Development Staffing**

While prior research examining college athletics fundraising has established the influence of athletic success and number of alumni or enrollment on total donations (Brannigan & Morse, 2020; Humphreys & Mondello, 2007; Wells et al., 2005), the number of development staff and the amount of effort that staff dedicates to outreach is likely to also impact gift levels. As Hiles (2010) notes, to measure the effectiveness of a development staff, the number of calls, contacts, and proposals presented must be measured. Within university development, spending on alumni relations has a significant, positive relationship on the amount of alumni giving (Harrison et al., 1995). Specifically within college athletics fundraising, touchpoints with athletics donors are influential; when number of outreach contacts were utilized as an independent variable in a study examining the length of time donors continued to give, the number was found to be statistically significant (Wanless et al., 2019). Anecdotal evidence suggests simply hiring more staff members will result in greater donations procured (DiFebo, 2008). This notion was confirmed to some degree in a study by Popp et al. (2020), which found when hiring more ticket salespeople, college athletics departments generated more donations as donations are often required for season ticket purchases. Surprisingly, however, Curry et al. (2012) found the size of the development staff did not predict fundraising performance at Christian universities. In their exploration of factors affecting donations to college athletics departments, Wells et al. (2005) found the number of years the development team had full-time staff and the number of years of experience possessed by the development director both significantly predicted total donations, however the number of development staff members did not. Wells et al, however, collected data from 2000; since that time, the number of development personnel employed by athletics departments has grown significantly. As evidence, membership in the National Association of Athletic Development Directors has more than tripled since 2003 (Murphy, 2018). With more athletics departments now hiring a significantly greater number of development personnel, it is possible the relationship between number of fundraisers and amount raised has shifted since the Wells et al. study. In other studies examining the effect of fundraising staffing on total donations in various non-profit settings, organizations which better resource and train development personal see significantly better results (Betzler & Gmur, 2016; Zappala & Lyons, 2006).

### **Summary**

In summary, prior studies examining college athletics fundraising have frequently explored (a) donor motives, (b) donor characteristics, and (c) the impact of athletic success and environmental factors on donation volume. Reward tier structure--and the minimum gift required within that structure--as well as the size of the develop-

ment staff are factors controlled by athletics administrators which could impact giving. Such factors are also accessible to researchers as reward tiers and development staff listings are frequently available on athletics departments' websites. Additional mutable factors which are likely to impact fundraising effectiveness (such as number of donor touchpoints or donor prospecting strategies) are more difficult to procure and may not be recorded in a similar fashion from one institution to another. Thus, the current study examines two factors uniformly displayed by nearly all observations in the population and poses the following research questions:

**RQ1:** What is the relationship between the established minimum gift requirement for the lowest reward tier and number of donors at that reward tier among NCAA Division I athletics programs?

**RQ2:** What is the relationship between the total number of development staff and number of donors at the lowest reward tier among NCAA Division I athletics programs?

## Methodology

To answer the research questions, the research team first made a decision to only use the minimum donation required to qualify for the lowest reward tier at NCAA Division I fundraising programs. The schools in the population, all NCAA Division I institutions ( $n = 357$ ), contained various numbers of reward tiers and minimum gift requirements for each of those tiers. A request was sent to the Assistant Director of Annual Giving (or similar position) to all schools in the population requesting two key pieces of data: (a) the total number of donors at the lowest reward tier and (b) the total number of donors to the athletics program, for a single academic year, pre-Covid (2018-19). Schools which did not respond to this initial request were sent a second request. If the original contact did not respond to two requests, a third and final request was sent to another member of the development staff.

To conduct the analysis, the research team utilized hierarchical regression analysis to develop a model exploring the relationship between several independent variables and the dependent variable of total number of donors at the lowest reward tier. Based on prior literature, the research team categorized independent variables into four groups. The first group represented both the level of football played (FBS or FCS), as well as conference affiliation, in terms of whether the institution was a member of the Atlantic Coast Conference (ACC), Big Ten Conference, Big 12 Conference, the Pac-12 Conference, or the Southeastern Conference (SEC). Schools not playing football were utilized as the reference variable. Conference affiliation was previously found to be a statistically significant predictor of annual donations among NCAA Division I athletics departments (Brannigan & Morse, 2020; McEvoy, 2005), and thus is important to include as a control variable. The second group of variables included institution-related measures which are likely to influence alumni giving and therefore need to be controlled for, including school enrollment, tuition, endowment, and public or private status of the university (Brannigan & Morse, 2020; Humphreys & Mondello, 2007). The third group of variables included two measures of athletic



success, Director's Cup ranking (an annual ranking of all sports performance by an institution) and all-time men's basketball winning percentage. Various measures of performance in football, such as all-time wins, all-time winning percentage, and bowl appearances were compiled, with each highly correlated with representation in each of the aforementioned Power Five athletic conferences and therefore they were left out of the model. The final group included the key variables of interest for the study: minimum gift amount required to join the lowest reward tier, maximum gift amount of the lowest reward tier, and number of full-time development staff. The dependent variable in the model was the total number of donors at the lowest reward tier for each school's development program, in order to determine the correlation between each of the key independent variables of development staff size and minimum and maximum reward tiers and the total number of donors.

## Results

A total of 153 schools responded to the request for data (some declining participation) and 129 schools supplied the requested data, a response rate of 36.1%. Additional data regarding these schools, including number of fundraising personnel, institutional variables, and athletic success variables, were then collected from secondary sources. Among the 32 NCAA Division I conferences, 29 were represented in the sample. Responses included 39 schools classified as Power 5 institutions, 18 which did not sponsor football, and 27 that were private institutions. The average enrollment of the universities in the sample was 21,721 with a minimum of 1,172 and a maximum of 85,586. The mean annual out-of-state tuition was \$33,498, with a minimum of \$8,535 and maximum \$64,380. The average endowment was \$1.3 billion, with a minimum of \$9.0 million and a maximum \$25.6 billion. The median endowment was \$362.6 million. Descriptive characteristics of the donor programs are depicted in Table 1. A correlation matrix for all of the continuous variables in the dataset was also generated and can be found in Table 2.

Table 1  
*Donor Program Characteristics*

	Mean	Minimum	Maximum
Donors at the Lowest Tier	1124	2	9000
Total Donors	4274	110	21198
Percent of Total Donors at Lowest Tier	26.6%	4.1%	92.2%
Minimum Gift Requirement	\$94.19	\$1	\$1,500
Maximum Gift at the Lowest Tier	\$328.26	\$49	\$3,499
Number of Tiers	8.2	2	16
Number of Development Staff	8.0	1	44



Table 2  
Descriptive Statistics and Correlations for Continuous Variables

	M	SD	DON	EMT	TUI	END	DIR	PCT	DEV	MIN
Donors	1134.7	1595.0								
Enrollment	22299.4	14618.6	.535*							
Tuition	33320.7	30002.9	.029	-.051						
Endowment	1323.8	3084.3	.274*	.178	.163					
Directors Cup	141.3	93.6	-.523*	-.523*	.018	-.357*				
MBBW/PCT	.539	.082	.275*	.258	.013	.234*	-.441*			
DevStaff	8.1	8.3	.635*	.532*	-.003	.294*	-.647*	.398*		
TenMin	82.7	77.3	-.036	-.150	.025	.001	.154	-.128	-.084	
TenMax	329.9	356.2	.457*	.154	-.010	.071	-.174*	.084	-.042	.401*

\*  $p < .01$

Table 3  
*Hierarchical Regression Results Predicting Donors at Lowest Giving Level*

Predictor Variables	Model 1	Model 2	Model 3	Model 4
<i>Conference Affiliation</i>				
ACC	.237 (3.152)**	.203 (2.673)**	.186 (2.099)*	-.046 (-.563)
Big Ten	.478 (6.507)**	.392 (5.103)**	.379 (4.504)**	.316 (4.764)**
Big 12	.100 (1.391)	.089 (1.252)	.075 (.951)	-.003 (-.056)
PAC-12	1.94 (2.736)**	.129 (1.791)	.118 (1.503)	.022 (.366)
SEC	.446 (6.174)**	.381 (5.20)**	.367 (4.480)**	.043 (.576)
<i>Institution-Related</i>				
Public v. Private		.005 (.057)	.008 (.104)	.009 (.142)
Enrollment		.236 (2.549)*	.104 (2.437)*	.055 (.725)
Out-of-state Tuition		.012 (.167)	.013 (.189)	.019 (.361)
Endowment		.121 (1.606)	.113 (1.433)	.096 (1.574)
<i>Measures of Athletic Performance</i>				
Director's Cup Ranking			-.046 (-.411)	.049 (.564)
All-time MBB Win Percentage			.001 (.010)	-.025 (-.396)
<i>Development-Controlled Variables</i>				
Number of Full-time Development Staff				.515 (5.723)**
Min. Gift Requirement for Lowest Tier				-.191 (-3.267)**
Max. Gift for the Lowest Tier				.500 (8.20)**
<i>F-statistics</i>	15.205**	11.235**	9.366**	18.329**
$R^2$	0.476	0.522	0.523	0.731
<i>Adj R<sup>2</sup></i>	0.445	0.476	0.467	0.691
$\Delta R^2$	0.476	0.046	0.001	0.208

To answer the research questions, the research team conducted a hierarchical regression analysis, the results of which are shown in the table below. To begin, the group of binary variables representing both the level of football played and conference affiliation were entered into the model, which ensures they are controlled for in each of the subsequent models. This group of variables explained a statistically significant amount of the variance in the number of donors,  $F(7, 117) = 15.205, p < .001$ . Specifically, this group of variables explained 47.6% ( $R^2 = .476$ ) of the variance in donors. The variables reflecting membership in the ACC ( $t = 3.152, p = .002$ ), Big Ten ( $t = 6.507, p < .001$ ), Pac-12 ( $t = 2.736, p = .007$ ), and SEC ( $t = 6.174, p < .001$ ) were all significant, suggesting that institutions in these major athletic conferences are significantly different in terms of the number of donors than institutions from non-Power 5 conferences. The variable representing institutions in the Big 12 was nonsignificant ( $t = 1.391, p = .167$ ). The variables reflecting playing football in either the FBS or FCS were nonsignificant as well.

In Model 2, the group of variables reflecting institutional factors such as enrollment, tuition, endowment, and whether the institution was public were then entered into the model. This group of variables explained an additional 4.6% ( $R^2 = .046$ ) of the variance in the number of donors, also deemed to be statistically significant,  $F(4, 113) = 2.721, p = .033$ . In this group of variables, only the variable indicating the enrollment of the institution was significant ( $t = 2.549, p = .012$ ). The third set of variables were entered in Model 3, representing the athletic department's overall performance and historical performance in men's basketball. As indicated in Table 3, neither variable was significantly correlated with the number of donors and this group of variables did not explain a significant amount of incremental variance,  $F(2, 111) = .086, p = .918$ .

Finally, Model 4 controls for the level of football played and conference affiliation, various institutional factors, and athletic performance, and adds both the minimum and maximum gift required to join the lowest reward tier and the total number of development staff employed. The group of variables reflecting the reward tiers and the size of the development staff explained an additional 20.8% of variance in the number of donors ( $R^2 = .208$ ), deemed to be a statistically significant amount of incremental variance,  $F(3, 108) = 27.787, p < .001$ . In total, the final model (Model 4) explained 73.1% ( $R^2 = .731$ ) of the variance in the number of donors at each institution. The variable representing the number of development staff was statistically significant ( $t = 5.723, p < .001$ ), with the unstandardized coefficient ( $\beta = 98.503$ ) indicating that each additional staff member added would result in an increase of more than 98 donors. The variable reflecting the size of the maximum donor tier was also significant and positive ( $t = 8.200, p < .001$ ), with the unstandardized coefficient ( $\beta = 2.238$ ) indicating that a \$1 increase in the maximum donor tier would result in an increase of 2.2 donors. Finally, the minimum donor tier was also significant, but negative ( $t = -3.267, p = .001$ ). The unstandardized coefficient for the minimum tier ( $\beta = -3.944$ ) suggests that a \$1 increase in the minimum amount required to achieve the minimum tier would result in a decrease of nearly four donors.

## Discussion

The primary purpose of the current study was to examine the relationship between factors athletics departments control—minimum donation required and personnel—and the total number of donors at the lowest donor reward tier (entry-level point) for NCAA Division I college athletics departments. Specifically, the factors examined included the minimum gift required to join the donor program and the number of development staff employed by the department. In examining current development practices, it appears schools indeed mimic each other rather than structuring giving tiers based on quantitative analysis, providing further evidence of memetic isomorphism as suggested by Lipsey et al. (2021). As an example, despite universities in the sample spanning a wide range of athletic success, conference affiliation, or enrollment, 63.6% of the sample established their minimum gift requirement amount at either \$50 or \$100. Yet, while minimum gift requirement was fairly homogenous, the number of donors at the lowest giving tier varied significantly, suggesting several variables likely affect donors' decisions to give. Prior research has suggested factors such as athletic success, conference affiliation, and university enrollment all significantly predict donor volume (Brannigan & Morse, 2020; McEvoy, 2005; Wells et al., 2005). The current study confirmed several of these variables did significantly predict total number of donors at the lowest giving tier, with the peculiar exception of measures of overall athletics success. When Directors Cup points and all-time men's basketball winning percentage were added to the model, they produced virtually no change in the predicted amount of variability among total number of donors.

The unique and most important contribution of the current study is the establishment of minimum gift requirement and staff size as influential factors in predicting number of donors at the lowest reward tier, after controlling for common institutional variables. In this analysis, those two variables accounted for more than 20% of the variance in the total number of donors at the lowest giving tier. Such a finding has strong managerial implications, as it suggests manipulating the minimum giving level and hiring more staff—two factors athletics departments have the ability to alter—drives donor growth. Tiered reward systems are designed to attract members at a low entry point, then incentivize them to gradually move to higher levels (McCall & Voorhees, 2010). Because the lowest giving tier is often the entry point for donors, and because it is often the tier containing the largest percentage of all donors, it is incumbent upon development administrators to maximize the utility of this lowest tier to produce the greatest number of donors for an athletics department. Growing this base will likely result in producing more donors who give at a higher level as times goes on (Malone, 2011).

This study's analysis found the unstandardized coefficient for minimum gift requirement at the lowest tier was -3.94, demonstrating a negative, or inverse relationship between minimum gift amount and number of donors. From a practical standpoint, for every dollar the athletics fundraising organization increases their minimum gift amount, they will lose approximately four donors. The model thus becomes valuable in helping establish minimum gift requirements for the entry-level

reward tier. A primary goal of the development team is to generate significant revenue. Raising the minimum giving level at the lowest tier will likely have the effect of reducing the number of donors, while reducing the minimum gift required is likely to increase the number of donors. The effect on revenue will depend on the number of donors and the amount the gift requirement changes. Below we look at two examples from the dataset to illustrate the value of our model.

In the first example, we utilize a large Power 5 institution from the dataset, which currently has 3,193 donors at their lowest giving tier, with a minimum gift requirement of \$100. If it is assumed donors are contributing around the minimum level, as found by McCardle et al. (2009), this department hypothetically generates \$320,000 from donations at this reward tier. If the development team increases the minimum gift amount by \$50 (now \$150), the model suggests they will lose approximately 200 donors, leaving them with 2,993 at the minimum level. However, if all donors gave the minimum amount (the higher entry point), this fewer number of donors would generate nearly \$450,000, a 40% increase in revenue.

In a second example from the dataset, a non-Power 5 institution without football has 330 donors at their lowest tier with a minimum gift requirement of \$150, thus hypothetically generating approximately \$50,000. If this institution were to raise the minimum gift requirement by \$50 and lose 200 donors, they would likely cut their revenue at this tier in half, generating only \$26,000. If this same institution, however, lowered their minimum gift amount by \$30, the model suggests an increase in 120 more donors, resulting in revenue of \$54,000. This is an increase of 8% in immediate revenue, but also results in 36% jump in number of new donors, who can be cultivated to give more in the future utilizing relationship-building and an effective tiered reward system.

Meanwhile, a significant positive relationship was found between the total number of full-time development staff and the number of donors at the lowest giving level. The unstandardized coefficient for this variable was 98.50, indicating for the addition of one full-time fundraising staff member, an athletics department will gain approximately 99 donors at the lowest tier. This finding is not surprising, considering prior studies have suggested when more personnel are hired to sell tickets, athletics departments generate more ticket revenue (Popp et al., 2020). The current study suggests when more employees are hired to cultivate donor relationships, there is likely to be growth in the number of donors, at least at the lowest giving level, which is likely the entry-level point for most donors. Instead, the more important question for athletics administrators is the expected return on investment (ROI). An athletic department which requires a minimum gift of \$150 to join the booster program might generate an additional \$15,000 upon hiring an additional staff member, but would incur greater expenses from a salary for that employee of, say, \$50,000. It is important to remember, however, the current analysis was only able to model additional donor growth at the lowest giving tier. If each new development staff hire was also able to cultivate new donors at higher reward tier levels as well, the ROI from the additional staff member may be well worth the expense. In fact, Scherhag and Boenigk (2013) found servicing more generous donors results in more significant gifts compare to

less generous donors. In addition, growing the number of donors at the lowest reward tier in the short-term may result in greater lifetime giving and growth in higher reward tiers in the long-term.

## Limitations and Future Research

Though this study did yield significant findings, some limitations are acknowledged. First, while the final model (Model 4 in Table 2) explained more than 70% of the total variance in donors, 27% of variance was left unexplained. Additional variables could be explored in the future to determine if a model can be developed explaining even more variance. The current study examined institutional and athletic performance variables, but did not include factors related to the donors themselves. For instance, Popp et al. (2016) examined effects of fan identification, and more specifically, the age when donors became highly identified with an athletics department, on donor behavior. In her analysis of donors, Watson (2020) utilized median household income of the Metropolitan Statistical Area and a measure of fan support, operationalized by utilizing department Twitter followers. Jensen et al. (2020), meanwhile, included the distance between where donors resided and the university, in their examination of athletics giving. Wanless et al. (2019) also included the number of contacts the development staff had with donors; future studies could also include the number of contacts, but also an investigation of the quality of those touchpoints. In addition, future studies may want to collect additional data such as experience levels of development staff or prospecting strategies employed by development staff.

Second, the current study only examined data related to the lowest giving tier within the development structure. Future studies should expand upon the current results to examine giving volume and the impact of price manipulation at all reward tiers. Several prior studies have noted different factors impacting donors who give at lower tiers, compared to those who give at higher tiers (Park et al., 2016; Scherhag & Boenigk, 2013; Wei Shi, 2018). Ultimately, athletics departments will benefit by understanding how many reward tiers to create and how tier pricing decisions impact giving behavior (Lipsey et al., 2021). Future studies in this area may wish to employ experimental designs in order to gauge the impact of number of tiers or minimum gift requirement manipulation on donor giving decisions.

Third, future studies should investigate the strategies employed by development staff in establishing reward tiers and minimum gift requirements. Such a study might provide additional evidence to determine whether mimetic isomorphic behavior is indeed driving decision making (Lipsey et al., 2021). In fact, a prior study by Morehead et al. (2021) suggested college athletics administrators are guided by several competing motives when setting ticket prices, with profit maximization serving as just one of many strategies. A similar finding could emerge among development personnel; perhaps a department's short-term goal is to generate the maximum number of donors initially, with an objective of cultivating those donors in to higher-end donors in ensuing years.

Finally, the current study examined donor behavior in the context of U.S.-based college athletics. However, many sport organizations operate as non-profit organizations and rely heavily on procuring donors to fund their operations. The current investigation provides a blueprint for future studies conducted within other contexts such as recreational sport, sport clubs, sport national governing bodies (NGBs), and other entities, although future researchers should be cognizant of the unique location of U.S. college athletics at the intersection of commercialization and non-profit status. Most prior work examining financial donations to sport organizations has focused on donor motives. Future explorations of giving frameworks not only provides fertile ground for research but can have a significant applied benefit for practitioners eager to maximize donor solicitation.

## References

- Betzler, D., & Gmür, M. (2016). Does Fundraising Professionalization Pay? The Impact of Organizational Fundraising Capability on a Charity's Net Revenue from Private Donations. *Nonprofit Management and Leadership*, 27(1), 27-42.
- Boenigk, S., & Scherhag, C. (2014). Effects of donor priority strategy on relationship fundraising outcomes, *Nonprofit Management and Leadership*, 24(3), 307-336.
- Brannigan, K. J. & Morse, A. L. (2020). An empirical investigation of the variables influence contributions in NCAA Division I athletics: A quantitative analysis, *The Sport Journal*, 23(16). <https://thesportjournal.org/article/an-empirical-investigation-of-the-variables-influencing-contributions-in-ncaa-division-i-athletics-a-quantitative-analysis/>
- Cooper, C. G., & Weight, E. A. (2011). An examination of administrators' non-revenue, Olympic program values within NCAA athletic departments. *Journal of Intercollegiate Sport*, 4(2), 247-260.
- Curry, J., Rodin, S., & Carlson, N. (2012). Fundraising in difficult economic times: Best practices, *Christian Higher Education*, 11(4), 241-252.
- Difebo, M. (2008). A great start, *Athletic Management*, available at: [http://athletic-management.com/2008/04/18/a\\_great\\_start/index.php](http://athletic-management.com/2008/04/18/a_great_start/index.php)
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields, *American Sociological Review*, 48(2), 147-160.
- Drayer, J., Shapiro, S. L., & Lee, S. (2012). Dynamic ticket pricing in sport: An agenda for research and practice, *Sport Marketing Quarterly*, 21(3), 184-194.
- Gladden, J. M., Mahony, D. F., & Apostolopoulou, A. (2005). Toward a better understanding of college athletic donors: What are the primary motives?, *Sport Marketing Quarterly* 14(1), 18-30.
- Harbaugh, W. T. (1998). What do donations buy?: A model of philanthropy based on prestige and warm glow, *Journal of Public Economics*, 67(2), 269-284.
- Harrison, W. B. (1995). College relations and fund-raising expenditures: Influencing the probability of alumni giving to higher education, *Economics of Education Review*, 14(1), 73-84.



- Hiles, T. S. (2010). Determining the success of fundraising programs, *New Directions for Higher Education*, 2010(149), 51-56.
- Humphreys, B. R., & Mondello, M. (2007). Intercollegiate athletic success and donations at NCAA Division I institutions, *Journal of Sport Management*, 21(2), 265-280.
- Jensen, J. A., Wanless, L., Hedt, K., & Wayland, E. (2020). Analyzing big data in intercollegiate athletics: An application to athletic donor behavior, *Journal of Issues in Intercollegiate Athletics*, 13, 292-311.
- Ko, Y. J., Rhee, Y. C., Walker, M., & Lee, J.-H. (2014). What motivates donors to athletic programs: A new model of donor behavior, *Nonprofit and Voluntary Sector Quarterly*, 43, 523–546.
- Lipsey, J. U., Popp, N., Jensen, J. A., & Gray, P. (2021). Assessing fundraising practices of intercollegiate athletic departments: An empirical analysis of tiered reward systems, *Journal of Issues in Intercollegiate Athletics*, 14, 238-255.
- Mahoney, D. F., Gladden, J. M., & Funk, F. C. (2003). Examining Athletic Donors at NCAA Division I Institutions, *International Sports Journal*, 7(1), 9–25.
- Malone, J. B. (2011), *“That’s my seat!”: A study on athletic association donor behavior* [Doctoral dissertation, University of Georgia].
- McCall, M., & Voorhees, C., (2010). The drivers of loyalty program success: an organizing framework and research agenda, *Cornell Hospitality Quarterly*, 51(1), 35-52.
- McCardle, K. F., Rajaram, K. & Tang, C.S. (2009). A decision analysis tool for evaluating fundraising tiers, *Decision Analysis*, 6(1), 4-13.
- McEvoy, C. (2005). Predicting fund raising revenues in NCAA Division IA intercollegiate Athletics, *The Sport Journal*, 8(1). <https://thesportjournal.org/article/predicting-fund-raising-revenues-in-ncaa-division-i-a-intercollegiate-athletics/>
- Morehead, C. A., Shapiro, S. L., Reams, L., McEvoy, C. D., & Madden, T. M. (2021). A Qualitative Exploration of Ticket-Pricing Decisions in Intercollegiate Athletics. *Journal of Issues in Intercollegiate Athletics*, 14, 547-573.
- Murphy, M. A. (2018). *Development effectiveness in intercollegiate athletics* [Doctoral dissertation, Ohio State University].
- Nageswarakurkkal, K., Gonçalves, P., & Moshtari, M. (2020). Improving fundraising efficiency in small and medium sized non-profit organizations using online solutions, *Journal of Nonprofit and Public Sector Marketing*, 32, Vol. 32 No. 3, pp.286-311.
- NCAA (2020). 15-year trends in Division I athletics finances. National Collegiate Athletics Association, Indianapolis, IN: NCAA Retrieved from: [https://ncaaorg.s3.amazonaws.com/research/Finances/2020RES\\_D1-RevExp\\_Report.pdf](https://ncaaorg.s3.amazonaws.com/research/Finances/2020RES_D1-RevExp_Report.pdf)
- Park, C., Jae Ko, Y., Kim, H. Y., Sagas, M., & Eddosary, M. (2016). Donor motivation in college sport: Does contribution level matter?, *Social Behavior and Personality: An International Journal*, 44(6), 1015-1032.

- Popp, N., Barrett, H., & Weight, E. (2016). Examining the relationship between age of fan identification and donor behavior at an NCAA Division I athletics department, *Journal of Issues in Intercollegiate Athletics*, 9, 107-123.
- Popp, N., Jensen, J., McEvoy, C., & Weiner, J. (2020). An examination of the effects of outsourcing ticket sales force management, *International Journal of Sports Marketing and Sponsorship*, 21(2), 205-223.
- Reynolds, R., Mjelde, J. W., & Bessler, D. A. (2017). Dynamic relationships among winning in various sports and donations to collegiate athletic departments, *Cogent Social Sciences*, 3(1), 1-23.
- Rhoads, T. A., & Gerking, S. (2000). Educational contributions, academic quality, and athletic success, *Contemporary Economic Policy*, 18(3), 248-258.
- Sattler, L., Morehead, C., Popp, N., & McEvoy, C. (2019). Click here to donate: An examination of online crowdfunding campaigns by Division I intercollegiate athletic departments, *Journal of Issues in Intercollegiate Athletics*, 12, 454-478.
- Scherhag, C., & Boenigk, S. (2013). Different or equal treatment? Donor priority strategy and fundraising performance assessed by a propensity score matching study, *Nonprofit Management and Leadership*, 23(4), 443-472.
- Shapiro, S. L., & Ridinger, L. L. (2011). An analysis of donor involvement, gender, and giving in college athletics, *Sport Marketing Quarterly*, 20(1), 22-32.
- Shapiro, S. L., & Drayer, J. (2014). An examination of dynamic ticket pricing and secondary market price determinants in Major League Baseball, *Sport Management Review*, 17(2), 145-159.
- Simons, A., Weinmann, M., Tietz, M., & vom Brocke, J. (2017). Which reward should I choose? Preliminary evidence for the middle-option bias in reward-based crowdfunding, In *Proceedings of the 50th Hawaii International Conference on System Sciences*.
- Smith, J., & Washington, M. (2014). Advancing isomorphism in higher education: A critical analysis of the careers of intercollegiate athletic directors. *Journal of Contemporary Athletics*, 8(1), 1-21.
- Staurowsky, E. J., Parkhouse, B., & Sachs, M. (1996). Developing an instrument to measure athletic donor behavior and motivation, *Journal of Sport Management*, 10(3), 262-277.
- Stinson, J. L., & Howard, D. R. (2004). Scoreboards vs. mortarboards: Major donor behavior and intercollegiate athletics, *Sport Marketing Quarterly*, 13(2), 129-140.
- Stinson, J. L., & Howard, D. R. (2008). Winning does matter: Patterns in private giving to athletic and academic programs at NCAA Division I-AA and I-AAA institutions, *Sport Management Review*, 11(1), 1-20.
- Stinson, J., & Howard, D. (2010). Athletic giving and academic giving: Exploring the value of SPLIT donors, *Journal of Sport Management*, 24(6), 744-768.
- Tanford, S. (2013). The impact of tier level on attitudinal and behavioral loyalty of hotel reward program members, *International Journal of Hospitality Management*, 34, 285-294.

- Tsiotsou, R. (1998). Motivation for donations to athletic programs, *The Cyber Journal of Sport Marketing*, 2(2), 1-15.
- Tsiotsou, R. (2007). An empirically based typology of intercollegiate athletic donors: High and low motivation scenarios. *Journal of Targeting, Measurement and Analysis for Marketing*, 15(2), 79-92.
- Verner, M. E., Hecht, J. B., & Fansler, A. G. (1998). Validating an instrument to assess the motivation of athletics donors, *Journal of Sport Management*, 12(2), 123-137.
- Wanless, L., Jensen, J. A., & Poliakoff, P. (2019). New applications of survival analysis modeling: Examining intercollegiate athletic donor relationship dissolution, *Journal of Sports Analytics*, 5(1), 45-56.
- Ward, R. E. (2015). Buried accomplishments: Institutional isomorphism in college athletics mission statements. *International Journal of Sport Communication*, 8(1), 18-45.
- Watson, S. (2020). An empirical analysis of minimum gift amount to the highest giving level for athletic fundraising organizations in the NCAA division I football bowl subdivision, Masters thesis, University of North Carolina.
- Wei Shi, S. (2018). Crowdfunding: Designing an effective reward structure, *International Journal of Market Research*, 60(3), 288-303.
- Wells, D. E., Southall, R. M., Stotlar, D., & Mundfrom, D. J. (2005). Factors related to annual fund-raising contributions from individual donors to NCAA Division I-A institutions, *International Journal of Educational Advancement*, 6(1), 3-10.
- Zappalà, G., & Lyons, M. (2006). Factors associated with fundraising dependency among nonprofit organisations in Australia. *Australian Journal of Social Issues*, 41(1), 399-417.