
1-1-2013

Impact of Intercollegiate Athletics on Undergraduate Enrollment at a Small, Faith-Based Institution

Matthew J. Brunet

Michele W. Atkins

Gary R. Johnson

Linn M. Stranak

Follow this and additional works at: <https://trace.tennessee.edu/jasm>

Recommended Citation

Brunet, Matthew J.; Atkins, Michele W.; Johnson, Gary R.; and Stranak, Linn M. (2013) "Impact of Intercollegiate Athletics on Undergraduate Enrollment at a Small, Faith-Based Institution," *Journal of Applied Sport Management*. Vol. 5 : Iss. 1.

Available at: <https://trace.tennessee.edu/jasm/vol5/iss1/12>

This Article is brought to you for free and open access by Volunteer, Open Access, Library Journals (VOL Journals), published in partnership with The University of Tennessee (UT) University Libraries. This article has been accepted for inclusion in *Journal of Applied Sport Management* by an authorized editor. For more information, please visit <https://trace.tennessee.edu/jasm>.

Impact of Intercollegiate Athletics on Undergraduate Enrollment at a Small, Faith-Based Institution

Matthew J. Brunet

Michele W. Atkins

Gary R. Johnson

Linn M. Stranak

Abstract

Based on previous research, it is apparent many National Collegiate Athletic Association (NCAA) Division I institutions benefit from the existence of and success in intercollegiate athletics. However, few studies have researched the impact of intercollegiate athletics at National Association of Intercollegiate Athletics (NAIA) institutions. Therefore, the purpose of this study was to investigate the effect of intercollegiate athletics at a small, faith-based institution affiliated with the NAIA. More specifically, does success in or the existence of intercollegiate athletics have an effect on students' decisions to enroll at this institution? Findings indicate the majority of freshmen student participants, including many intercollegiate athletes, were not considerably influenced by the existence of intercollegiate athletics or the existence of successful intercollegiate athletics when deciding to attend the institution. These findings indicate the need for similar institutions to reevaluate the importance placed on and benefits derived from intercollegiate athletics.

Keywords: *Athletics, enrollment, NAIA, NCAA, college*

Matthew J. Brunet is an assistant professor of physical education, wellness, and sport at Union University. Michele W. Atkins is a professor of education at Union University. Gary R. Johnson is professor of physical education, wellness and sport at Union University. Linn M. Stranak is a university professor and department chair of physical education, wellness, and sport at Union University.

Please send correspondence regarding this article to mbrunet@uu.edu

Introduction

The popularity of intercollegiate athletics continues to rise, and the relationship between intercollegiate athletics and related factors that impact higher education is being examined (e.g., Baade & Sundberg, 1996; Mixon & Trevino, 2005; Rhoads & Gerking, 2000; Tucker, 2004). Intercollegiate athletics are a high priority at many institutions; therefore, a great value is placed on athletic success. Others believe the value placed on intercollegiate athletics is too strong and can cause the focus to stray from academics (Duderstadt, 2000).

On average, fewer than one dozen colleges and universities show an annual profit in their athletic programs (Fried, 2007). As a matter of fact, between 1995 and 2001, National Collegiate Athletic Association (NCAA) Division I athletic programs increased their spending by an average of 25%. During this same time period, the overall budget for NCAA Division I schools only increased by 10% (Frank, 2004). Furthermore, according to a 2004–2006 report conducted by the NCAA, only 19 out of 119 Football Bowl Subdivision schools experienced positive net revenues; the median net loss for these 119 schools was \$7.2 million (Fulks, 2008). Unbeknownst to most people, student fees cover an average of 20% of collegiate athletic budgets; however, the majority of students will never set foot on an athletic field (Frank, 2004). Therefore, concerns have been raised regarding the priority placed on intercollegiate athletics.

College Choice Theory and Athletic Programs

Maslow's (1943) Hierarchy of Needs and Hossler and Gallagher's (1987) model of college choice provide a theoretical foundation regarding college choice and describe how intercollegiate athletic programs can influence the college choice process.

According to Maslow's (1943) Hierarchy of Needs, humans have five basic needs: physiological, safety, belonging, esteem, and self-actualization. All components in Maslow's hierarchy play a role in college choice; however, the needs of belonging and esteem appear to be particularly important. Many institutions go to great lengths to provide their students with a sense of belonging, which can aid in the recruitment and retention of students. One way colleges and universities can achieve a sense of belonging is through intercollegiate athletic programs. Athletic programs can create a sense of belonging, ownership, and pride that attracts students to their campuses. Maslow explained fulfilling the need of self-esteem can lead to feelings of self-worth, self-confidence, strength, adequacy, and usefulness. Intercollegiate athletic departments can greatly aid in fulfilling these needs by cultivating athletic programs of which students can be proud, thereby providing students with a sense of prestige, recognition, attention, and importance.

In addition to Maslow's (1943) Hierarchy of Needs, the second theory incorporated into this study was Hossler and Gallagher's (1987) model of college choice. Compared to other college choice models, Hossler and Gallagher's model

focuses more on the student rather than the institution and isolates and contains the college choice process into three stages: predisposition, or deciding to attend college; search, or gathering information about different schools; and choice, or determining which college to attend. According to Hossler, Schmit, and Vesper (1999), this model is primarily sociological and background characteristics are correlated with the predisposition stage and are cumulative in terms of their effect on the college choice process. These background characteristics are present during all three stages but may vary in their level of influence.

The predisposition stage involves the decision to attend college as opposed to an alternative route, such as the military or workforce. According to Hossler and Gallagher's (1987) model, the emphasis is not on the intention to attend college but rather the decision to attend college. When deciding whether to attend college, some high school students may be influenced by the media exposure generated by intercollegiate athletics. Therefore, intercollegiate athletics might have an impact on the predisposition stage of the college choice process.

Once the decision has been made to attend college, the student will begin to make a list of colleges and college attributes. During this stage, students seek out information about colleges and universities. According to Hossler and Gallagher (1987), this stage involves increased interaction between students and institutions and is possibly the most important stage in the college choice process. During this stage, students will change which colleges are on their list and learn new questions to ask while conducting their search. Colleges and universities can use positive attributes generated by intercollegiate athletics to attract potential students. Attributes such as vibrant social opportunities, strong school spirit, and a sense of belonging may attract students to a particular institution, due in part to intercollegiate athletics.

The choice stage involves applying to a list of schools compiled throughout the predisposition stage. Students apply to schools in a preference order that is consistent with, but not necessarily identical to, their selection order. In this stage, students compare the academic and social characteristics of each school to find the "best value with the greatest benefits" (Hossler et al., 1999, p. 150). Intercollegiate athletic programs may have a positive impact on the choice stage due to the positive social opportunities they provide. The benefits provided by intercollegiate athletics may be the deciding factor in a student's decision to enroll at a particular institution.

Maslow's (1943) Hierarchy of Needs and Hossler and Gallagher's (1987) model of college choice provide valuable insight when studying the factors that influence college choice. Any new findings regarding college choice can be valuable information to institutions of higher education, including the impact of intercollegiate athletics. Therefore, these two models were used as a theoretical foundation to study the impact of intercollegiate athletics on undergraduate enrollment.

Institutional Benefits of Intercollegiate Athletics

Numerous studies have been conducted examining the specific benefits of intercollegiate athletics upon higher education. A study by Tucker (2004) revealed a positive and significant relationship between football success and alumni giving. Similarly, a study conducted by Rhoads and Gerking (2000) showed athletic success could have a positive impact on alumni giving. Likewise, a study by Baade and Sundberg (1996) indicated football bowl appearances as well as postseason basketball tournament appearances were a significant determinant of alumni giving. Additionally, a study conducted by Dugan, Mullin, and Siegfried (2000) revealed intercollegiate athletes, compared to non-intercollegiate athletes, responded more favorably to requests for donations after graduation. Furthermore, a study conducted by Mixon and Trevino (2005) indicated a positive and significant relationship between intercollegiate athletics and freshman retention and graduation rates. Likewise, a study by Tucker (2004) revealed a positive and significant relationship between football success and graduation rates. Similarly, a study by Schurr, Wittig, Ruble, and Henriksen (1993) discovered a positive and significant relationship between intercollegiate athletic involvement and graduation rates. Finally, Coats and Cox (2004) conducted a study of Nicholls State University's athletic program and concluded the program provided a significant economic boost to the local economy, which could lead to increased community support.

In 1984, Doug Flutie, quarterback at Boston College, won the Heisman Trophy, which is awarded to the best college football player in the country. Whether directly or indirectly related, applications to Boston College surged 16% in 1984 (from 12,414 to 14,398) and another 12% (to 16,163) in 1985 (McDonald, 2003). This phenomenon later became known as the Flutie Factor (McEvoy, 2006). Similarly, in 1996, the year after Northwestern University's football team recorded 10 wins, compared to only three wins the previous year, and earned a trip to the prestigious Rose Bowl, their admissions applications increased by 21% (Northwestern University, n.d.). Likewise, since 1950, eight out of the nine largest enrollment increases for Auburn University have come the year after their football team finished in the top 10 of the football rankings or played in a nationally televised bowl game (Auburn University, n.d.).

Numerous studies have been conducted to determine if there is a positive correlation between winning seasons and major boosts in enrollment. In 1987, a landmark study conducted by McCormick and Tinsley investigated the Flutie Factor to determine whether intercollegiate athletics had a positive impact on college enrollment. McCormick and Tinsley (1987) studied universities associated with major athletic conferences (e.g., Atlantic Coast Conference, Big Ten Conference, Big Eight Conference, Pacific Atlantic Conference, Southwestern Conference, and Southeastern Conference) and concluded winning trends in college football (over a 15-year period) improved winning schools' average SAT scores among incoming freshmen. More recently, Tucker (2005) conducted a study regarding the effects

of intercollegiate athletics on freshmen SAT scores and found a 10% increase in winning percentage increased average SAT scores by roughly 14 points and one additional appearance in the final Associated Press top 20 rankings or one extra bowl game appearance during the same time period increased average SAT scores by more than 12 points.

Furthermore, a study conducted by Toma and Cross (1998) revealed from 1979 to 1992, 14 out of 16 universities recorded increased applications the year after winning a national championship in NCAA Division I college football. Likewise, McEvoy (2005) found a 1-year improvement in football winning percentage greater than .25 resulted in a 6.1% increase in admissions applications. Mixon and Hsing (1994) found athletic achievement and level of distinction had a positive impact on out-of-state enrollment.

The relationship between intercollegiate athletics and college enrollment is of particular interest to school administrators because of the direct impact that enrollment statistics have on universities. Increased enrollment may stimulate revenue. In addition, an increased applicant pool may lead to greater selectivity, possibly resulting in improved average SAT and ACT scores among incoming freshmen, which can serve the university academically. With college enrollment being such a prevalent issue, exploration of the relationship between enrollment and intercollegiate athletics is warranted.

Based on previous research, it is apparent many NCAA Division I colleges and universities benefit from the existence of and success in intercollegiate athletics (e.g., higher incoming SAT scores, improved academic rankings, and increased enrollment). However, few studies have researched the impact of intercollegiate athletics at small, faith-based institutions, specifically those affiliated with the National Association of Intercollegiate Athletics (NAIA). There are many differences between the NCAA and the NAIA such as number of members, eligibility requirements, level of athletic ability, and size of athletic budgets.

The purpose of this study was to investigate the impact of intercollegiate athletics at a small, faith-based institution affiliated with the NAIA. More specifically, this study examined the degree to which the existence of or success in intercollegiate athletics at the institution impacted students' decision to enroll at this institution.

Admissions Applications

Several researchers have investigated the effects of intercollegiate athletics on the number of admissions applications received. McEvoy (2005) examined the relationship between dramatic changes in team success and the change in applicant numbers the following year. McEvoy (2005) sampled 62 schools between 1994 and 1998. All 62 schools competed in NCAA Division I athletics and belonged to major athletic conferences (i.e., Atlantic Coast Conference, Big East Conference, Big Ten Conference, Big 12 Conference, Big Eight Conference, Pacific 10 Conference,

and Southeastern Conference). Athletic performance was deemed the independent variable based on winning percentage from year to year between 1994 and 1998 and was limited to games played within each university's respective conference. Athletic performance was calculated for men's basketball, women's basketball, women's volleyball, and football. Winning percentage was categorized into three categories: an increase of .25 or greater, a decrease of .25 or greater, and no change at all. The three categories of winning percentage, multiplied by the four sports being studied, provided a total of 12 strata. Universities and teams that did not fit one of these criteria were withdrawn from consideration.

Four separate ANOVA tests were run, one for each of the four sports. According to McEvoy (2005), only football showed a significant relationship when compared to the number of applications received. Schools whose football teams had a .25 or greater increase in winning percentage showed an average 6.1% increase in undergraduate applications. Those with no change in winning percentage showed an average increase of 2.5% in undergraduate applications, and those with .25 or greater decrease in winning percentage showed an average 0.4% decrease in undergraduate applications. Men's basketball, women's basketball, and women's volleyball did not show a significant relationship between winning percentage and the number of applications received. McEvoy (2005) suggested increased media exposure for NCAA Division I college football might explain why only football, and not basketball or volleyball, was responsible for increased undergraduate applications. He also suggested as media exposure continues to grow for women's sports, the effect of these sports on applications received could increase as well.

A second study conducted by McEvoy (2006) focused on the impact of elite individual athletic performances on the number of undergraduate applications. McEvoy (2006) used a pretest–posttest control group design to compare the number of applications received by NCAA Division I universities the year before and the year after one of their players was named a top five finalist for the Heisman Trophy.

A 2 x 2 mixed-factor ANOVA design was used. Differences in undergraduate admissions applicants between institutions with top five Heisman Trophy finalists and the control group were examined. The year in which the athlete was a top five Heisman Trophy finalist and the subsequent year were also examined. Universities in the experimental group (those with top five Heisman Trophy finalists) experienced an average increase of 6.59% in applications received. The control group received an average increase of 3.33% in applications received. Therefore, schools in the experimental group received almost twice the increase in applications compared to those in the control group. However, not all institutions experienced an increase in applications the year after having a top five Heisman Trophy finalist.

McEvoy (2006) concluded having a top five Heisman Trophy finalist could positively impact university admissions. A more specific conclusion was schools with top five Heisman Trophy finalists were more likely to experience an increase

in undergraduate applications compared to schools with similar win-loss records but without a top five Heisman finalist.

The majority of current research pertaining to this topic focuses on NCAA Division I institutions or community colleges. Therefore, it is difficult for NAIA-affiliated schools to draw conclusions from these findings. Although athletic budgets at NAIA schools are typically smaller compared to NCAA Division I budgets, the priority placed on athletics is still apparent. NAIA schools could greatly benefit from research developed to investigate the impact of intercollegiate athletics on college enrollment. As previously mentioned, many NAIA schools are smaller in size compared to NCAA Division I schools, and their dependence on yearly enrollment could be even stronger. Therefore, any positive or negative effects that intercollegiate athletics have on NAIA enrollment could be critical information.

Method

The institution was a small, faith-based institution affiliated with the Southern Baptist Convention and the NAIA. The institution had an undergraduate enrollment of 2,857 students, and the population used to collect data for analysis consisted of first semester, full-time, freshmen students over age 17. At the time, 1,184 were considered residential students, 59% were female, 41% were male, and 25% were minorities. The undergraduate student body was made up of 78% white/non-Hispanic, 10% black/non-Hispanic, 2% nonresident aliens, 1% Hispanic, less than 1% American Indian/Alaskan, and 8% refused to indicate. The student body represented 42 states and 37 countries. The average ACT score for first-time freshmen was 25, and the average SAT score for first-time freshmen was 1139. The freshmen class included 65 intercollegiate athletes, 46 of whom received athletic scholarships. Thirty-seven intercollegiate athletes (56.9%) and 18 intercollegiate scholarship athletes (39.1%) participated in the study. The student-to-faculty ratio was 12:1, and 84% of faculty held the highest degree possible in their respective field.

The dependent variable was the decision of freshmen students to enroll at the institution. Independent variables included the importance placed on the existence of intercollegiate athletics and the existence of successful intercollegiate athletics. Additional variables were measured such as participation in intercollegiate athletics (athlete or nonathlete) and athletic scholarship status (those who received athletic scholarships).

The 2009 Cooperative Institutional Research Program (CIRP) Freshman Survey, conducted by the Higher Education Research Institute (HERI), was used to measure the effect of intercollegiate athletics on students' decision to enroll at the institution. The CIRP allows for an additional 20 questions at the end of its survey. These questions can be designed to investigate specific areas of interest at individual institutions. For this study, five questions were added to the existing CIRP

survey to further explore the relationship between intercollegiate athletics and the decision to enroll at the institution.

Students were asked to reflect on the mere existence of intercollegiate athletics and then the existence of successful intercollegiate athletics when deciding to enroll at the university and to respond in one of three ways: very important, somewhat important, or not important. Additionally, students were asked whether they would have chosen a different institution if there was an absence of intercollegiate athletics at the university. This was a hypothetical question, which introduces some level of error. Data were disaggregated by athletic status to determine if this variable had an effect on students' decision to enroll. A contingency table chi-square analysis was used to determine if there was a significant relationship between athletic status and the decision to enroll at the institution based on the existence of intercollegiate athletics at the university. For the purpose of this study, successful intercollegiate athletics was defined as teams that are consistently ranked in the top 25 of their respective athletic association (e.g., NCAA, NAIA) or consistently win their respective conference championship. The university in which the sample was derived has maintained a successful intercollegiate athletic program within the NAIA across several sports for many years. Results were then disaggregated by athletic status to determine whether this variable had an effect on their decision to enroll. Finally, a contingency table chi-square analysis was used to determine whether there was a significant relationship between athletic status and the decision to enroll at the institution based on the existence of successful intercollegiate athletics at the university. An alpha level of .05 was used for all statistical tests.

Results

A total of 454 freshmen were invited to participate, and 239 freshmen completed the survey, yielding a 53% response rate. Findings showed 20.1% of all freshmen student participants reported the existence of intercollegiate athletics was very important, 29.7% reported it was somewhat important, and 50.2% reported it was not important when making the decision to enroll at the university. Results were then disaggregated by athletic status to determine whether this variable had an effect on their decision to enroll. Table 1 provides the responses to this question disaggregated by athletic status.

The Pearson chi-square analysis found a significant relationship between intercollegiate athletic status (athlete or nonathlete) and the importance placed on the existence of intercollegiate athletics, $\chi^2(2, N = 239) = 51.73, p < .001$, as well as a significant relationship between athletic scholarship status (those who received athletic scholarships) and the importance placed on the existence of intercollegiate athletics, $\chi^2(2, N = 239) = 41.11, p < .001$. These findings suggest intercollegiate athletes are statistically significantly more likely to place greater importance on the existence of intercollegiate athletics in their decision to enroll at the university than nonathletes.

Table 1*Importance Placed on the Existence of Intercollegiate Athletics*

Variable	Response		
	Very (%)	Somewhat (%)	Not (%)
Athletic Status			
Not an Athlete	12.9	28.7	58.4
Intercollegiate Athlete	59.5	35.1	5.4
Scholarship Athlete	77.7	16.7	5.6

Note. $N = 239$.

Additionally, students were asked whether they would have chosen a different institution if there was an absence of intercollegiate athletics at the university. Results showed only 13.4% of freshmen student participants reported they would have chosen a different institution and 86.6% reported they would have chosen the same institution. Results were then disaggregated by athletic status to determine whether this variable had an effect on their decision to choose a different institution. Table 2 provides the responses to this question.

Table 2*Choice of Different Institution Based on the Absence of Intercollegiate Athletics*

Variable	Response	
	Yes (%)	No (%)
Athletic Status		
Not an Athlete	7.9	92.1
Intercollegiate Athlete	43.2	56.8
Scholarship Athlete	61.1	38.9

Note. $N = 239$.

The Pearson chi-square analysis showed a significant relationship between intercollegiate athletic status (athlete or nonathlete) and the decision to attend a different institution based on the absence of intercollegiate athletics, $\chi^2 (1, N = 239) = 33.65, p < .001$, as well as a significant relationship between athletic scholarship status (those who received athletic scholarships) and the decision to attend a different institution based on the absence of intercollegiate athletics, $\chi^2 (1, N = 239) = 38.23, p < .001$. These findings suggest intercollegiate athletes were more likely

to attend a different institution based on the absence of intercollegiate athletics than nonathletes. Likewise, scholarship athletes are more likely to attend a different institution based on the absence of intercollegiate athletics than those who did not receive athletic scholarships.

Additional findings showed 13.4% of all freshmen student participants reported the existence of successful intercollegiate athletics was very important, 25.5% reported it was somewhat important, and 61.1% reported it was not important when making the decision to enroll at the university. Table 3 provides the responses of students disaggregated by athletic status.

Table 3

Importance Placed on the Existence of Successful Intercollegiate Athletics

Variable	Response		
	Very (%)	Somewhat (%)	Not (%)
Athletic Status			
Not an Athlete	6.9	24.3	68.8
Intercollegiate Athlete	48.7	32.4	18.9
Scholarship Athlete	77.8	11.1	11.1

Note. $N = 239$.

The Pearson chi-square analysis showed a significant relationship between intercollegiate athletic status (athlete or nonathlete) and the importance placed on the existence of successful intercollegiate athletics in participants' decision to enroll at the institution, $\chi^2 (2, N = 239) = 54.21, p < .001$, as well as a significant relationship between athletic scholarship status (those who received athletic scholarships) and the importance placed on the existence of successful intercollegiate athletics, $\chi^2 (2, N = 239) = 69.82, p < .001$. These findings suggest intercollegiate athletes are more likely to place greater importance on the existence of successful intercollegiate athletics in their decision to enroll at the university than nonathletes.

Conclusions

Findings from aggregated data analysis showed nearly half of all freshmen student participants (49.8%) were affected by the existence of intercollegiate athletics and slightly more than half (50.2%) were not affected by the existence of intercollegiate athletics in their decision to enroll at the institution. However, data also suggested intercollegiate athletes were more likely to place greater importance on the existence of intercollegiate athletics in their decision to enroll at the university than nonathletes ($p < .001$).

Due to their interest and participation in athletics, intercollegiate athletes were more affected by the existence of intercollegiate athletics. However, 86.6%

of all freshmen student participants, 56.8% of intercollegiate athletes, and 38.9% of scholarship athletes would have chosen the same institution even if there were no intercollegiate athletics available. These findings clearly show the majority of students, including intercollegiate athletes and many scholarship athletes, chose to attend this institution based on factors other than the existence of intercollegiate athletics. These findings are particularly astonishing because, based on their responses, these intercollegiate athletes would be willing to forego their intercollegiate athletic careers, and in some cases their athletic scholarships, to attend this institution. Based on the unique qualities of this institution, variables such as academic reputation, student life programs, religious affiliation, size, financial assistance, and graduate job placement could have influenced these decisions.

Due to the minimal impact of intercollegiate athletics on undergraduate enrollment at this institution, similar institutions should reconsider the importance placed on intercollegiate athletics, especially as a separate functioning entity, and ensure athletic departments are deeply immersed within the university culture and the mission of the athletic department is reflective of the institutional mission statement. Doing so could prevent the athletic department from becoming an isolated entity and possibly increase the importance placed on intercollegiate athletics by nonathletes. Furthermore, institutions should reconsider the amount of emphasis placed on intercollegiate athletics when recruiting potential students and should promote athletics as an integral component of quality student life at the institution.

Moreover, findings from aggregated data analysis showed less than half of all freshmen student participants (38.9%) were affected by the existence of successful intercollegiate athletics and the majority of freshmen student participants (61.1%) were not affected by the existence of successful intercollegiate athletics in their decision to enroll at the institution. However, findings also suggested intercollegiate athletes, as well as scholarship athletes, were more likely to be influenced by the existence of successful intercollegiate athletics in their decision to enroll at the institution than nonathletes and those not receiving athletic scholarships ($p < .001$). These findings are not surprising because most students who participate in intercollegiate athletics tend to have a greater appreciation for successful athletics and a better understanding of the benefits derived from success in athletics. Therefore, it stands to reason they would be more influenced by the existence of successful intercollegiate athletics than nonathletes.

Furthermore, there appears to be little evidence of the Flutie Factor at this particular institution. These findings could be due to the inability of successful NAIA athletics to create the same advertising effect as successful NCAA Division I athletics, as found by McEvoy (2006). Therefore, due to a lack of national media exposure, recognition, and prestige created by NAIA athletics, it is possible successful NAIA athletics do not significantly affect the belonging, esteem, and self-actualization needs of college students, as described in Maslow's (1943) Hi-

erarchy of Needs or the predisposition, search, and choice stages of Hossler and Gallagher's (1987) model of college choice.

Although every institution should strive for excellence in athletic programming, this and similar institutions should reconsider the amount of importance placed on successful intercollegiate athletics and ensure athletic departments are held accountable and rewarded for more than just winning seasons. Furthermore, these institutions should consider the amount of emphasis placed on successful intercollegiate athletics when recruiting potential students.

Study Limitations and Future Research

The major limitation for this study was the sample consisted of freshmen students enrolled at a small, faith-based institution affiliated with the Southern Baptist Convention and the NAIA. As a result, these findings cannot be generalized to all institutions. Although many institutions face similar challenges, each institution has a unique subculture that creates distinctive variables. Second, students were surveyed after they arrived on campus, and some students spent up to 1 month on campus before completing the survey. Therefore, students' opinions may have been skewed by their initial campus experiences. Third, the researcher did not have access to the amount of athletic scholarship received by each intercollegiate athlete; therefore, due to the large range of athletic scholarships awarded, it was difficult to draw conclusions based on scholarship athlete responses. For example, an intercollegiate athlete receiving a \$500 annual scholarship may have responded differently than an intercollegiate athlete receiving a \$20,000 annual scholarship. Last, because the survey data were dependent upon self-reported information given by freshmen students, accurate results were dependent upon the honesty and objectivity of each student.

Research examining freshmen student responses from similar institutions (e.g., NAIA-affiliated) would help determine the effects of intercollegiate athletics nationwide. Furthermore, research examining the responses from upperclassmen, faculty, and staff members would allow institutions to discover the impact of athletics campus-wide and discover how intercollegiate athletics contribute to the quality of life at the institution. Last, research examining the effects of intercollegiate athletics on overall quality of life and booster, donor, and alumni giving would allow institutions to discover the importance of intercollegiate athletics across a broader spectrum.

Overall Conclusions and Implications

Findings from this study indicate the existence of intercollegiate athletics has little impact on the decision of students to enroll at the institution as freshmen. Based on these results, it is recommended this institution and similar institutions reconsider the benefits derived from the existence of intercollegiate athletics as an entity in itself. Institutions should consider intercollegiate athletics as part of the

overall culture of the institution, an emersion instead of a separate function. Additionally, these findings could benefit institutions when deciding on the importance placed on intercollegiate athletics, the funding designated to intercollegiate athletics, or the possibility of leaving the NAIA and joining the NCAA. However, before making decisions based on these findings, institutions should conduct further research to investigate the impact of intercollegiate athletics on student retention, faculty and staff recruitment, and alumni giving.

Second, findings from this study indicate the existence of successful intercollegiate athletics has little impact on the decision of students to enroll at the institution as freshmen. Based on these results, it is recommended this institution and similar institutions reconsider the benefits derived from the existence of successful intercollegiate athletics. Moreover, these findings could benefit institutions when setting admission standards, academic probation guidelines, and judicial principles for intercollegiate athletes as well as establishing expectations, salaries, and bonuses for athletic directors and coaches. Finally, these findings could benefit athletic departments in their efforts to increase school spirit and marketing toward nonathletes. However, before making decisions based on these findings, institutions should conduct further research to investigate the impact of successful intercollegiate athletics on student retention, faculty and staff recruitment, and alumni giving.

References

- Auburn University. (n.d.). *Historical enrollment fall terms, 1859–2009(a)*. Retrieved from <https://oira.auburn.edu/factbook/enrollment/enrtrends/hefq.aspx>
- Baade, R., & Sundberg, J. (1996). Fourth down and gold to go? Assessing the link between athletics and alumni giving. *Social Science Quarterly*, 77(4), 789–803.
- Coats, R., & Cox, C. (2004). *Economic impact of NSU athletics*. Retrieved from <http://www.slec.org/uploads/EconomicImpact.pdf>
- Duderstadt, J. (2000). *Intercollegiate athletics and the American university: A university president's perspective*. Ann Arbor: University of Michigan Press.
- Dugan, K., Mullin, C., & Siegfried, J. (2000). *Undergraduate financial aid and subsequent giving behavior: Williams project on the economics of higher education* (Discussion Paper No. 57). Retrieved from <http://www.nyu.edu/classes/jepesen/williamsstudy1100.pdf>
- Frank, R. (2004). *Challenging the myth: A review of the links among college athletic success, student quality, and donations*. Retrieved from <http://www.knight-foundation.org/dotAsset/131763.pdf>
- Fried, B. (2007). Punting our future college athletics and admissions. *Change: The Magazine of Higher Learning*, 39(3), 8–15.
- Fulks, D. (2008, March). *2004–2006 revenues and expenses of division I intercollegiate athletics programs report*. Retrieved from http://www.ncaapublications.com/Uploads/PDF/Revenue_Expenses_200860cc123e-54d9-45e7-acbd-a1f-195b345e6.pdf

- Hossler, D., & Gallagher, K. (1987). Studying student college choice: A three phase model and the implications for policymakers. *College and University*, 62(3), 207–221.
- Hossler, D., Schmit, J., & Vesper, N. (1999). *Going to college: How social, economic, and educational factors influence the decisions students make*. Baltimore, MD: Johns Hopkins University Press.
- Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. doi:10.1037/h0054346
- McCormick, R., & Tinsley, M. (1987). Athletics versus academics? Evidence from SAT scores. *Journal of Political Economy*, 95(5), 1103–1116. doi:10.1086/261505
- McDonald, B. (2003). Phenomenology: The “Flutie Factor” is now received wisdom, but is it true? *Boston College Magazine*. Retrieved from http://bcm.bc.edu/issues/spring_2003/ll_phenomenology.html
- McEvoy, C. (2005). The relationship between dramatic changes in team performance and undergraduate admissions applications. *The Smart Journal*, 2(1), 17–24.
- McEvoy, C. (2006). The impact of elite individual athletic performance for admission in NCAA division I-A football. *The Sport Journal*, 9(1). Retrieved from <http://www.thesportjournal.org/article/impact-elite-individual-athletic-performance-university-applicants-admission-ncaa-division-i>
- Mixon, F., & Hsing, Y. (1994). The determinants of out-of-state enrollments in higher education. *Economics of Education Review*, 13(4), 329–335. doi:10.1080/09645299400000005
- Mixon, F., & Trevino, L. (2005). From kickoff to commencement: The positive role of intercollegiate athletics in higher education. *Economics of Education Review*, 24(1), 97–102.
- Northwestern University. (n.d.). *U.S. News and World Report application 1995–1996*. Retrieved March 24, 2009, from Northwestern University's Office of the Associate Provost of University Enrollment.
- Rhoads, T., & Gerking, S. (2000). Educational contributions, academic quality, and athletic success. *Contemporary Economic Policy*, 18(2), 248–258. doi:10.1093/cep/18.2.248
- Schurr, K., Wittig, A., Ruble, V., & Henriksen, L. (1993). College graduation rates of student athletes and students attending college male basketball games: A case study. *Journal of Sports Behavior*, 16(1), 33–42.
- Toma, J., & Cross, M. (1998). Intercollegiate athletics and student college choice: Exploring the impact of championship seasons on undergraduate applications. *Research in Higher Education*, 39(6), 633–661. doi:10.1023/A:1018757807834
- Tucker, I. (2004). A reexamination of the effect of big-time football and basketball success on graduation rates and alumni giving rates. *Economics of Education Review*, 23(6), 655–661. doi:10.1016/j.econedurev.2004.03.001
- Tucker, I. (2005). Big-time pigskin success. Is there an advertising effect? *Journal of Sports Economics*, 6(2), 222–229. doi:10.1177/1527002504263398

Management Whitepaper

Impact of Intercollegiate Athletics on Undergraduate Enrollment at a Small, Faith-Based Institution

Matthew J. Brunet, Michele Atkins, Gary R. Johnson, and Linn M. Stranak

I. Research Problem

The purpose of this study was to investigate the effect of intercollegiate athletics at a small, faith-based institution affiliated with the National Association of Intercollegiate Athletics (NAIA). More specifically, does success in or the existence of intercollegiate athletics have an effect on students' decisions to enroll at this institution? Findings indicated the majority of freshmen student participants, including many intercollegiate athletes, were not considerably influenced by the existence of intercollegiate athletics or the existence of successful intercollegiate athletics when deciding to attend the institution. These findings indicate the need for similar institutions to reevaluate the importance placed on and benefits derived from intercollegiate athletics. This article would likely be useful to athletic departments and other major stakeholders of intercollegiate athletics that decide on the importance placed on intercollegiate athletics, the funding designated to intercollegiate athletics, the promotion of school spirit, or the decision to move from the NAIA to the National Collegiate Athletic Association (NCAA). Furthermore, this article could be useful to university administrators at institutions similar to the university under study who set admission standards, academic probation guidelines, and judicial principles for intercollegiate athletes, as well as who establish expectations, salaries, and bonuses for athletic directors and coaches.

II. Issue

The popularity of intercollegiate athletics continues to rise, and the relationship between intercollegiate athletics and related factors that impact higher education is being heavily researched and scrutinized. One of these related factors is the impact of intercollegiate athletics on college choice. Numerous studies have revealed positive and significant relationships between NCAA Division I athletic success and alumni giving, freshman retention rates, graduation rates, improved academic rankings, freshman SAT scores, and admission applications received.

The relationship between intercollegiate athletics and college enrollment is of particular interest to school administrators because of the direct impact enrollment statistics have on universities. Increased enrollment can stimulate revenue. In addition, an increased applicant pool may lead to greater selectivity, possibly resulting in improved average SAT and ACT scores among incoming freshmen,

which can serve the university academically. With college enrollment being such a prevalent issue, exploration of the relationship between enrollment and intercollegiate athletics is warranted.

Based on previous research, it is apparent many NCAA Division I colleges and universities benefit from the existence of and success in intercollegiate athletics (e.g., higher incoming SAT scores, improved academic rankings, and increased enrollment). Few studies have researched the impact of intercollegiate athletics at small, faith-based institutions, specifically affiliated with the NAIA. There are many differences between the NCAA and the NAIA such as number of members, eligibility requirements, level of athletic ability, and size of athletic budgets.

The majority of current research pertaining to this topic focuses on NCAA Division I institutions or community colleges. Therefore, it is difficult for NAIA-affiliated schools to draw conclusions from these findings. Although athletic budgets at NAIA schools are typically smaller compared to NCAA Division I budgets, the priority placed on athletics is still apparent. NAIA schools could greatly benefit from research developed to investigate the impact of intercollegiate athletics on college enrollment. As previously mentioned, many NAIA schools are smaller in size compared to NCAA Division I schools, and their dependence on yearly enrollment could be even stronger. Therefore, any positive or negative effects intercollegiate athletics have on NAIA enrollment could be critical information.

III. Summary

Roughly 20% of all freshmen student participants reported the existence of intercollegiate athletics was very important, 29% reported it was somewhat important, and 50% reported it was not important when making the decision to enroll at this university. Findings also suggest intercollegiate athletes are more likely to place greater importance on the existence of intercollegiate athletics in their decision to enroll at the university than nonathletes.

Additionally, students were asked whether they would have chosen a different institution if there was an absence of intercollegiate athletics at the university. Results showed roughly 87% of students surveyed reported they would have chosen the same institution, even without intercollegiate athletics, and surprisingly, nearly 60% of intercollegiate athletes and 40% of scholarship athletes responded the same way.

Additional findings showed roughly 13% of all freshmen student participants reported the existence of successful intercollegiate athletics was very important, 25% reported it was somewhat important, and 61% reported it was not important when making the decision to enroll at the university. In comparison, almost 49% of intercollegiate athletes reported successful intercollegiate athletics was very important, 32% reported it was somewhat important, and nearly 19% reported it was not important when deciding to enroll at the university. When scholarship athletes were asked the same question, almost 78% reported successful intercollegiate athletics was very important, 11% reported it was somewhat important, and another 11% reported it was not important when making their decision to enroll.

IV. Analysis

These findings clearly show the majority of students, including many intercollegiate and scholarship athletes, chose to attend this institution based on factors other than the existence of intercollegiate athletics. These findings are particularly astonishing because, based on their responses, many intercollegiate athletes would be willing to forego their intercollegiate athletic careers, and in some cases their athletic scholarships, to attend this institution. Based on the unique qualities of this institution, variables such as academic reputation, student life programs, religious affiliation, size, financial assistance, and graduate job placement could have influenced these decisions.

Due to the minimal impact of intercollegiate athletics on undergraduate enrollment at this institution, similar institutions should reconsider the importance placed on intercollegiate athletics and ensure athletic departments are deeply immersed within the university culture and the mission of the athletic department is reflective of the institutional mission statement. Doing so could prevent the athletic department from becoming an isolated entity and possibly reduce the lack of importance nonathletes place on intercollegiate athletics. Furthermore, institutions should reconsider the amount of emphasis placed on intercollegiate athletics when recruiting potential students.

These findings also reveal the apparent inability of successful NAIA athletics to create the same advertising effect as successful NCAA Division I athletics. Although every institution should strive for excellence in athletic programming, this institution and similar institutions should reconsider the amount of importance placed on successful intercollegiate athletics and ensure athletic departments are held accountable and rewarded for more than just winning seasons. Furthermore, these institutions should consider the amount of emphasis placed on successful intercollegiate athletics when recruiting potential students.

V. Discussions/ Implications

This study found the existence of intercollegiate athletics has little impact on the decision of students to enroll at the institution as freshmen. Based on these results, it is recommended that this institution and similar institutions reconsider the benefits derived from the existence of intercollegiate athletics as an entity in itself. Institutions should consider intercollegiate athletics as part of the overall culture of the institution, an emersion instead of a separate function. Additionally, these findings could benefit institutions when deciding on the importance placed on intercollegiate athletics, the funding designated to intercollegiate athletics, or the decision to move from the NCAA to the NAIA. However, before making decisions based on these findings, institutions should conduct further research to investigate the impact of intercollegiate athletics on student retention, faculty and staff recruitment, and alumni giving.