

THE IMPACT OF A SIGNIFICANT COLLEGE BASEBALL STADIUM PROJECT ON
ATTENDANCE, RECRUITING, AND ON-FIELD SUCCESS

James P. Richards III

A thesis submitted to the faculty at the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Masters of Arts in the Department of Exercise and Sport Science (Sport Administration).

Chapel Hill
2016

Approved By:

Nels Popp

Erienne Weight

John Brunner

© 2016
James P. Richards III
ALL RIGHTS RESERVED

ABSTRACT

James P. Richards III; The Impact of a Significant College Baseball Stadium Project on Attendance, Recruiting and On-Field Success
(Under the direction of Nels Popp)

The purpose of the study was to determine how building a new college baseball stadium or conducting a significant renovation effects on-field success, recruiting and attendance when comparing the three years before and after the stadium project. Recruiting data was obtained from Perfect Game, while attendance and winning percentage data was obtained from information released by the NCAA and on athletic department websites to determine if the millions of dollars athletic departments are spending on facility upgrades lead to improvements in these areas. The study focused on the top-11 NCAA Division I baseball conferences and was narrowed to a sample of 41 baseball programs that conducted a significant stadium project between 2007 and 2013. There were no findings showing a significant relationship between a stadium project and winning games. However, new stadiums led to a significant increase in commitments from top-500 recruits and extensive stadium projects led to an average of an additional 493 fans per game in the three years following the venue opening.

TABLE OF CONTENTS

LIST OF TABLES.....	vi
CHAPTER I: INTRODUCTION.....	1
Purpose of Study.....	1
Research Questions.....	1
Definition of Terms.....	2
Assumptions.....	3
Limitations.....	3
Delimitations.....	4
Significance of Study.....	4
CHAPTER II: LITERATURE REVIEW.....	5
The College Athletics “Arms Race”.....	5
Popularity of College Baseball.....	6
The “Honeymoon Effect”.....	7
Recruiting.....	9
Relationship Between Facilities and Winning.....	12
CHAPTER III: METHODS.....	15
Data Collection.....	16
Data Analysis.....	18
CHAPTER IV: RESULTS.....	19
Descriptive Statistics.....	19
Winning.....	20

Recruiting.....	20
Attendance.....	21
New Stadium vs. Renovated Stadium.....	22
CHAPTER V: DISCUSSION.....	27
On-Field Success.....	27
Recruiting.....	28
Attendance.....	29
Conclusion.....	31
Limitations.....	32
Future Research.....	32
REFERENCES.....	33

LIST OF TABLES

Table 1: Perfect Game class rankings methodology.....	3
Table 2: Comparing winning, recruiting and attendance.....	20
Table 3: Comparing new and renovated stadiums.....	23

CHAPTER I: INTRODUCTION

Since 2000, more than 80 NCAA Division I colleges and universities have undergone multi-million dollar renovations or built new stadiums for their college baseball programs (StadiumJourney.com, n.d.). The popularity, revenue, and television exposure for college baseball is at an all-time high and athletic departments are hopeful their investments will result in winning more games, luring better recruits, selling more tickets and generating more revenue (Sato, 2013; Goff, 2014). College athletic administrators often argue investing money in facilities results in better athletic programs, but there has been very little research conducted on this topic, particularly outside of football and men's basketball at the collegiate level. This topic is significant as athletic administrators rationalize spending tens or sometimes hundreds of millions of dollars on facilities to keep up with their competition.

Purpose of Study

The purpose of this study is to determine whether extensive college baseball stadium projects result in teams winning more games, luring better recruits, and attracting more fans.

Research Questions

Based on a review of literature, the following research questions provided guidance for this study. Is there a difference in baseball team winning percentage before and after athletic departments invest in a new or renovated baseball facility?

1. Is there a difference in the talent levels of college baseball recruits before and after athletic departments invest in a new or renovated baseball facility?

2. Is there a difference in fan attendance before and after athletic departments invest in a new or renovated baseball facility?
3. Is there a difference in a college baseball team's (a) winning percentage, (b) recruiting ranking and (c) fan attendance when an athletic department chooses to build a new college baseball stadium in comparison to conducting a significant renovation?

Definition of Terms

1. **Honeymoon Effect** - Period of initial fan excitement and euphoria over a new facility and its amenity offerings, which ends as fans eventually adjust their expectations and adapt to their surroundings. The increase in attendance is typically strongest in the first year and slowly declines over the next decade (Clapp & Hakes, 2005)
2. **On-Field Success** - Team winning percentage.
3. **Recruiting success** - Utilize the Perfect Game college recruiting class rankings, which are based on the PGCrossChecker's national high school player rankings. Perfect Game uses the following points system to create their rankings:

Table 1
Perfect Game Class Rankings Methodology

Recruit's National Ranking	Points Earned
1-50	15
51-100	12
101-150	10
151-200	9
201-250	8
251-300	7
301-350	6
351-400	5
401-450	4
451-500	3

4. **Fan attendance** - Average number of fans that attended each home baseball game during a particular season.
5. **Arms Race** - Construction boom that has engulfed intercollegiate athletics and caused institutions to renovate existing or build new facilities altogether. As of 2005, approximately twenty percent of all spending in college athletics was tied to facility expansion and capital debt (Perko, 2009).

Assumptions

1. The research methods used are valid, reliable, and conducted thoroughly.

Limitations

1. Extensive college baseball rankings are only available dating back to 2004.

2. The NCAA only releases average attendance figures for the top-50 ranked college baseball programs in Division I and these numbers are not always accurate.
3. Some programs in the sample did not divulge the cost of the stadium project.
4. The study was unable to look at the 5, 8, and 10 year time frame after a stadium project was completed.

Delimitations

1. This study only examines 41 Division I college baseball programs, ranked among the top-11 conferences that conducted extensive stadium projects between 2007 and 2013.

Significance of Study

Collegiate athletic departments continue to spend millions of dollars on facility upgrades to keep up with their competition. Coaches and athletic directors continuously point to the impact on recruiting, fan attendance and team success as reasons to invest significant sums of money on athletic venues. However, there is very little research to substantiate the impact of these stadium projects in the short and long term. This study will provide clarity for athletic administrators as they make economic decisions on stadium projects that can impact not just specific athletic programs, but universities and cities as well.

CHAPTER II: LITERATURE REVIEW

The College Athletics “Arms Race”

The term “arms race” originated during the Cold War between the United States and the Soviet Union in the latter half of the twentieth century. Both nations spent exorbitant amounts of money in an attempt to develop the greatest nuclear technology in the world and eventually ended up with far more nuclear weapons than they would ever need or use (“Arms Race”, 2009). In recent years the term “arms race” has been used frequently when describing new or renovated college athletics facilities popping up throughout the country (Weight, Weight, & Schneider, 2013). Many have argued the spending from universities on athletic facilities is not economically viable, and is being done simply to compete with rival programs in an attempt to lure recruits, generate more revenue, and attract more fans (Goff, 2014).

Between 1995 and 2005, \$15.2 billion was spent on intercollegiate athletic facilities and nearly twenty percent of current spending by college athletic departments is allocated to facility expansion and capital debt (Perko, 2009). While some institutions have large, wealthy fan bases that make significant contributions to these huge capital projects, many other colleges and universities issue bonds and make hefty annual debt payments to try to keep up (Perko, 2009). In 2013, only 20 of the 128 athletic departments participating in the Division I Football Bowl Subdivision (FBS) made a profit and the competition to keep pace from a facility standpoint could prove to be devastating for programs not among the financial elite.

Much of the focus on the arms race in college sports has focused on the new and renovated facilities for football and men’s basketball programs, and rightfully so. These two

sports provide the vast majority of the revenue for college athletic programs (NCAA Revenue Breakdown, 2012) and as a result the facilities in which these sports compete have seen many lavish additions in recent decades (Bennett, 2012, Jackson, 2013 and Perko, 2009). The majority of the time the purpose of these additions is not to address structural needs or to meet standards of the Americans with Disabilities Act, but to make the facility more luxurious and improve the fan experience (Blosser, 2007). Luxury boxes, suites, and fine dining have become the standard offered to fans attending games at the highest level of college athletics (AP, 2014).

The NCAA prohibits institutions from directly paying its student-athletes beyond the cost of attending college (AP, 2015), so athletic facility renovations can be viewed as an improvement to the student-athlete experience and a reward for all the hard work and time involved in participating in intercollegiate athletics (Goff, 2014). Perhaps most importantly in the eyes of college coaches, the luxurious additions are a major factor in recruiting the best high school talent (Robinson, 2014). Sport-specific indoor practice facilities, student-athlete academic centers and cafeterias, state-of-the-art strength training and sports medicine facilities and luxurious locker rooms are routine for basketball and football programs in the “Power-5” conferences (Bennett, 2012).

Popularity of College Baseball:

While football and men’s basketball are the two biggest revenue generating sports in college athletics and have seen a great deal of the facility improvements, the arms race has spread down to other sports facilities as well, including college baseball. The popularity of college baseball is at an all-time high. In 2011, ESPN committed \$500 million to broadcast the College World Series through 2024 and also started showing every game of the 64-team NCAA Tournament on national television (Sato, 2013). With new channels such as the SEC Network

and Pac-12 Network, regular season and conference tournament coverage will also improve significantly in the coming years (Thirkill, 2013). In 2011 the College World Series moved from historic Rosenblatt Stadium down the street to TD Ameritrade Park in Omaha, Nebraska. The \$130 million stadium can hold 24,000 fans and may eventually be increased to a capacity of 35,000 (Brown, 2010). While not as popular as college football bowl games or “March Madness”, The College World Series is a major draw for the crowds in Omaha and for the millions of viewers who tune in on the ESPN family of networks.

Among the 88 programs in the historically top-eight ranked college baseball conferences (ACC, AAC, Big 12, Big West, Conference USA, Pac 12, SEC, Sun Belt), 23 have built new stadiums and 34 have conducted a significant, multi-million dollar renovation to their existing stadium since 2000 (StadiumJourney.com). Therefore, over half of the top college baseball programs have made significant facility upgrades in the last fifteen years.

The “Honeymoon Effect”

The “honeymoon effect” is often described as the excitement in the early stages of a marriage, which eventually wears off and grows stale as a couple settles into a routine life together (Hillin, 2014). However, the honeymoon effect in athletics refers to a sports team building a new venue to play their competition. The hypothesis is that the first few years of a new facility result in increased fan attendance and excitement about the team, but eventually the newness surrounding the facility and its amenities wear off and fans lose interest (Zygmunt & Leadley, 2005). Athletic teams often argue a new venue has the potential to lead to increased ticket sales and revenue, luring top talent and winning more games (Clapp & Hakes, 2005; Goff, 2014).

There has been very little, if any, prominent research conducted on college athletic venues and whether the honeymoon effect exists with athletic facilities at the collegiate level. However, numerous studies have focused on the honeymoon effect in professional sports, most notably Major League Baseball (MLB) (Clapp & Hakes, 2005; McEvoy, 2005; Zygmunt & Leadley, 2005). Twenty-five of the thirty MLB franchises have moved into new ballparks since 1987, and despite the differences in collegiate and professional athletics, MLB provides a great opportunity to research the honeymoon effect in professional baseball (McEvoy, 2005). Clapp and Hakes (2005) studied MLB attendance and new stadiums from 1950-2002 and found a significant increase in attendance for the first eight years after a new baseball stadium is built. These totals include a 44.1% increase in fan attendance in the first year, 26.9% in the second year, 20.2% in the third year, and 10% in the eighth year, which is the final season that there is a significant increase in attendance.

Howard and Crompton (2003) looked at new venues in all four of the North American professional sports leagues (MLB, NBA, NFL, and NHL) from 1995-1999. Average attendance among these 31 new venues rose by about 22.2% for the first season after the new stadium was built. While the numbers drop some after the first year, the study found teams are still better off in the long run, with 90% seeing appreciable gains in the fifth year when compared to the previous facility.

Zygmunt and Leadley (2005) focused their research on MLB stadiums built between 1970 and 2000 and the increase in revenue associated with these new ballparks. The average new stadium led to an extra 6,000 tickets being sold per game in the first year, 1,100 in the tenth year, and 500 by the fifteenth year (2005). Additionally, ticket prices tended to rise by about thirty percent in the first year after a new stadium was built. Due to the increase in the number of

tickets sold and price increases, an MLB team can expect to make \$116 million more in revenue with a new stadium over a fifteen year period and \$228 million more if they are moving from a multipurpose stadium to a baseball-only ballpark. Another study (McEvoy et al, 2005) estimated a new MLB stadium leads to about 320,000 more spectators in the first year, resulting in an additional \$11.25 million in revenue.

Howard and Crompton (2003) hypothesized that avoiding the extreme increase in ticket prices in the first year of a new venue and thereafter could lead to a less significant drop in attendance as venues begin to age. They found average ticket prices for new facilities from 1997-2001 were 46.8% higher than the previous year in the old venue. Although MLB has much larger stadiums and generates far more revenue than college baseball, important parallels can be drawn between the two.

The Honeymoon Effect has been covered extensively in professional sports, and there is significant evidence that a new venue leads to higher attendance in the early years of its existence in comparison to the previous venue. However, the Honeymoon Effect has not been researched adequately at the collegiate level and additional findings on the topic could be vital in the decision-making process of college athletic administrators. Before an institution decides to spend millions of dollars on an athletic facility, they should first consider the effect the new venue could have on attendance increases, which can lead directly to additional revenue for an athletic department.

Recruiting

In college athletics, the teams that recruit the best talent often have the most success on the field. Langelett (2003) found recruiting has a significant effect on a football program's on-field results, which in turn makes a difference in future recruiting performance. Langelette's

study showed recruiting the best high school talent leads to more wins for a team and program success makes future recruits more likely to choose a particular institution. It is a cycle that often leads to programs maintaining elite status for an extended period of time, while others can't seem to get over the hump. Dumond (2007) found college football teams that won the most games and finished with a better national ranking over a five-year period were also signing higher caliber recruits to attend their institution in comparison to their competition (2007). These studies suggest recruiting elite talent leads to a program winning more games, which is a major priority for every college coach at the NCAA Division I level. More than half of NCAA Division I schools doubled or tripled their budget for recruiting student-athletes from 1997-2014 (Treadway, Adams, Hanes, Perrew, Magnusen, & Ferris, 2014).

A coach's goal is to win championships and recruiting top talent leads to more wins. Therefore, college athletic departments are looking for any way possible to attract the top talent to attend their university and put on their school's uniform. Many factors lead to a recruit's decision to attend a college including, but not limited to: (a) coaching, (b) playing time, (c) education, (d) location, (e) proximity to home, (f) facilities, (g) exposure, and (h) scholarship money (Massey, 2013; Harmon, 2009; Kraft & Dickerson, 1996; Letawsky, Schneider, Pederson, & Palmer, 2003; Pauline & Pauline, 2004). There have been a number of studies exploring what factors lead a collegiate student-athlete to attend a particular institution and the quality of athletic facility is often among the options a student-athlete can rate. These studies have found mixed results on the importance of athletic facilities in the college selection process and it likely varies based on the individual, sport and a host of other factors, but there certainly are a segment of athletes who strongly consider the quality of an athletic facility when making their college decision. Scott Stricklin, the Athletic Director at Mississippi State said, "It is a message to

prospective student-athletes, at the end of the day, it is an arms race and you have to have a certain level of facility to show what is important to you” (Jackson, 2013).

A study by Harmon focused solely on the factors that lead a recruited high school baseball player to make his college decision (2009). Harmon calculated the percentage of each particular factor to rank in every recruited student-athletes top-five reasons to pick a college and came across the following results: 1) Education-84.9%; 2) Coaching Staff-83.9%; 3) Athletic Facilities-64.6%; 4) Potential Playing Time-57.3%; 5) Amount of Scholarship-50.5%.

Additionally, in student-athletes who attended college in “cold weather climates”, athletic facilities were ranked as the second most important factor, with 89% of participants ranking athletic facilities in their top-five (Harmon, 2009). Indoor athletic facilities are particularly important for college baseball programs in cold weather climates as the baseball season starts as early as February 14th. Schools in these regions are often forced to play on the road for the first month of the season, but they need an indoor facility to practice in order to remain competitive. A similar 2004 study by Pauline and Pauline, found of 320 college baseball players listed the five most influential factors in the college selection process as: (a) winning program, (b) the opportunity to play early in career, (c) baseball-specific facilities, (d) coaching and (e) tradition of the athletic program.

While Harmon and Pauline’s studies are the only ones focused solely on the college decision-making process for recruited baseball student-athletes, a number of other studies have looked at the decision-making process for other collegiate student-athletes (Massey, 2013; Letawsky et al, 2003; Kraft & Dickerson, 1996). A study of student-athletes at a mid-major university found that athletic facility quality, relationship with the coaching staff, early playing time and lack of depth were the four most important factors in a student-athlete picking a college

(Massey, 2013). Massey noted, “recruits understand they will be committing a large portion of their time in athletic facilities as a student-athlete and want to feel they are effectively using their time in those facilities.” Kraft and Dickerson (1996) found the most important event on an official visit for a football prospect is the tour of the program’s football facilities (1996). A 2003 survey of 135 first-year student-athletes at a “Big Time College Sports” institution showed that the most important factors in choosing a school based on its athletic environment were (a) the head coach, (b) sports traditions, (c) athletic facilities and (d) the official on-campus visit (Letawsky et al, 2003).

Coaches and athletic administrators are constantly looking for ways to improve the talent they are able to recruit to their programs. While providing great experiences and a quality college education are important goals for coaches, the top tier of NCAA Division I also requires competitive success on the playing field. Therefore, research focusing on whether better facilities lead a program to improving the quality of their recruits, can prove to be very valuable as administrators weigh the value of pouring millions of dollars into facility upgrades, particularly for sports that are not traditional “revenue-generating” programs.

Relationship Between Facilities and Winning

Very little research is available that places a focus on collegiate athletics and whether top-notch facilities translate to more wins. A few studies (Ozanian, 1999; Quinn, Bursik, Borick & Raethz, 2003) look into this phenomenon in professional sports. However, in this instance, professional and collegiate sports appear to be far different. Professional free agents typically make decisions on which franchise to sign with based on money, winning, team chemistry and coaching (Hernandez, 2011). Because all professional sports facilities are so comparable, free agents rarely, if ever, choose a franchise based on a stadium or arena. However, as we have seen

from the research on college athletics, facilities can be a significant factor in the selection process of elite recruits (Massey, 2013).

In collegiate athletics, attracting top-tier recruits often results in having more on-field success (Langelett, 2003). In professional sports, drafting, developing, and trading for talent, along with signing free agents are the primary ways to create a winning franchise. None of these methods of acquiring talent are directly connected to building a new facility or undergoing a significant renovation. However, as seen by the “Honeymoon Effect”, a new venue often results in a significant increase in attendance in the early years of a facility (Clapp and Hakes, 2005). Increased attendance, along with additional premium seating and more corporate sponsorship opportunities can generate a substantial amount of additional revenue for a franchise due to a new venue. Additional revenue often leads a franchise to increase their budget and spend more money on player and coaching personnel, which has the potential to lead to more competitive success. The Baltimore Orioles built Camden Yards in 1992 and the Texas Rangers built the Ballpark in Arlington in 1994. Both franchises were traditionally “small market” teams and by 1995, the Orioles and Rangers were each in the top-three in net worth in terms of Major League Baseball franchises (Ozanian, 1999). Marie Fioramonti of Prudential Power Associates says, “Because of the revenues the new venues bring in, we have a situation developing in sports where market size isn’t the most important factor in determining a team’s ability to make a profit” (Danielson, 2001, p. 49).

From 1990 to 1999, 49 professional sports venues were built new or were undergoing construction totaling \$22 billion (Quinn et al., 2003). Quinn’s 2003 study measured 15 non-expansion MLB, NBA, NFL and NHL franchises that built new venues or had significant renovations and focused on the winning percentage for the franchise the year the new facility

opened, along with the three and seven years prior to and after the opening. There were no significant findings for NBA, NFL or NHL franchises having more success after building a new venue in comparison to the previous venue. However, there was a significant increase in winning percentage for MLB franchises in the three and seven years after opening a new venue in comparison to the final three and seven years in the previous facility. A 2008 study by Davis found that an “exogenous shock to attendance, such as the construction of a new stadium, may lead to an increase in winning percentage” (Davis, 2008). Part of this can be attributed to Major League Baseball not having a salary cap and franchises with new stadiums spending a large portion of their additional revenues on player acquisition (Quinn et al., 2003). Depken (2006) found that teams on average spend about \$17 million in increased revenues from a new stadium on increased player salaries.

There is not sufficient evidence that a new venue leads to more wins in professional sports and there is virtually no research on this topic at the collegiate level. However, exploring this topic is critical as athletic departments look for any way to keep up with the competition. The impact new facilities have on attracting recruits leads athletic departments to invest their money in this department in hopes of winning more games. This research could prove to be critical as administrators seek to learn whether improved facilities actually lead teams to fare better competitively.

CHAPTER III: METHODS

The purpose of this research was to determine if there was a significant increase in a Division I college baseball team's recruiting success, fan attendance and on-field success following a new or renovated stadium when compared to the previous years. The population of the study were the baseball programs from the top eleven ranked Division I baseball conferences according to the Ratings Power Index (RPI) over the last ten years. These eleven conferences (American Athletic, Atlantic Coast, Big Ten, Big 12, Big West, Conference USA, Missouri Valley, Pac 12, Southeastern, Southern, and Sun Belt) represented 118 of the top college baseball programs in NCAA Division I. The subjects in the study were all of the NCAA Division I college baseball programs in the population of top baseball conferences that underwent an extensive stadium project between 2007 and 2013.

The study focused on college baseball programs that built a new stadium or made an extensive renovation to their existing stadium between the years 2007 and 2013. It was easy to determine which programs built new stadiums or had no renovations during this time period. However, categorizing a renovation as extensive was more difficult because not all athletic departments release the cost of a stadium project, which can make it hard to compare renovations. Many college baseball programs make individual upgrades to different areas of their venue on a nearly annual basis to improve their facility over the long term. These renovations that occurred over several years were not included in the sample, because the measurements for winning, recruiting and attendance would have been too difficult to measure over an extended period of time instead of working off a specific year. To define a project as extensive, the

renovation needed to improve the experience of both the fans and student-athletes while taking place in a one to two year time frame. Each renovated stadium was categorized to determine if it was extensive based on every addition to the stadium, how the venue improved, the time frame of the renovation, along with the cost of the project for the universities that released this information. The types of renovations included in the study were: additional seating, premium seating, concession stands, turf installation, clubhouse, batting cages, dugouts, indoor practice facility, coaches' offices, video boards, concession stands, restrooms, press box, ticket office, parking, fencing, academic center, Hall of Fame, lighting, sound system and training rooms. After researching the 118 college baseball programs in the population, it was determined that 41 colleges and universities conducted an extensive college baseball stadium project from 2007-2013, which made up the sample for the study.

Data Collection

The variables utilized included on-field success, recruiting rankings, and fan attendance, while comparing the pre- and post-construction. Winning percentage was readily available on the athletic websites for each college and university. To measure recruiting success, the Perfect Game Top-500 High School Prospects, which was published on annual basis beginning in 2004, was used to determine how many student-athletes committed to each program in the sample during the three years before and after an extensive stadium project (Perfect Game Top 500 Prospects). The quality of the recruiting class was measured by the number of top-500 commitments, along with the average ranking among the top-500 recruits for each individual year. Beginning in 2011, Perfect Game started using a system which assigned a point value based on the range each recruit was ranked as a means to rate the top-25 college recruiting classes (Perfect Game College Recruit Ranking). This point system, found in Table 1, was

utilized to assign the number of points for each recruiting class in the 41-school sample in order to measure a combination of the quantity and quality of recruiting classes. For example, in 2008, LSU brought in six recruits ranked numbers 181, 190, 208, 288, 350 and 470, which translated to 42 points according to the Perfect Game class ranking system. The following year, LSU opened their new stadium and brought in seven recruits ranked numbers 17, 20, 70, 162, 244, 428 and 461 for a total of 66 points. The final variable researched was the average fan attendance for each stadium. The NCAA publishes the attendance figures for the top-50 ranked baseball programs in terms of attendance each year (NCAA Baseball Attendance). For the programs that did not rank in the top-50, emails were sent to the program's Sports Information Director's (SID's) or found in box scores on the program's athletic website.

In the statistical tests to determine significant findings, each of the variables compared the three years prior to and following the stadium project. It would have been ideal to obtain data for five or even ten years before and after the opening of the stadium, which would have provided more clarity on the "honeymoon effect" for attendance. However, with the Perfect Game recruiting rankings beginning in 2004, there was only a twelve-year window to work with. Additionally, the attendance and winning percentage data became more and more difficult to obtain prior to 2004.

To measure on-field success, a paired-samples t-test was conducted comparing the mean winning percentage for the three years prior to the stadium project and the three years following the opening. To measure recruiting success, paired-samples t-tests were conducted comparing the number of recruits, average recruiting ranking, and number of recruiting points for the three years before the stadium project and the three years after. To compare attendance, a paired samples t-test was conducted comparing the mean attendance for the three years prior to the

stadium project and the three years following the opening. Each of these paired-samples t-tests were then conducted comparing the 18 new stadiums in the sample with the 23 college baseball programs that underwent a renovation.

Data Analysis

The null hypothesis in the study was, “there was no statistically significant difference in attendance, recruiting, or winning percentage in the three years following a college baseball stadium project in comparison to the three years prior.” To test the null hypothesis three separate, paired-samples t-tests were used with the dependent variables attendance, winning percentage and recruiting ranking. Means for each dependent variable were compared for the three years prior to the stadium project and the three years after. For the paired-samples t-tests that resulted in a p-value below .05, it was concluded that a new or renovated college baseball stadium had a significant effect on that particular factor. Lastly, the three independent variables were compared between new stadiums and renovated stadiums to determine if winning, recruiting or attendance was affected by whether an athletic department opted to build a new stadium or simply renovate their current stadium.

CHAPTER IV: RESULTS

The purpose of the study was to determine how building a new college baseball stadium or conducting a significant renovation effects on-field success, recruiting and attendance.

Quantitative data was obtained to measure differences in recruiting, winning and attendance for the three years prior to the completion of the stadium project and the three years after the venue opened. The rest of the chapter is divided into separate sections aimed at answering each of the research questions.

Descriptive Statistics

In Table 2, descriptive statistics were utilized to show the differences in means of the 41 schools in the sample for each of the three variables. The mean winning percentage increased by 2.6% in the three years following the stadium project in comparison to the three years prior. College baseball programs brought in an average of 1.56 more top-500 recruits in the three years following the stadium project in comparison to the three years prior. The average recruiting ranking among top-500 prospects was 44.38 places higher (less talented) in the three years prior to the stadium project in comparison to the three years following. Total recruiting points jumped from 81.61 in the three years prior to 94.49 in the three years following the stadium project. Lastly, mean attendance increased by an average of 493 fans per game in the three years following the stadium project in comparison to the three years prior.

Table 2*Comparing winning, recruiting and attendance in the three years before and after an extensive college baseball stadium project*

	Pre		Post		Mean Difference	t	p
	Mean 1	SD 1	Mean2	SD2			
Winning Percentage	0.556	0.133	0.582	0.097	-0.026	-1.314	0.196
Number of Top-500 Recruits	9.46	9.31	11.02	10.45	-1.561	-1.704	0.096
Avg. of Top-500 Recruits	228.64	127.74	273.02	124.5	-44.376	-2.061	0.046
Recruiting Points	81.61	90.4	94.49	100.74	-12.878	-1.597	0.118
Attendance	1690.42	1893.66	2183.56	2381.88	-493.146	-3.459	0.001
Note: N=41							

Winning

A paired-samples t-test was conducted to compare the mean winning percentage of a college baseball program in the three years prior to an extensive stadium project with the three years following the project. There was not a significant difference in the scores before ($M=.556$, $SD=.02$) and after the stadium project ($M=.582$, $SD=.02$); $t(40)=-1.31$, $p=0.196$. These results suggest that an extensive stadium project does not lead to a college baseball program winning more games in the first three years after the venue opens when compared to the previous three years.

Recruiting

Three separate paired samples t-tests were conducted to measure different variations of the Perfect Game Top 500 recruiting rankings. The first paired-samples t-test was conducted to compare the number of Perfect Game top-500 commitments a college baseball program recruited in the three years prior to an extensive stadium project with the three years following the project. There was a significant difference in the scores before the stadium project ($M=9.46$, $SD=1.45$) and after ($M=11.02$, $SD=1.63$); $t(40)=-1.70$, $p=0.096$. These results suggest that at the alpha level of .10, an extensive stadium project leads to a college baseball program receiving more top-500

commitments in the first three years after the venue opens when compared to the previous three years.

The second paired-samples t-test was conducted to compare the average ranking of Perfect Game top-500 commitments for a college baseball program in the three years prior to an extensive stadium project with the three years after. There was a significant difference in the scores before the stadium project ($M=228.64$, $SD=127.74$) and after the stadium project ($M=273.02$, $SD=124.50$); $t(40)=-2.06$, $p=0.046$. These results suggest that an extensive stadium project leads to the average top-500 commitment being higher ranked (less highly regarded) in the first three years after the venue opened when compared to the previous three years.

The third paired-samples t-test was conducted to compare the number of recruiting points based on the Perfect Game top-500 class rankings for a college baseball program in the three years prior to an extensive stadium project with the three years following the project. There was not a significant difference in the scores before ($M=81.61$, $SD=90.40$) and after the stadium project ($M=94.49$, $SD=100.74$); $t(40)=-1.60$, $p=0.118$. These results suggest that an extensive stadium project does not lead to a college baseball program attracting more top-500 recruits, who are also more highly ranked on average when comparing the first three years after an extensive stadium project with the previous three years.

Attendance

A paired-samples t-test was conducted to compare the mean annual attendance of a college baseball program in the three years prior to an extensive stadium project with the three years after. There was a significant difference in the scores before the stadium project ($M=1690$, $SD=1894$) and after the stadium project ($M=2184$, $SD=2382$); $t(40)=-3.46$, $p=0.001$. These results suggest that an extensive stadium project leads to a college baseball program significantly

increasing attendance in the first three years after the venue opens when compared to the previous three years.

New Stadium vs. Renovated Stadium

In Table 3, descriptive statistics were utilized to show the differences in means for each of the variables while separating the 18 new stadiums and the 23 renovated stadiums. The mean winning percentage of new stadiums increased by 4.4%, while renovated stadiums only increased by 1.2% in the three years following the stadium project in comparison to the three years prior. College baseball programs that built a new stadium brought in an average of 3.39 more top-500 recruits in the three years following the stadium project in comparison to the three years prior, while programs that renovated their stadium only brought in an additional .13 top-500 recruits. The average recruiting ranking among top-500 prospects for programs that built a new stadium was 18.26 places higher (less talented) in the three years after the venue opened in comparison to the three years prior. The average recruiting ranking among top-500 prospects that renovated their stadium was 64.82 places higher (not as highly regarded) in in the three years after the facility opened in comparison to the three years prior. For new stadiums, total recruiting points jumped from 66.56 in the three years prior, to 94.61 in the three years following the stadium project. In renovated stadiums, recruiting points only increased by one point in the three years following the stadium project when compared to the three years prior. Lastly, mean attendance increased by an average of 694 fans per game in new stadiums and 336 fans per game in renovated stadiums when comparing the three years following the stadium project with the three years prior.

Table 3*Comparing winning, recruiting and attendance in the three years before and after a new or renovated stadium*

	New Stadiums		Renovated Stadiums		New Stadiums		Renovated Stadiums	
	<i>Mean(SD) Pre</i>	<i>Mean(SD) Post</i>	<i>Mean(SD) Pre</i>	<i>Mean(SD) Post</i>	<i>t</i>	<i>p</i>	<i>t</i>	<i>p</i>
Winning Percentage	.531(.168)	.575(.116)	.576(.099)	.588(.082)	-1.073	0.298	-0.798	0.433
Number of Top-500 Recruits	7.89(9.5)	11.28(11.85)	10.7(9.17)	10.83(9.49)	-2.106	0.05	-0.134	0.894
Avg. of Top-500 Recruits	264.56(134.27)	282.82(132.22)	200.53(117.71)	265.35(120.57)	-0.636	0.533	-2.091	0.048
Recruiting Points	66.56(89.75)	94.61(112.83)	93.39(91.13)	94.39(92.81)	-1.92	0.072	-0.122	0.904
Attendance	1266.46(1982.38)	1960.2(2693.82)	2022.2(1794.74)	2358.36(2152.91)	-3.191	0.005	-1.803	0.085
Note: New Stadiums- N=18								
Note: Renovated Stadiums- N=23								

A paired-samples t-test was conducted to compare the mean winning percentage of a college baseball program in the three years prior to building a new stadium with the three years after. There was not a significant difference in the scores before the stadium project ($M=.531$, $SD=.17$) and after the stadium project ($M=.575$, $SD=.12$); $t(17)=-1.07$, $p=0.298$. These results suggest that building a new stadium does not lead to a college baseball program winning more games in the first three years after the venue opens when compared to the previous three years.

A paired-samples t-test was conducted to compare the mean winning percentage of a college baseball program in the three years prior to renovating their stadium with the three years after. There was not a significant difference in the scores before the stadium project ($M=.576$, $SD=.10$) and after the stadium project ($M=.588$, $SD=.08$); $t(22)=-.80$, $p=0.433$. These results suggest that renovating a college baseball stadium does not lead to a college baseball program winning more games in the first three years after the venue opens when compared to the previous three years.

A paired-samples t-test was conducted to compare the number of Perfect Game top-500 commitments a college baseball program recruited in the three years prior to building a new stadium with the three years following the project. There was a significant difference in the scores before the new stadium ($M=7.89$, $SD=9.50$) and after ($M=11.28$, $SD=11.85$); $t(17)=-2.11$, $p=0.05$. These results suggest that building a new stadium leads to a college baseball program

receiving more top-500 commitments in the first three years after the new venue opened when compared to the previous three years.

A paired-samples t-test was conducted to compare the number of Perfect Game top-500 commitments a college baseball program recruited in the three years prior to renovating their stadium with the three years following the project. There was not a significant difference in the scores before (M=10.70, SD=9.17) and after the stadium project (M=10.83, SD=9.49); $t(22)=-.134$, $p=0.894$. These results suggest that renovating a college baseball stadium does not lead to a college baseball program receiving more top-500 commitments in the first three years after the venue opened when compared to the previous three years.

A paired-samples t-test was conducted to compare the average ranking of Perfect Game top-500 commitments for a college baseball program in the three years prior to building a new stadium with the three years following the project. There was not a significant difference in the scores before the new stadium (M=264.56, SD=134.27) and after (M=282.82, SD=132.22); $t(17)=-.64$, $p=0.533$. These results suggest that building a new stadium does not lead a college baseball program to recruit a higher ranked player on average in the first three years after the venue opens when compared to the previous three years.

A paired-samples t-test was conducted to compare the average ranking of Perfect Game top-500 commitments for a college baseball program in the three years prior to an extensive stadium renovation with the three years following the project. There was a significant difference in the scores before the stadium project (M=200.53, SD=117.71) and after (M=265.35, SD=120.57); $t(22)=-2.09$, $p=0.048$. These results suggest that an extensive stadium renovation leads to the average top-500 commitment being higher ranked (less highly regarded) in the first three years after the venue opened when compared to the previous three years.

A paired-samples t-test was conducted to compare the number of recruiting points based on the Perfect Game top-500 class rankings for a college baseball program in the three years prior to building a new stadium with the three years following the project. There was a significant difference in the scores before ($M=66.56$, $SD=89.75$) and after building the new stadium ($M=94.61$, $SD=112.83$); $t(17)=-1.92$, $p=0.072$. These results suggest that at the alpha level of .10, building a new stadium leads to a college baseball program attracting more top-500 recruits, who are also more highly regarded on average, when comparing the first three years after an extensive stadium project with the previous three.

A paired-samples t-test was conducted to compare the number of recruiting points based on the Perfect Game top-500 class rankings for a college baseball program in the three years prior to an extensive stadium renovation with the three years following the project. There was not a significant difference in the scores before the stadium project ($M=93.39$, $SD=91.13$) and after ($M=94.39$, $SD=92.81$); $t(22)=-.12$, $p=0.904$. These results suggest that an extensive stadium project does not lead to a college baseball program attracting more top-500 recruits, who are also more highly regarded on average when comparing the first three years after an extensive stadium renovation with the previous three.

A paired-samples t-test was conducted to compare the mean annual attendance of a college baseball program in the three years prior to building a new stadium with the three years following the project. There was a significant difference in the scores before ($M=1266$, $SD=1982$) and after building the new stadium ($M=1960$, $SD=2694$); $t(17)=-3.19$, $p=0.005$. These results suggest that building a new stadium leads to a college baseball program significantly increasing attendance in the first three years after the venue opens when compared to the previous three years.

A paired-samples t-test was conducted to compare the mean annual attendance of a college baseball program in the three years prior to an extensive stadium renovation with the three years following the project. There was a significant difference in the scores before the stadium renovation ($M=2022$, $SD=1795$) and after ($M=2358$, $SD=2153$); $t(22)=-1.80$, $p=0.085$. These results suggest that with an alpha level of .10, an extensive stadium renovation leads to a college baseball program increasing attendance in the first three years after the venue opens when compared to the previous three years.

CHAPTER V: DISCUSSION

Data was gathered on college baseball programs in order to determine the impact of a college baseball stadium project on team success, recruiting and attendance. The goal of this discussion chapter is to build on the findings presented in Chapter 4 and to aid in further answering the research questions.

On-Field Success

The mean winning percentage of the 41 college baseball programs in the sample increased by 2.58% in the three years after a stadium project, when compared to the three years prior. The mean winning percentage of the 17 college baseball programs that built a new stadium between 2007 and 2013 saw an even higher increase at 4.41%. Based on this data, one could extrapolate that in a 56-game college baseball schedule, an extensive stadium project would translate to an additional 1.5 wins per season and a new stadium may translate to an additional 2.5 wins each year. However, none of the paired samples t-tests conducted showed a significant increase in winning percentage in the three years after an extensive stadium project was completed, when compared to the previous three.

This is a particularly interesting finding as coaches, administrators, fans and student-athletes often justify huge investments in facility upgrades with the assurance that it will lead to the program winning more games (Robinson, 2014; Hobson & Rich, 2015). However, this finding is to be expected as there was not any research available that showed a direct correlation between a new facility and winning games in college athletics. It would be interesting for a similar future study to look at winning percentages for a longer time frame to see if winning

percentage begins to increase more than three years down the road as recruiting improves and attendance increases.

Recruiting

While several studies showed the impact of athletic facilities on a recruit's college decision-making process (Harmon, 2009; Massey, 2013; Pauline & Pauline, 2004), this study did not suggest quite the same impact a facility project has on luring top recruits. The only variable found to be significant at the .05 level in the sample of 41 schools was measuring the difference in average ranking among the top-500 recruits committed. This test determined that the average top-500 recruit was rated 44 spots higher in the three years following the renovation when compared to the previous three recruiting classes. Contrary to the hypothesis, this paired-samples t-test actually suggests the average top-500 recruit is significantly worse in the three years following the stadium project. Some of this could be attributed to the idea that attracting more top-500 recruits, would bring down the quality of the average recruit. However, the p-value for the paired-samples t-test involving number of top-500 recruits was only .096, meaning the test is only 91.4% certain the increase did not occur due to random chance. Additional reasoning for the disparity may be that coaches are already using the stadium project in their recruiting pitches years in advance of its completion, so the impact is not as drastic in the year the venue actually opens.

The paired-samples t-tests showed vastly different results when comparing the recruiting variables for new and renovated stadiums. While the recruiting average variable is the only significant test for renovated stadiums, it is the only test that is not significant for new stadiums. New stadiums in the sample resulted in an additional 3.39 top-500 recruits after the opening, as

well as 28 additional recruiting points, which translates to a college baseball program luring an additional top-50 and top-100 recruit in the three years after the venue opens.

Renovated stadiums do not appear to have any positive impact on a college baseball program's recruiting success, while the data suggests new stadiums have a significantly positive impact on recruiting. Previous research has shown that better recruiting leads to more on-field success in college athletics (Dumond, 2007; Langelett, 2003), which means athletic departments are more comfortable pouring millions of dollars in to facility upgrades in hopes of landing more elite talent. This study suggests that building a new college baseball stadium may be worth the investment with the improvement in recruiting, however an extensive stadium renovation does not appear to be as fiscally responsible.

Attendance

The average attendance of a college baseball program increased by 493 fans per game in the three years following an extensive stadium project, which is a 26% increase when compared to the three years prior. For the 18 baseball programs in the sample that built a new stadium between 2007 and 2013, mean attendance increased by 693 fans per game in the three years following the grand opening, which was a 35.9% increase when compared to the three years prior. The 23 renovated stadiums saw an additional 336 fans per game in the first three years, a 20% increase in comparison to the three years prior. While there was not any research on the "honeymoon effect" in collegiate athletics, the attendance results are in line with the studies on the subject in professional sports. Clapp & Hakes (2005) saw a 44.1% increase in attendance in year one, 26.9% in year two and 20.2% in year three, and a significant increase for the first eight years of the venue. Howard & Crompton (2003) saw a 22.2% increase in attendance in year one and a significant increase for the first five years of the venue. It would be great for future

research to focus on the five, eight and ten year time periods to determine how long the increase in college baseball attendance lasts following an extensive stadium project.

With the 56-game regular season schedule in collegiate baseball, an additional 493 fans per game has the opportunity to generate a large amount of additional revenue for a college athletic department. While the top programs typically play the majority of their games at home, we can conservatively say a program in one of the top-11 conferences will play at least 30 home games per year, unless they are located in a geographical area that makes it difficult to do so with cold weather. Charging \$5 for 30 home games with an additional 493 fans per game would generate \$73,950 in extra revenue on an annual basis; charging \$10 per head would increase revenue by \$147,900. For the 18 programs that built new stadiums and averaged 693 additional fans per game, charging \$5 per ticket would lead to \$103,950 in extra revenue and \$10 per ticket would mean an additional \$207,900.

It is not nearly as expensive to invest in an extensive college baseball stadium as it is with the college football and basketball venues that are routinely exceeding \$100 million to construct. Of the 26 programs in the sample that listed the price of the new stadium or renovation, the average cost was \$11.62 million. While a project exceeding ten million dollars is never easy for an athletic department to fund, it is a much more reasonable price tag in comparison to many college football and basketball venues. As the studies on the Honeymoon Effect showed in professional sports (Clapp & Hakes, 2005; Howard & Crompton, 2003), attendance will likely see a gradual decline as the facility ages, but a significant increase in attendance for five to ten years can go a long way in terms of additional revenue.

As a college baseball coach or athletic administrator, this study should serve as a resource when making a decision on an extensive baseball facility project. The study shows that a stadium

project is not going to solve all of the problems for a college baseball program, but it can be beneficial, particularly a new stadium. Many factors should be considered before investing in a new facility, including how much money can be generated towards the project from key donors and how much additional revenue a new stadium could provide from corporate sponsors. This study provides strong evidence that an athletic department will increase revenue from ticket sales in the early years of a new stadium and have better crowds at home games with the increase in attendance. However, coaches and administrators should temper their expectations in terms of the impact a stadium project will have on recruiting top baseball prospects as well as winning more games in the early years of the stadium.

Conclusion

This study served its purpose by answering the research questions and providing new information on the subject of baseball facility projects in college athletics. While the data did not show an extensive stadium project leads to a college baseball program winning more games, there were other tests that were beneficial. There was evidence that a new stadium leads to improved recruiting and other studies have provided evidence that recruiting the best talent leads to winning more games (Dumond, 2007; Langelett, 2003). Additionally, the study shows an extensive stadium project leads to significant increases in attendance in the first three years of the stadium opening. While there are many factors that go in to a college athletic department's decision to conduct an extensive stadium project, this study begins to provide evidence that there are valid reasons to make such a decision. However, the study also does not prove building a new stadium will solve all of a program's problems and turn the team into an instant contender on the field.

Limitations

Due to the lack of recruiting data available on college baseball, the study could only utilize recruiting rankings from 2004-15, which meant only stadiums built from 2007-2013 could be used in order to have the rankings from the three years before and after. Additionally, the NCAA only releases the attendance figures for the top-50 ranked NCAA baseball programs on an annual basis. This made tracking down attendance numbers on websites and through SID's for the programs outside the top-50 extremely difficult. Ideally, attendance figures would have been utilized for up to ten years after the stadium project, which would be more similar to the studies on the Honeymoon Effect in professional sports. It would have been interesting to measure the price of the facility project and its impact on winning, recruiting and attendance. However, only 26 of the 41 schools in the sample reported the cost of the stadium project.

Future Research

There are some great ways this study can be expanded to further future research. A similar study could continue to focus on college baseball, but expand to all of Division I to see the impact of a stadium project on the lower levels in comparison to the top of Division I. Future studies should also look to expand to five or even ten years before and after the facility project to give a more expansive view of the impact of the project. Similar research could also be conducted on other sports and facility projects at the collegiate level. Very little research has been conducted on the impact of facilities in college athletics and this study creates a blueprint for how to measure the impact of a venue in several different areas.

REFERENCES

- Arms Race. (2009). *History*. <http://www.history.com/topics/cold-war/arms-race>.
- Associated Press. (2014). Baylor, Texas A&M add luxury touches to new stadiums. <http://www.foxsports.com/southwest/story/colleges-add-luxury-touches-to-new-stadiums-081914>
- Associated Press. (2015). NCAA ban on paying athletes faces more threats. http://www.huffingtonpost.com/entry/ncaa-ban-on-paying-athletes-faces-more-threats_us_55d90595e4b0a40aa3ab333e
- Bennett, B. (2012). Arms race proves recession-proof. http://www.huffingtonpost.com/entry/ncaa-ban-on-paying-athletes-faces-more-threats_us_55d90595e4b0a40aa3ab333e
- Blosser, S. (2007). Athletics arms race: stadium renovations provide more luxury to already luxurious arenas. <http://www.popecenter.org/commentaries/article.html?id=1874>
- Brown, N. (2010). Facilities make Big Ten attractive to college baseball talent. <http://www.athleticbusiness.com/stadium-arena/facilities-make-big-ten-attractive-to-college-baseball-talent.html>
- Clapp, C. M., & Hakes, J. K. (2005). How long a honeymoon? The effect of new stadiums on attendance in Major League Baseball. *Journal of Sports Economics*, 6, 237-263.
- Danielson, M. N. (2001). *Home team: Professional sports and the American metropolis*. Princeton, NJ: Princeton University Press.
- Davis, M. C. (2008). The interaction between baseball attendance and winning percentage: a VAR analysis. *International Journal of Sport Finance*, 3(1), 58-73.
- Depken, C. A. (2006). The impact of new stadiums on professional baseball team finances. *Public Finance and Management*, 6(3), 436-474.
- Dumond, J. M., Lynch, A. & Platania, J. (2008). An economic model of the college football recruiting process. *Journal of Sports Economics*, 9(1), 67-87.
- Harmon, B. (2009). Factors that affect college baseball recruiting. Research Project. Gonzaga University.
- Herndon, M. (2014). NCAA study finds all but 20 FBS schools lose money on athletics. http://www.al.com/sports/index.ssf/2014/08/ncaa_study_finds_all_but_20_fb.html

- Goff, B. (2014). NCAA “Arms Race” metaphor gets the economics backwards.
<http://www.forbes.com/sites/briangoff/2014/07/30/ncaa-arms-race-metaphor-gets-the-economics-backwards/#4d1a6d144aaa>
- Hillin, T. (2014). The honeymoon effect is real, and here’s proof.
http://www.huffingtonpost.com/2014/04/22/marriage-study_n_5194366.html.
- Hobson, W. & Rich, S. (2015). The latest extravagances in the college baseball arms race? Laser tag and mini golf. https://www.washingtonpost.com/sports/colleges/for-college-athletic-departments-building-the-best-is-never-ending-task/2015/12/21/e8384dd4-a558-11e5-9c4e-be37f66848bb_story.html
- Howard, D. R. & Crompton, J. L. (2003). An empirical review of the stadium novelty effect. *Sport Marketing Quarterly*, 12, 111-116.
- Jackson, D. (2013). Improving facilities builds recruiting, too.
<https://n.rivals.com/news/improving-facilities-builds-recruiting-too-1>
- Kraft, R. E. & Dickerson, K. (1996). Influencing the football prospect’s choice of college. *Coach and Athletic Director*, 65(9), 72-73.
- Langelett, G. (2003). The relationship between recruiting and team performance in Division 1A college football. *Journal of Sports Economics*, 4(3), 240-245.
- Letawsky, N. R., Schneider, R. G., Pederson, P. M., & Palmer, C. J. (2003). Factors influencing the college selection process of student-athletes: are their factors similar to non-athletes? *College Student Journal*, 37(4), 604-610.
- List of NCAA Division I baseball venues. *Wikipedia*.
https://en.wikipedia.org/wiki/List_of_NCAA_Division_I_baseball_venues
- Massey, T. (2013). What the recruiter wants: an analysis of values in the recruiting process. Master’s Thesis. Coastal Carolina University.
- McEvoy, C. D., Nagel M. S., DeSchrive T. D., & Brown M. T. (2005). Facility age and attendance in Major League Baseball. *Sport Management Review*, 8, 19-41.
- NCAA Baseball Attendance.
<http://www.ncaa.org/championships/statistics/baseball-attendance>
- NCAA Revenue Breakdown. (2012).
<http://www.ncaa.org/about/resources/finances/revenue>
- Ozanian, M. K. (1995). Suite deals: Why new stadiums are shaking up the pecking order of sports franchises. *Financial World*, 165, 50-64.

- Pauline, J. & Pauline, G. (2004). Influential factors in the college selection process of baseball student athletes. *Journal of Contemporary Athletics, 1*, 153-166.
- Perfect Game College Recruit Rankings.
<http://www.perfectgame.org/Rankings/Recruiting/Rankings.aspx>
- Perfect Game Top 500 Prospects.
<http://www.perfectgame.org/Rankings/Players/Default.aspx?gyear=2014&num=500>
- Perko, A. (2009). Construction in college sports: an arms race? *The Knight Commission*.
<http://www.knightcommission.org/collegesports101/chapter-4>
- Quinn, K. G., Bursik, P. B., Borick, C. P. & Raethz, L. (2003). Do new digs mean more wins? The relationship between a new venue and a professional sports team's competitive success. *Journal of Sports Economics, 4*(3), 167-182.
- Robinson, D. (2014). Athletic arms race is out of control.
<http://www.deseretnews.com/article/865603005/Athletic-arms-race-is-out-of-control.html?pg=all>
- Sato, K. (2013). Be bullish on college baseball.
http://www.huffingtonpost.com/kai-sato/be-bullish-on-college-baseball_b_3350606.html
- SEC schools unveil new stadiums. *College Sports Business News*.
<http://collegesportsbusinessnews.com/issue/february-2010/article/new-college-baseball-facilities>
- Stadiumjourney.com
- Thirkill, M. (2013). Why isn't college baseball more popular?
<http://businessofcollegesports.com/2013/07/10/why-isnt-college-baseball-more-popular/>
- Treadway, D. C., Adams, G., Hanes, T. J., Perrew, P. L., Magnusen, M. J., and Ferris, G. R. (2014). The roles of recruiter political skill and performance resource leveraging in NCAA football recruitment effectiveness. *Journal of Management, 40*(6), 1607-1626.
- Zygmunt Z. X., & Leadley J. C. (2005). When is the honeymoon over? Major League Baseball attendance 1970-2000. *Journal of Sport Management, 19*, 278-299.