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# The Effects of Training Programs Using Free Weights and Free motion Machines on Strength in Untrained College-Age Females

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December 2015

To the Dean of the Graduate School:

We are submitting a thesis written by Zachary Ringlein entitled ANALYZING STUDENT PERCEPTIONS OF STARTING A NEW FOOTBALL PROGRAM AT A UNIVERSITY.

We recommend acceptance in partial fulfillment of the requirements for the degree of Master of Science in Sport and Fitness Administration through the Richard W. Riley College of Education

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ANALYZING STUDENT PERCEPTIONS OF STARTING  
A NEW FOOTBALL PROGRAM AT A UNIVERSITY

A Thesis Presented to the Faculty  
Of the College of Education  
In Partial Fulfillment of the  
Requirements for the Degree of  
Master of Science  
in Sport and Fitness Administration  
Winthrop University

December 2015

By Zachary Ringlein

## ABSTRACT

**Background:** Student support is a critical factor that colleges and universities must consider when determining whether to add a football team to the athletic program. The student body is a large population that may attend games, purchase merchandise, attend athletic social events, tailgates, pep rallies, and homecoming, and join student oriented athletic fan clubs. Understanding the level of student support is important for prospective football programs.

**Purpose:** The purpose of this study was to examine the perceptions of current students on beginning a college football program.

**Methods:** Current college students at a public university in the southeastern United States completed online surveys concerning perceptions towards the athletics program at their university and whether they would support a college football program being added to their university's athletics program. There were 833 usable surveys returned.

**Results:** The results showed that those who have attended past athletic events at the university and those who have played organized sports are more likely to attend football games, other athletic events, and to purchase merchandise at the university.

Approximately  $\frac{3}{4}$  of those surveyed had a positive likelihood to attend football and other athletic events, to purchase merchandise, and to engage in those activities surrounding the football team such as tailgates, fan clubs, etc.

**Discussion:** Universities can use these results to analyze their own schools to determine student support for the athletics program. Past behavior (attendance to games) and

identification with the team are significant variables that can be used to evaluate the support of the student body.

Dedication

To my family:

Thank you for supporting me in everything I have done throughout my time in school and  
in all other aspects of my life. You all are my foundation.

To my graduate committee and advisors, Dr. Boyd, Dr. Wojcik, Dr. Chung, and Dr.

Schary:

The expertise and advice you all provided was essential to my success in completing this  
project and I appreciate all the guidance you all were able to provide.

Thank You.

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## **Chapter One**

### **Introduction**

Many collegiate athletic programs today have incorporated a football program as one of the many things that draw students into attending the school. The teams may vary in competitiveness, skill level, and division, but collegiate football is a big part of college life at many schools. At some schools, the success of their football program has been shown to increase the attendance at the university, as well as increase the number of undergraduate applicants (Toma & Cross, 1998). The potential of increasing applications and attendance is a benefit for many universities who are considering the addition of a football team. There are many factors that have to be considered when adding a football team however, including the amount of support from the student body. Schools must determine whether there is enough interest within the student body that feel that their college experience would be enhanced by adding a football team. Questions for the school to consider include: would there be enough students to fill a section of the stadium, would there be added support in activities that surround the program that would benefit the university as a whole such as tailgating, pep rallies, homecoming, etc., and would the students be more willing to stay at the university over the weekend to attend these events. The overall purpose of this study was to analyze these aspects of the students' perceptions concerning whether a university should start an NCAA college football program.

### **Justification**

This study focused on analyzing the students' perceptions that affect whether a southeastern university should establish a football program. Benefits of a football

program include creating a team of which the students can identify (Kim, Trail, & Magnusen, 2013). This gives the students a reason to remain at the university over the weekend. It can also provide social events that the students can attend, and a way for students to connect to the school during their time at the university and after graduation. This study provides vital information for the university to determine if the addition of a football program will have the student body support. It also provides other colleges and universities that may be considering the addition of a football program a template for student perceptions.

### **Research Hypotheses**

For the purpose of this study, the following research hypotheses were postulated:

1. Those who have attended the University's past athletic events (PA) will be more likely to want to attend future university football games if the university begins a football program.
2. PA will be more likely to intend to purchase university merchandise if the school begins a football program.
3. Those who have a high level of attachment to the current university athletics (Higher Fan Attachment Rating- FAR) will be more likely to attend future university football games and to purchase university merchandise.
4. Those who played organized sports (POS) in the past will be more likely to want to attend the University football games if the university begins a football program.
5. POS in the past will be more likely to intend to purchase University merchandise if the university begins a football program.

**Definition of Terms**

1. **Division I**, the highest level of college football competition in the United States (Roy, Graeff., & Harmon, 2008)

**Limitations**

Due to this study being performed by using a survey, there is a large chance of participant reporting errors. Responses may be reported based on what the subjects feel that the researcher is looking for out of the subjects. Another factor that is a limitation to the study is the demographics of who actually responds. The sample size being only a small portion of the university population may also limit the generalizability of the results.

**Delimitations**

This study will be performed at a university in the southeast region of the United States using current students of the university. The university also happens to be strong in liberal arts and education. The study will also be based on a school in a region of the country where football is much higher on most peoples' priorities due to the large football conferences in the area (Southeastern Conference and Atlantic Coast Conference). This may affect the results more towards supporting a football program at the university than the results at a school in other regions of the country.

## **Chapter Two**

### **Review of Literature**

A football program can be a central focus of many students and student athletes in choosing a school. A student can decide which college to attend based on a connection to an athletic team. Once at the school, there are many factors that play into what the students choose to do with their free time, including whether or not the students will attend athletic events. We analyzed previous literature based on student perceptions, spectator intentions, and other information related to the addition of a football program at a university that does not currently have one. The following chapter is based on our findings.

#### **What Effects Spectator Intentions in Regards to a New Football Program?**

The purpose of Shapiro, Ridinger, and Trail (2013) was to investigate the effects of a new football program on consumer consumption rates in regards to buying merchandise and attending sporting events. The researchers wanted to know if having football would make people more interested and if they would identify with the school more. The research was performed at a Mid-Atlantic public university with an enrollment of approximately 23,000. The university had been known as a typically commuter-based school because it was in a city of around 1.5 million citizens and was a highly metropolitan area. Beginning a football program was an effort to increase the sense of community on campus. The data was collected from season ticket holders and students who had attended at least one home game during the inaugural year. Just over 1,000 useable fan surveys were used for the study.

The survey was composed of 55 total items divided into four sections. The sections included demographics, past behaviors concerning watching and attendance, identification with the team, and future intentions concerning attendance and purchasing merchandise.

The results of this study (Shapiro et al., 2013) showed that attendance of a single home game in the past could significantly predict whether the subjects would attend a future football game, whether they would support sponsors, and whether they would purchase team merchandise in the future. Prior football game attendance did not significantly predict attendance at men's or women's basketball games at the school. Team Identification and Past Attendance at football games were the only two points of attachment which significantly explained variance in attendance. Overall, past behaviors were the most significant predictors of future intentions and team identification were the most significant mediating influence on behavioral intentions.

These results (Shapiro et al., 2013) showed that fans need to feel like they are appreciated and a part of the organization to influence their attendance and purchasing intentions. Television, radio, Facebook, Twitter, booster clubs, and web broadcasts had little effect on attendance. With identification with the team explaining 19.2% of the variance, this should be the focus of marketing at the university level based on this study. When the marketing focus is shifted towards getting fans to identify with the team, the attendance may significantly be affected.

### **Does Identifying With a Team Effect Attendance?**

Kim, Trail, and Magnusen (2013) examined the effect that identifying with a team

affected attendance rates. Throughout past research, not much change in attendance had been linked to motives. The researchers for this study determined that there was another influencing factor that decreased the relationship between motives and attendance. Much of the time, it seemed that those who identified strongly with a team had very different attendance rates than those who did not strongly identify with the team. Subjects included 207 students, aged 18-27 who attended NCAA Division I-A schools. Students were used because many other similar studies had been done using students so they could easily be compared these studies. An email was sent to all the students enrolled in sport activity classes asking them to complete the survey for the researchers. The Motivation Scales for Sport Consumption was used to measure many of the motives for attendance to the football games including: achievement, aesthetics, drama, escape, knowledge, skill and social. The Points of Attachment Index was used to identify what the students were attached to about the football program. This included coach, level, player, sport, team, and university as points of attachment to the program.

The results of this study showed that Achievement, Aesthetics, and Identification were the only three motivation variables that were significantly related to attendance. Achievement and Aesthetics accounted for 14-20% of variance in attendance while Identification accounted for 30% of the variation according to the study. The interaction variables of Achievement×ID, Drama×ID, Escape×ID, Knowledge×ID, Social×ID, Skill×ID and Added Value×ID were all significantly related to the intention to attend, and they accounted for 4-16% of the variance. With achievement and aesthetics as the only two significant variables alone, these can be related to how the team has performed



recently and with how the players express themselves through their playing styles. Overall, these motives did not seem to be significant factors in determining attendance rates. They may relate in regards to whether people will attend a single game, but not to how many games they will attend throughout the season. However, identification when tested as a moderating factor did have a strong effect on all the motive-attendance intention associations. This means that identification with a team does increase or decrease the motives for attending games significantly. Thus, marketers, coaches, players, and the organization as a whole need to focus on how they can get people attached to the team enough to identify with the team as a fan and supporter. This will strengthen the motives for attending and bring people in on a more regular basis to support the team. (Kim et al., 2013)

### **Why Do People Become Fans of a Team?**

People become fans of a college team for many different reasons. Some become fans because they live near the school. Others choose the team because they went to the school for their education. Still others choose the team simply because the team is successful. Dietz-Uhler, Harrick, End, & Jacquemotte (2000) examined the reasons why people chose to become fans, what sports and games to attend, and whether there was a difference between males and females in regards to why they became a fan. The researchers hypothesized that there would be an equal number of males and females who think they are sport fans but that they will have different behaviors and reasons for being a sports fan.

There were 76 subjects who chose to complete the questionnaire in exchange for

extra credit in one of their classes, 36 male and 40 female. The questionnaire asked about the subjects sport behaviors and reasons for being a sports fan. The questionnaire found out if they felt they were a true sports fan, how much they discussed and identified with a sports team. They were then asked to indicate the reasons why they felt that they were a sports fan. This was left as an open-ended question to allow the subjects the freedom to give any reason they wanted. These answers were categorized into 13 different groups, including “playing sport”, “enjoy cheering for the sport”, “watch the sport”, “attend the sporting events”, “feels loyal to a team”, etc.

The results of Dietz-Uhler et al., (2000) showed no significant difference between genders when comparing the responses about being a sports fan. The results also showed that males spend more time discussing sports, watching sports on television, have more knowledge about sports, have significantly more interest in sports, and therefore seem to engage in more sport fan behavior than females. Through Chi-Square analysis, males and females had significantly different reasons for being a sports fan. Females seemed to be a sports fan to attend games with people, they like to cheer, and watching the games with friends and family. Males were fans because they like to play the sport, enjoy sports, and like to gain knowledge about sports through watching and reading about them.

The results of Dietz-Uhler et al., (2000) gave a clear illustration of the need for various aspects to be present to establish a strong fan-base of a college football team. To engage the male students, simply having the team will be enough to draw them in, in addition to having stories about the team for the males to read and watch. To engage the females, there must be a social stigma to draw in the crowd. Such things as tailgating,

homecoming events, etc. will be strong additions to a football program to bring in the female crowd. Having a set student section would also bring in the females to have a place to interact with their peers while watching the games. By engaging both crowds, there will be a stronger fan base to support the program through ticket sales, concessions, and participation in other promotions. Once these things are put in place, there will be more motivating factors into which sporting event the fans will attend.

### **How Do Fans Choose Which Sporting Event to Attend?**

Much research has been done concerning whether having more than one option as to which sporting event to attend is good or bad for attendance. The purpose of Ferreira (2009) was to examine how spectators choose which sporting competition to attend if multiple options are available in a common location. Many colleges may have many of their facilities at the same area. This leads to spectators having to make decisions as to which event they will attend if they are scheduled simultaneously. The researchers were interested in learning how spectators chose which event to attend.

The studies of Ferreira (2009) were conducted using students at a southwestern United States university. All students were required to participate in physical activity classes at the university, so the sample was conducted using 33 out of 93 unique physical activity classes. Subjects were surveyed in their choices for attendance. First they were asked which sporting event they would choose to attend if given two free tickets. Next they were asked which they would attend if their preferred sport was not an option.

The results of Ferreira (2009) showed that the alternate sex sport was usually the second choice. When men's basketball was the first option, women's basketball was the

second choice, and when baseball was the first option, softball was the second choice.

The results supported the theory that sports of similar types competed for attendance more than sports of the same gender. This showed that people generally tend to want to attend a sport overall, then they consider the alternatives of gender. Spectators would be more likely to attend a different gender's competition of the same sport before they decided to attend an entirely different sport. This gives athletic directors and coaches the knowledge that they should work between teams of the same sport to avoid scheduling at the same time. This is a prime example of why men's and women's teams play after each other instead of opposing each other. By having the males play right after the females, the season ticket holders are able to come out and watch both teams play. This also will help students who like the sport to be able to come out and watch both teams instead of choosing between them. If football were to be added at the university in question, there may be a women's sport that could be added that would satisfy those fans who enjoy seeing both genders compete that could be added to comply with Title IX law requirements.

### **What Determines if Season Ticket Holders Will Renew For the Next Season?**

The purpose of Pan and Baker (2005) was to investigate what factors play into the decision of season ticket holders whether to renew their season tickets for the following year each season. Many factors could determine renewal, including winning percentage, whether the owner attended the school, if the owner has a student on the team, if the owner is a student, etc. The goal of marketing programs everywhere is to not only persuade people to buy season tickets, but also to renew these tickets for the following

year. The sale of season tickets gives athletic departments a pre-season idea of the revenue their program will produce. This also ensures fans will be in the seats, and can fund the other marketing events that will bring in the non-season ticket holders. By finding out the factors that play into the renewal process, marketing programs can be more successful.

Pan and Baker sent out a survey to 400 season ticket holders to fill out concerning their motives for attending football games, demographics, and attendance at other sporting events of the school, and 197 of the surveys were returned and used in analysis. The ticket holders were to rate 17 motives for attending games based on a 7 point Likert Scale. The results showed that 60.27% of variance could be explained by five factors. These five factors were Team Performance (Last Year's Record, Level of Football Performance, Overall Outlook for the Season, and Star Players), Game Competitiveness (Conference Games, Non-Conference Games, Top-Twenty Opponents), Athletic Event (Excitement, Overall Atmosphere, and Pageantry), Economic View (Ancillary Prices, State of Economy, Season Ticket Prices), and Social Affinities (Attending with Friends or Family, Loyalty to University's Football). "Team Performance" and "Game Competitiveness" were the two most important factors and they explained about one half of the total variance of the results.

The results of Pan and Baker (2005) showed that careful attention should be paid to scheduling. Specifically, it is important to have competitive games that are against exciting opponents and the team has at least a chance to win. If a school is scheduling exciting, top-twenty teams, but the team is unable to win these games, the team

performance and competitiveness both go down. With these two being the most important factors to season ticket holders, there may need to be rivalry games that are in-state that may not be against an opponent of such a higher caliber of talent. Thus, the team may be able to win the game against a smaller school/opponent, while still remaining high in the game competitiveness realm. There also should be special attention paid to outside incentives in the case that the team is not as competitive, such as a new program would be expected to be. Such things can include cheaper concession and parking costs, exciting marketing events, giveaways, etc. These will draw in spectators, especially including students, and keep them coming back. By having giveaways and other souvenirs that the fans and students can buy, their identification with the team increases, which would hypothetically increase loyalty to the team. With the added attention to scheduling, the team may even have a higher chance of winning a championship and added support from the students.

### **Championship Seasons Effect on School Attendance**

Toma and Cross (1998) examined the relationship between the number of students who applied to institutions who had won a championship in intercollegiate athletics, particularly in National Collegiate Athletic Association basketball and football. A successful athletic program seems to attract many students to certain schools. Athletic success is one of the most obvious publicized information about an institution, due to the high level of attention and importance placed on sports, whether through social media, news, or word of mouth. Toma and Cross investigated whether the championship season affected the number of undergraduate applications turned in during the following year.

The study was done using applicant data from the 1979-1992 seasons of collegiate sports, with information from the championship winning colleges as well as similar institutions for trend comparison.

During the time period that was being investigated by Toma and Cross (1998), 13 different schools won the NCAA men's basketball championship and 16 won or shared the championship in NCAA football. Applicant data was collected from these schools for the 3 years prior to the championship and for the 3 years after the championship as well. These numbers were gathered from each edition of *Peterson's Guide to Four-Year Colleges and Universities* for the corresponding year. With football being a fall sport, the next fall semester was the focus of the study specifically, while the increase from a basketball championship was examined the following year to account for the championship occurring in late spring semester. The admissions office of each championship winning school was contacted to determine which schools were their primary competitors for students regularly, in order to have comparison schools.

The results showed that 14 of the 16 schools who won the football championship had an increase in applications, as seven schools had an increase by over 10% and two schools increased by over 20%. Many of the schools had dramatic relative increases when compared to their peer schools. Schools such as 1987 Miami and 1990 Georgia Tech, who had a 3 year change of 33% and 23% increase respectively, were much greater than their peer schools that each had gains of 13% or less. Even more dramatic of a change occurred at Notre Dame following the 1988 championship. Notre Dame had an increase of only 11%, but its peer schools decreased by as much as 24% applicants. Out

of the 13 schools who won the basketball championship, 10 increased in applicants the following year, but only 2 of these schools increased by over 10%. Over the following 3 years after the basketball championships, 9 of the schools had increased by over 9% (Toma & Cross, 1998).

These results suggests there to be a correlation between winning championships and an increase in undergraduate applications. This tends to be especially true following football championships, and the trend continues for the following few years after the championship is won. Having something to cheer for and a team to support seems to be fairly important to those looking to attend institutions of higher learning. Being able to go out to the athletic events and enjoy being there for a winning team makes a college much more appealing to some incoming students.

### **Does Division I-A Status Effect University Perception**

Roy, Graeff, and Harmon (2008) examined the effects of becoming Division I-A on the perception of the university as a whole. Division I-A is the highest level of athletic competition for colleges and it is extremely demanding to become a part of this high quality division. Requirements include competing in at least 5 home games against other Division I-A schools, supporting at least 16 varsity athletic teams, 6 of which have to be male and 8 female, and averaging at least 15,000 people in attendance at sporting events. Many institutions are making or have made the push to achieve this status for their sports. Roy et al. (2008) investigated if moving to Division I-A was beneficial for time, effort, and money.



Roy et al. (2008) surveyed students, alumni, and the local community of a public university in the Southeastern United States that moved to Division I-A in the 1990s. Paper surveys were distributed in many classes at the university to obtain the opinions of the students, and phone calls were made to interview the alumni and local community surrounding the area. The local residents included those from the county of the university and 2 of the bordering counties. The researchers collected 210 student responses, 291 alumni responses, and 567 local residents' responses. Questions asked the respondents about perceptions of Division I-A football, the university's move to Division I-A, and behavioral intentions related to the move to Division I-A.

Roy et al. (2008) showed overall positive attitudes about the Division I-A transition. Students and alumni generally agreed that moving to Division I-A for football contributes to a positive image of the university that can draw students in to attend the university and increases school spirit and team identification. The local residents overall believed that the team's success would lead to an improved university image more than the school's academic success. This is due to the fact that most people only have a connection with a university because of their sports, unless they have family members or friends who have attended the university that can vouch for the university's academic reputation. All three groups approve of the move to Division I-A, and think that it has increased the schools image, spirit, and attendance by association. With results showing that not only students and alumni agree with the move to Division I-A, but also local residents from the surrounding area agreeing with the move as well, more universities might push for this to occur simply to increase their image and attendance. This will

bolster the universities reputation and hopefully push more students and student-athletes to come to the university. Thus, the university would benefit as a whole, not just athletically from a move to Division I-A.

### **Attendance at Division-II Sporting Events**

DeSchrive and Jensen (2002) examined the relationship between both winning percentage and promotional activity in regards to attendance at Division-II sporting events. The study was performed to find the main determinants in getting people to attend the games, due to the smaller average attendance at Division-II sporting events. Many of these schools have football as their primary ticket revenue. Little research had previously been done concerning determinants of attendance at schools smaller than Division-I. This inspired the researchers to examine these determinants in order to assist with increasing attendance rates.

DeSchrive & Jensen (2002) sent out surveys to the sports information and media relations offices of NCAA Division-II schools with football in 1994, 1996, and 1999. A total of 260 responses were obtained, with 1,302 games played during the time. Demographic information regarding population, student enrollment, etc. were gathered from the U.S. Higher Education Directory, US Census, and TRIPMAKER. Ordinary Least Squares Regression Analysis was performed on the data.

DeSchrive & Jensen (2002) found many significant variables. The first of which was that winning percentage in the current season became significant to attendance as the season progressed. At the beginning, winning percentage didn't have much effect. With this information, more money could be spent on better equipment, coaches, and recruiting

if the revenue is worth the effort to fill the seats. Previous year success was significant during the early weeks of the season as expected. This served as the measure of whether the games were worth attending. The promotional activities were significant at the .01 level. Homecoming increased attendance by twice the number that other promotional activities did, however all the promotional activities brought in more attendees. Marketers should examine the cost-benefit relationship in regards to putting on promotional activities at more of their games to increase the number of people attending. Stadium age and the number of miles between the teams were also significant to attendance. As both numbers increased, attendance decreased by a significant percentage. Student enrollment and weather were also significant as well. With 10% extra student enrollment, there was a 2% increase in attendance at games. These are things that the athletic administrators can't control, but these should be considered when looking at their attendance numbers in comparison with other schools.

DeSchrive & Jensen (2002) demonstrated that there are many factors that should be considered in regards to attendance at Division-II sporting events. They found that promotional activities and winning percentage of the home team was significantly related to attendance rates. As the season continued, current season winning percentage had a stronger effect on attendance while past season winning percentage decreased in effect. More efforts need to be included in promotional activities such as homecoming, parents' day, hall of fame day, and similar events. With more promotional activities and a higher winning percentage, attendance rates may increase, along with better athletic recruiting.

### **How Student Athletes Choose a School**

Student athletes have a life decision to make when choosing which school to attend to play sports. Not only does it determine the best fit for them as an athlete, but it also determines where they will primarily live for the next four years of their life and the level of education they might receive. Klenosky, Templin, and Troutman (2001) examined factors that lead to athletes choosing a specific school.

Klenosky et al. (2001) focused on 27 football players from NCAA Division I schools. A series of interviews were conducted to evaluate what factors led to the players to choose their school. The players all reported that they were recruited by over 20 schools. The interviews each lasted around 10-15 minutes, and used a laddering technique where the respondent was asked why each factor in their response was important to them until they could no longer answer based on each topic.

Klenosky et al. (2001) found that there were many key reasons for an athlete to choose the school. The first trend was that the coach, coaching staff, location, and knowing someone on the team made the athletes feel comfortable with their school and the decision to go there. Second, the coach and facilities available to help the athlete improve their skills was very important to them. Third, being able to play immediately after going to the school was very high on the list of priorities. Academic reputation of the given school and the ability to be seen on TV to continue to the next level were the last high importance qualities of a school.

Klenosky et al. (2001) gave an outline as to what coaches and others involved in athletic recruiting have to be focused on when recruiting athletes. Especially with a new program, the student athlete has to see the benefits of the school's academic reputation,

the coaches' backgrounds and records, the quality of the facilities, and the equipment for training must be good enough to improve the athletes' abilities. When an athlete is being recruited for a new athletic team, these things should be a focus since there is no history of winning, identification with the football team, or many television opportunities. If the athlete sees the benefits of the school as a whole, instead of just the benefits of the football team, they will be more likely to attend the school as an athlete.

### **Do Collegiate Telecasts Effect Attendance?**

Fizel & Bennett (1989) examined the relationship between collegiate sports telecasts and physical attendance at the sporting events. In 1984, rules concerning television broadcast of collegiate football were changed through a Supreme Court case. The Board of Regents of the University of Oklahoma, et al, vs. the NCAA stated that the participating schools of the football games could decide who could broadcast their games, and whether or not they wanted to sell the rights to a station. Prior to this decision, the NCAA had all rights to decide what games were televised, therefore limiting how much college football was broadcast, and maintaining the numbers in attendance at the football games. However, Kaempfer and Pacey (1986) argued that telecasts and football game attendance are complementary. They believed that with people seeing the telecasts, they would be more inclined to attend games for that team. Thus, Fizel and Bennett decided to look into whether the telecasts had an impact on attendance (1989).

Fizel & Bennett (1989) factored in ticket prices, attendance rate, winning percentage, population surrounding the school, power of conference, public vs. private

schools, telecast frequency, etc. Some of the more competitive games caused spikes in attendance. Through factoring in all these variables, the researchers were able to figure out how much telecasts effected attendance at games. The results showed that there was a complementary effect on attendance. One extra historical telecast showed on average an increase in attendance by approximately .16 percentage points. However, one additional “own-team” telecast, or a telecast scheduled by the college, showed a decrease by approximately .67 percentage points. Also, after the de-regulation of telecasts, there seemed to be a 2.09 percentage point decline in attendance. One thing in the study that did seem to affect attendance was winning percentage of the football team. A 10 percent increase in winning percentage showed a 1.6 percentage point increase in attendance rates.

In conclusion, Fazel & Bennett (1989) showed that stadium attendance seems to have decreased since the expanded availability of games on television. The colleges seem to have lost revenue from ticket sales because of the telecasts, however the home-viewer has greatly benefitted from the availability of games on television. Thus, stadiums are generating less revenue, which in turn may lead to less money going back to the school toward educational programs/materials. Efforts should be focused on promotional activities and reasons for the students and other spectators to come out to the game to further their identification and positive associations with the team. This could be offset by the money made from television broadcasts.

### **Does Online Marketing Help Teams Fill Seats?**

Many teams seem to be turning their efforts in marketing towards online settings.

With so many spectators becoming engaged in social media and internet-based applications, it only makes sense that the sports teams utilize the same resources. Twitter, Facebook, etc. have become primary marketing tools that are essentially free. Rather the organization may just have to urge spectators to “hash-tag” a certain keyword or “like” their Facebook page to increase spectator awareness. This increase in internet use influenced Ioakimidis (2010) to investigate internet-based marketing.

Ioakimidis (2010) examined the media-based marketing of teams in four professional sports leagues. The teams were involved in football, rugby, hockey, and soccer in professional leagues in North America and Europe. Ioakimidis researched the website of each team to find out what they organizations were using and where the websites could be improved. The websites had primarily photos, mobile services, social media, email, RSS feeds, games/contests, and video/audio clips. None of the teams offered all of the previously mentioned services. Out of the 32 strategies, the NFL used 24, the NHL used 19, the Premier League used 18, and the Super League used 11.

Ioakimidis (2010) examined what internet strategies could be used and which ones are most popular among athletic leagues around the world. The strategies found could be used to bolster the efforts of a collegiate athletic team in building its' fan base and increasing fan interaction. The most used platforms were internet based websites with video/audio of the contests, and games/contests on the websites for fans to participate in. Kim, Trail, and Magnusen (2013) showed that fans who identify with a team are more likely to attend the games of the team. As these fans are able to utilize the benefits of the internet based team sites, they will be more likely to identify with the team

because merchandise, information, and resources for the team will be more easily available. By studying the efforts of other leagues, these collegiate programs could greatly benefit in designing their own sites for fan use to reduce any constraints that keep spectators from coming to athletic events.

### **What Constraints Keep People from Attending Athletic Events?**

Trail and Kim (2011) focused on reasons why people do not attend sporting events, as opposed to what factors motivate spectators to attend athletic events. There has been extensive research performed to find out what makes people desire attending sporting events, but little has been done about why people would choose not to attend. These factors that discouraged attendance include, but are not limited to: lack of team success, lack of someone to attend with, no interest from significant others, cost, parking, and location. Through identifying the strongest factors of constraint, those in charge of bringing in spectators can focus on trying to eliminate some of these causes.

Trail & Kim (2011) examined a university in the southeastern United States. The study was proposed to the booster club of the university, and they chose to have their booster club used as the sample. The study was performed using the women's college basketball team as the sport of focus. After sending over 17,000 of them to the booster club members, 416 usable questionnaires were obtained. 90% of the respondents reported they had seen one of the university's women's basketball games on television, 60% had attended a game previously, and 90% of this group had attended the game in a group. The questionnaire was divided into 4 main categories: internal motivators, internal



constraints, external motivators, and external constraints. Subjects were also asked how many games they intended to attend the next year, but this question was left open-ended.

Trail & Kim (2011) found that the internal and external constraints did have a significant negative effect on attendance. Internal constraints such as lack of knowledge of the team were primary factors involved in effecting attendance. The results also supported previous research that showed that team performance is a huge contributing factor to whether people will attend games or not. The results did not, however, support that one of the four groups had a stronger correlation to whether people did or did not attend the game, but rather a combination of all four contributed most significantly. Those who were internally motivated did seem to attend the games more regularly however. The internal constraints seemed to discourage attendance more than the external constraints such as cost, parking, etc. These results showed that the constraints of attending athletic events do significantly moderate the motivators for attending, serving as a “checks and balance” system for attendance. These may be especially true in relation to the rates of visiting teams’ spectators that decide to travel to see the team play.

### **What Factors Effect Visiting Teams’ Attendance Rates?**

One factor that can greatly increase the revenue and beneficial outcomes of having sports teams is the attendance rate of visiting teams to competitions at your school. Leonard (2005) analyzed the effects of geography on visitor attendance rates. By examining the effects of distance on attendance, decisions such as who to play, what conference to be in, and a feasible non-conference schedule can be assessed to determine what would be beneficial for the school.

Leonard (2005) utilized a gravity model which focused on the mutual needs of the two places that interact, a measure of how easy it is for the two places to interact, and the attraction of competing places. These can be translated as the sizes of the schools, the distance between the two, and whether there is another school between the two with which to interact. This study was based on the Mid-American Conference due to the conference being the largest I-A conference in America. Visitor ticket sales from 91 games during the 2001-2002 seasons were used in the study. Win/loss, weather, TV, and other variables were included to analyze the data. The data showed attendance rate decreased based on distance. Games within 200 miles typically had high attendance rates, but a drop-off in attendance was apparent beyond that distance. Whenever the only southern school was the home school this decay was not experienced because people would use the trip as a vacation. Surprisingly, the data showed that the fans of winning teams were more affected by distance than losing team fans. The attendance of losing teams fans seemed to only waver based on the team's in-conference record at game time. When the team was playing the champion team from the previous season, attendance was slightly higher than other games as well. Some data also showed that the visiting team fan attendance rate was higher when the fans could use the trip for vacation, even if just for a day trip. Games around the holidays such as thanksgiving gave the fans a chance to travel for the weekend. The most significant variable found during Chi-Square analysis was that success of the team and external benefits of game location are powerful factors affecting visitor attendance rates.

Leonard (2005) showed that conference teams should be selected with distance in

mind because ticket sales are extremely affected by the distance that the fans have to travel. Therefore conference schools and non-conference games should be close. Losing teams experience less fan support when traveling, and winning teams experience less fan support when traveling long distances. If the games are closer, the team has more fan support and more ticket revenue will be generated.

### **Effects of Service Quality on Female Satisfaction with University Sporting Events**

Wiid & Cant (2012) examined the satisfaction of female spectators at university sporting events based on the service quality of the stadium. Most spectators come to athletic events primarily to support the team. The reasons for attending are numerous. The researchers were interested in investigating whether the service provided by the stadium workers effected the perception and satisfaction of the people who attended the games. Hospitality of the stadium could be a limiting factor to whether people want to attend, and this was the primary focus.

Wiid & Cant used questionnaires given to females who attended at least two basketball or soccer games at the university. A 46-item questionnaire was used by the researchers to collect data. Subjects were chosen at random, but had to have attended at least two of the events to qualify to participate. The subjects answered the questionnaire using the 5-point Likert scales, ranging from strongly disagree to strongly agree. Many of the respondents rated many of the qualities as “neither agree nor disagree.” This could be because the responders did not even interact with the employees enough to have an opinion. However, tangibles, access, and security of the stadium all were rated at least 40% or higher with a positive or “agree” response. On the other hand, responsibility and

reliability received the lowest ratings from those who responded. Overall, female respondents did not seem to have an opinion of the staff at the stadium. Some of the satisfaction of the spectators is out of the control of those over marketing for these spectator sports. Thus, time needs to be spent researching which factors are controllable and what is not controllable, to determine where marketers need to focus their efforts.

### **The Effects of Title IX**

One of the biggest events in the history of public education and indirectly on collegiate sports is the implementation of Title IX. This was a law intended to prohibit discrimination in educational programs based on gender. This includes student activities, admissions, advising, counseling, health services, athletics, and any other policies at the institution of public education. Mak (2006) further explained the Title IX law and the effect it has had on female sports.

Mak (2006) explained that Title IX was signed into law by President Richard Nixon to end discrimination based on gender in publicly funded educational institutions. There were three parts of this law that were extremely important. These included Scholarships, Equivalence in Athletic Benefits, and Effective Accommodation of Student Interests and Abilities. Scholarships were required to be given in proportions based on the number of males and female athletes. For equivalence in athletic benefits, there must be sufficient equipment, scheduling, travel, coaching, tutoring, locker rooms, medical facilities, housing and dining facilities/services, and publicity for both male and female sport teams. Lastly, for effective accommodation of student interests and abilities, the number of athletes of the underrepresented sex must be proportional to the undergraduate

enrollment, there must be a continued growth and development of the sport of the underrepresented sex, and the existing program must effectively accommodate the interests and abilities of both sexes.

Mak (2006) demonstrated that a college must have an athletic program that is equal and fair to both male and female athletes. With the addition of football as another traditionally male sport, there must be special attention paid to ensure that females are not given an unequal chance to participate in sports at that college. A football team traditionally has around 50-60 members, and therefore is much larger than any other team in an athletic department, and therefore the opportunity for participation must be evaluated to determine whether the female to male ratio will match the undergraduate enrollment at the school with the addition of a football team. By having fairly equal teams in relation to females and males, fans will be able to support both teams by attending their games and in cheering on the team.

### **Effects of Seat Location on Fan Aggression**

One safety concern about sporting events is fan aggression and loss of control over the fans, especially if there is a chance alcohol is involved. End and Foster (2010) investigated the relationship between ticket costs, seat location, identification with the team, and fan aggression based on these factors. It was expected that those who sat closer to the game and paid more to attend would be more aggressive towards the athletes and officials.

End and Foster (2010) examined 150 subjects, 51 female and 99 male. The subjects were undergraduate students at a Midwestern university. The students read a

scenario concerning a fiction sporting event and answered a *Hostile and Instrumental Aggression of Sport Questionnaire* to record how they feel they would have responded in the given situation. The subjects were given a random close or far seat assignment with a low or high cost per ticket. The subjects then answered the questions concerning their feelings when seated at that position. The results were surprising for the study. Males had more aggression overall than women, but when controlling for gender, there was no difference in aggression depending on ticket cost or seat location. The large difference in the results was that the fans that significantly identified with the team were significantly more aggressive than those who didn't identify with the team. One explanation of why this may be is that many contribute the "home court experience" or the loud crowd support as a whole, as opposed to individual fans. This being the case, the fans in the back of the crowd contribute just as much to the overall sound of the crowd as the fans in the front right near the field or court. This led the researchers to believe that no matter where fans sit, they will be just as aggressive or just as calm wherever they are. Therefore, staffing for an event should be equally spaced throughout the area to control the fans actions. If fans are getting unruly, the staff should be close at hand to control the situation so nothing serious comes up in regards to sportsmanship of fans.

### **Sportsmanship of Fans in College Basketball**

During athletic competitions, there is always going to be sportsmanship involved. Rudd and Gordon (2010) examined the sportsmanship attitudes of fans at basketball games. At times, the fans are simply yelling and screaming in support of their team. At other times, the fans are yelling at and trying to distract the other team. In sporting

competitions, there must be control of the fans and what is said to the coaches, referees, and players by the fans because there can be confrontation or arguments that occur because of the negative sportsmanship.

Rudd and Gordon used a various techniques to evaluate fans' sportsmanship at the basketball games at this major Southeast Division-I school. The first technique used was interviewing 10 students concerning their sportsmanship. These 10 students were highly identified with the basketball team, and were part of the fan group who attended these games. The other technique used was a questionnaire that was sent out to the 1,509 members of the fan group of the basketball team. 198 useable questionnaires were returned to the researchers. Results showed a large array of sportsmanship levels. The cheers identified that the fan group performed varied from positive/non-malicious to heckling opponent to heckling the referees. The vast majority of the fan group seemed to understand the general idea of sportsmanship however. Many identified that the moral values that are most important to sportsmanship are respect, fair play, nice/polite, honor, integrity, and having a good attitude. Many did however identify positive sportsmanship understanding, but noted that they performed some negative cheering that was distracting or heckling to the other team or referees. The primary message from this study was that all of the interviewed subjects thought that it is legitimate to win a game by cheering in a distracting manner. This shows that the subjects either didn't truly understand sportsmanship, they didn't value it very much, or that they answered the other questions throughout the survey in a way that would be socially acceptable.

Rudd and Gordon (2010) found that fan control must be of utmost concern in

regards to a stadium for a college football team. There will almost always be fans that, whether they understand and value sportsmanship, will have negative emotions poured out against the opposing team and referees in athletic competitions. Especially when there may be alcohol involved before and/or during the game, emotions can easily run high at college football games. When the negative phrases, cheers, and other demonstrations against the teams and referees begin, there is always the risk of confrontation, fights, etc. Special attention should be paid to keep the fans of opposing schools away from each other in some way, or to have enough staffing to keep the fans under control. There might be a need for sportsmanship education program to teach the fans how to have positive sportsmanship at the games to decrease the chances of problems occurring at the games. Another consideration for the schools and athletic department could be to install and encourage rules concerning language, and the things that are allowed to be yelled at games. This could reduce nasty, negative comments being made that may affect the performance of the athletes.

### **Importance of Audience Feedback on Performance**

Home field advantage and the effects of the crowd has always been a big discussion in regards to college athletics in general. Fan support at games has often been referred to as the “sixth man” at a basketball game or the “twelfth man” at football games. Having fans in the seats making noise can bolster your team’s confidence, or even cause the opposing team to feel uneasy about their play and confidence. Epting, Riggs, Knowles, and Hanky (2011) researched the effects of fans cheering, jeering, and



being silent during sporting events. The goal was to find out whether the cheering made the athletes perform better, worse, or if it had no effect.

Epting et al. (2011) had subjects volunteer to participate as athletes and were able to find 32 athletes at a Division-III all-male college who wanted to participate. The audience for the study was composed of students from an introductory psychology class and a campus fraternity who volunteered to participate. The audience was controlled to a group of 10 members during each athlete's performance and they were randomly assigned a single cheer or jeer to use during each condition. During the silent trials, the audience was present but remained silent. The baseball athletes were to pitch a ball into a 30 inch tall, 17 inch wide target zone, the basketball athletes were to shoot a regulation free throw, and the golfers were to aim at a flag that was 100 yards away to get as close as possible. Each athlete performed their skill 30 times, with 10 trials under each condition.

The results showed that there was no significant difference in the performance of the basketball athletes between conditions. The baseball players performed significantly worse during the jeers condition than either of the other two conditions but there was no significant difference between the cheers condition and silence. The golfers performed significantly worse during both the cheers and jeers conditions than the silent condition, but there was no significant difference between the cheers and jeers conditions. These results show that there is a significant difference between how athletes respond to their audience based on the sport they are competing in. Obviously, the environments between these sports are very different. Thus, the fan noise and attitude will significantly affect

how the player is able to perform based on the sport. Due to the idea that football is a loud sport where there is always going to be crowd noise, whether positive or negative, at the game, the athletes that will compete may benefit from having open practices where fans can come and make remarks about the athletes while they are practicing. This will give the athlete a game-like environment, although on a very small scale, as if they have an audience. There must be a considerable effort put forth to ensure that there are many home-team fans at the football team's games. Thus, they will have the positive cheering of the home team instead of the jeers of the visiting team which would likely have a more substantial fan base that is loyal because of their past performance.

### **Fan Alcohol Consumption at College Football Games**

Glassman, Braun, Reindl, and Whewell (2011) examined the rates of alcohol consumption by the fans at college football games. Many times, alcohol is consumed while tailgating prior to attending a football games. A lot of the times, this is even by underage students. This is especially true on days when there is a highly important game such as homecoming, rival games, bowl games, or championship games. This issue is of great concern for university officials for the sake of keeping everyone safe at games and for staffing enough personnel and security officials at the game.

Glassman et al. (2011) had subjects report how much they drank by using a 19 question survey. There were 249 students, 99 alumni, and 103 visiting fans were the three largest groups that participated in the survey, while a total of 536 useable surveys were completed prior to a total of five football games. Not only did students make up the largest group of those who completed the survey, but 17% of them (presumably students)

were under the legal drinking age. The subjects were then asked to blow in a breathalyzer. The results were then recorded on the surveys. The mean Blood Alcohol Content (BAC) recorded over the five games was .054 mL/L. The mean BAC as reported by the subjects was closer to .072 ml/L based on the body weight and the time it took to consume the alcohol. 90% of the people who took the survey had consumed alcohol that day. The subjects also vastly overestimated the number of people at the game who were over the legal drinking limit by 2.5 times the actual number.

Glassman et al. (2011) showed that there is a very high amount of alcohol consumption overall of fans at college football games. If generalized to 90% of fans that consume alcohol at college football games, there can be a very high risk of alcohol related injuries and other problems. Alcohol education events would likely benefit the fans who attend games on safe drinking, as well as designated areas that drinking is legal could be established to minimize the widespread drinking that occurs at tailgates. During the alcohol education, the true statistics concerning the amount of alcohol students consume should be outlined. This is supported by the overestimation of those who had consumed alcohol during these games during this study. Many students feel pressured to drink more to fit in with their peers because they feel that their peers are consuming large quantities of alcohol, while in reality they aren't. When establishing football at a school, things to minimize these alcohol-related incidents and the consumption of alcohol should be considered to ensure the safety of all who are in attendance at football games, as well as keeping the student athletes' safety as a top priority.

### **Student Athlete Alcohol Consumption**

A lot of student athletes are seen to be high volume alcohol consumers. Athletes have reported greater alcohol consumption than non-athletes, but they face much higher consequences and problems than the non-athletes. These problems include a higher risk of dehydration, impeded muscle recovery, and a higher risk of injury, not to mention the potential trouble with the law and loss of scholarships with the school if caught drinking illegally. Weaver et al. (2013) examined the relationship between sport achievement motivation and alcohol consumption.

Weaver et al. (2013) established what factors were related to increased alcohol consumption for the athletes. These factors included such things as off-season status, leadership roles, athlete-specific motives, and sport achievement orientation. 263 athletes completed a Sport Orientation Questionnaire to investigate the athletes' achievement orientation in relation to sports as well as measures of alcohol consumption and problems. The results of the questionnaires showed that Competitiveness, Win Orientation, and Goal Orientation were all associated with the use of alcohol but were not related to alcohol-related problems.

With the addition of a football team at a university, special care must be taken to ensure the safety of the athletes. With 50-60 young men just obtaining their freedom from constant parent supervision and the high feeling of being an athlete, there is a high risk of participating in activities related to alcohol that can lead to consequences for the athlete. Based on Weaver et al. (2013), the athletes on university teams must be kept under close supervision by the coaches and other school officials for possible problems, especially during the weekend, off-season, or any other long breaks. These times are high risk for

the athlete to be consuming alcohol which can lead to consequences for the athlete and, indirectly, consequences for the team and coaches. These athletes will need guidance to avoid illegal consumption of alcohol and in making good decisions for the betterment of their own lives and the team's chance for success.

### **Summary and Conclusions**

Overall, many factors must be considered when adding a football team as shown through the literature. Spectators must feel appreciated, identify with the team, and have a positive relation with the team to attend the games (Kim, Trail, & Magnusen, 2013). The fans who attended the games and felt that they identified with the team seemed to attend and represented high consumption of team merchandise. When considering a new football team, behaviors regarding the other athletic teams and identification with these teams must be analyzed. These factors were some of the main points focused on in the survey which was used for this study.

## **Chapter Three**

### **Procedures**

#### **Purpose of Study**

The purpose of this study was to analyze the perceptions of current students on whether a university should start a Division 1 National Collegiate Athletic Association football program.

#### **Selection of Subjects**

This study was based on the responses of students who were enrolled in a university in the Southeast region of the United States. This study was approved by an Institutional Review Board (Appendix A). The subjects were given a written statement prior to beginning the survey. The subjects had to agree to take the survey, and be 18 years or older. The subjects were selected by using various basic instruction and health courses in which the professor allowed researchers to share the link for the survey prior to or immediately following class time. The link for the survey was also disseminated through a campus-wide listserv twice a week for three weeks. The survey was administered using Qualtrics (2013) online survey program, and took subjects 5 to 10 minutes to complete.

#### **Design of the Study**

This study was a descriptive, cross-sectional study. The subjects were asked to complete an online survey based on their perceptions of beginning a football program at their university. The independent variable in the study was the initiation of a football program, and the dependent variables were the students' likelihood to attend football

games and to purchase more university merchandise.

### **Instrumentation & Data Collection**

Willing subjects completed a survey (Appendix B) which included Likert Scale questions and multiple choice answers. The researchers used a modified version of The Manual for the Points of Attachment Index by Shapiro and Trail (2013). The Manual for the Points of Attachment Index has been used to measure points of attachment to the players, team, coach, and community of the fans of college basketball and football, and professional golfing events.

Seven items asked demographic information, including inclusionary criteria to participate. If the participant did not meet inclusion criteria, they were sent to the end of the survey and not allowed to continue. Demographic information included: age, enrollment status, year in school, ethnicity, gender, and residency status (on or off campus).

Previous sport participation and previous sport attendance behaviors were addressed with five items. Questions included whether they had played sports in the past, which sports they had played in the past, whether they had attended sports in the past at the university, which sporting events they had attended at the university, and whether they had attended a football game in the past at any level (high school, college, professional, etc.).

Fan Attachment Rating was measured with 16 items that asked the subjects their perceptions concerning current sports at the university. Example questions included: "I consider myself a fan of all of the university's athletic teams," and "Being a fan of the

university's athletic teams is important to me." Responses to the questions ranged from strongly disagree (1) to strongly agree (5). Items were summed for a total score. Scores ranged from 11-55, with higher scores indicating a higher level of fan attachment to the university's athletics. This survey indicated good internal consistency and construct reliability (Shapiro & Trail, 2013).

Future intentions in regards to the creation of a football team were addressed through 10 items. These questions included the subjects beliefs toward whether they would attend football games if the university got a team, how much they would be willing to pay for the games, and whether they would be more supportive of the athletics program.

### **Data Analysis**

The data was then analyzed using Statistical Package for the Social Sciences (IBM, 2012) by IBM. Frequencies were run to determine the percentages of the sample based on gender, age, ethnicity, college of study, classification, and residency. Independent *t*-tests were used to compare the differences in response based on those who had attended past university athletic events, those who have and have not played organized sports in the past, gender, classification, and athletes. A test of regression was used to determine the relationship between FAR, likelihood to attend football games, and likelihood to purchase university merchandise.

### **Internal and External Validity Concerns**

This study did have validity concerns that should be addressed. Internal validity concerns included using a volunteer sample. Additionally, all surveys present a validity



concern of self-report. The survey's nature of being self-report was of concern because of the chances of changing their responses to fit the expected results or even so the subject feels like they would fit the norm.

This study was performed using subjects from one university in the Southeast region of the country that did not currently have a football team. This limited generalizability to other schools that would be in a similar situation.

## Chapter Four

### Manuscript

#### Background

College football is the most popular college sport. Many colleges and universities that do not have a football program find themselves pondering whether to add one. When discussing a new college team, however, the topics shift toward how to get fans in the seats and whether the team will be supported, especially by the students. Data on students' past attendance at sporting events, fan identification, and points of attachment to the team drive theories as to whether students will support the team (Shapiro et al., 2013).

In the past 10 years, many colleges (around 60) have added college football, including those in the National Collegiate Athletic Association and the National Association of Intercollegiate Athletics. In a study conducted by the National Football Foundation in 2014, the number of schools competing in college football increased by 173 schools from 1978 to 2013, an average increase of 4.9 schools per year (National Football Foundation, 2014). Increased student-athletes also correlates to an increase in student body for the university. The factors shown to correlate to why an athlete chooses a particular school include factors such as; proximity to home, location, facilities, and coaches with whom they connect (Klenosky et al., 2001)

In order for these new football teams to succeed year to year, a strong support system must be evident. It is important that current students support the program, as this will increase support from alumni and surrounding community as students graduate and

enter the work force. Kim et al. (2013) showed three key factors that influenced attendance to sporting events, which include achievement, aesthetics, and identification with the team. This study aimed at determining whether the students at the university identified with the athletics program already, and if this would translate to the football program if it was started. Through beginning the team, the males at the school will likely be drawn in by simply having the team, while the events surrounding the team such as pre-game tailgates, pep rallies, and a student section will draw the women in to support the team (Dietz-Uhler et al., 2000). The purpose of the current study was to analyze the perceptions of current students regarding the college beginning a new football team.

## **Methods**

### **Procedure**

This study was based on the responses of students who were enrolled in a university in the Southeast region of the United States and was conducted over the course of three weeks in October 2015. This study was approved by an Institutional Review Board (Appendix B). The survey was administered using Qualtrics (2013) online survey program, and took subjects 5 to 10 minutes to complete. The subjects were given a written statement prior to beginning the survey, had to agree to take the survey, and were required to be 18 years or older. The subjects were selected by using various basic instruction and health courses in which the professor allowed researchers to share the link for the survey prior to or immediately following class time. The link for the survey was also disseminated through a campus-wide listserv twice a week for three weeks.

Subjects were recruited through basic instruction classes, health classes, and through the campus-wide listserv.

## **Subjects**

The sample used for analysis included 833 students. The majority of the sample were female ( $n = 75\%$ ), and white ( $n = 65\%$ ) or African American ( $n = 27\%$ ). Other demographic information is included in Table 1.

## **Instrumentation**

Willing subjects completed a survey (Appendix A) which included Likert Scale questions and multiple choice answers. The researchers used a modified version of The Manual for the Points of Attachment Index by Shapiro and Trail (2013). The Manual for the Points of Attachment Index has been used to measure points of attachment to the players, team, coach, and community of the fans of college basketball and football, and professional golfing events.

Seven items asked demographic information, including inclusionary criteria to participate. If the participant did not meet inclusion criteria, they were sent to the end of the survey and not allowed to continue. Demographic information included: age, enrollment status, year in school, ethnicity, gender, and residency status (on or off campus).

Previous sport participation and previous sport attendance behaviors were addressed with five items. Questions included whether they had played sports in the past, which sports they had played in the past, whether they had attended sports in the past at

the university, which sporting events they had attended at the university, and whether they had attended a football game in the past at any level (high school, college, professional, etc.).

Fan Attachment Rating was measured with 16 items that asked the subjects their perceptions concerning current sports at the university. Example questions included: “I consider myself a fan of all of the university’s athletic teams,” and “Being a fan of the university’s athletic teams is important to me.” Responses to the questions ranged from strongly disagree (1) to strongly agree (5). Items were summed for a total score. Scores ranged from 11-55, with higher scores indicating a higher level of fan attachment to the university’s athletics. This survey indicated good internal consistency and construct reliability (Shapiro & Trail, 2013).

Future intentions in regards to the creation of a football team were addressed through 10 items. These questions included the subjects beliefs toward whether they would attend football games if the university got a team, how much they would be willing to pay for the games, and whether they would be more supportive of the athletics program.

### **Data Analysis**

The data was then analyzed using Statistical Package for the Social Sciences (IBM, 2012) by IBM. This program is used by many fields of study to analyze statistics. Frequencies were run to determine the percentages of the sample based on gender, age, ethnicity, college of study, classification, and residency. Independent *t*-tests were used to compare the differences in response based on those who had attended past university

athletic events, those who have and haven't played organized sports in the past, gender, classification, and athletes. A test of regression was used to determine the relationship between FAR, likelihood to attend football games, and likelihood to purchase university merchandise.

### **Results**

Out of the 939 surveys that were started by students, 106 were either unfinished or unusable due to incomplete submissions. As seen in Table 1, the sample included 833 subjects (88.7% of responses could be used) Full sample characteristics can be found in Table 1.

In regards to past sports played by the subjects, 33.0% had played basketball, 28.6% played soccer, 22.0% competed with track and field, and 42.6% had competed in some other sport, such as cheerleading, cross country, golf, swimming, and wrestling (Table 2). Only 243 subjects reported that they had not attended any of the university's past athletic events. The remaining subjects reported having attended at least one of the university's athletic events (Table 3). The Fan Attachment Rating was also calculated for the subjects ( $M = 41.509$ ,  $SD = 8.679$ ), with only 79 subjects having a score of 30 or less.

Independent *t*-Tests were conducted to compare the differences between many of the groups. The first t-test that was conducted compared those who had attended in the past with those who had not attended in regards to their likely intentions in the future if the university was to start a football team. The dependent variables measured included the subjects' likelihood to attend future university football games, to attend other athletic

events, to stay over the weekends to attend games, to join the school's fan club, to attend pre-game tailgates, and to purchase more university merchandise. Results suggested that those who had attended past events are more likely to attend future university football and other athletic events, to stay over the weekend, to join the school's athletic fan club, to attend pre-game tailgates, and to purchase university merchandise than those who have not ( $p < .001$ ), however both groups showed a positive intention in regards to all six variables (Table 4).

Another independent *t*-test was conducted to compare those who had played sports in the past to those who have not played sports in regards to the same six dependent variables that were tested. The results of this test showed that those who had played organized sports before were significantly more likely to feel that they would attend future university football games ( $p = .003$ ), other athletic events ( $p < .001$ ), future tailgates ( $p = .002$ ), and that they would buy more university merchandise ( $p = .018$ ) if the school began a football team. There was no significant difference between the two groups as to whether they would stay over the weekends to attend football games or if they would join the university's athletic fan club. However, both those who had played organized sports and those who did not play organized sports did demonstrate positive intentions in regards to all six variables tested (Table 5).

An independent samples non-parametric test was then performed to determine the likelihood that the sample felt they would attend future football games and whether they would buy merchandise upon beginning a football team. The results showed a mean ranking of 4.04 ( $p = .054$ ) and 3.88 ( $p = .022$ ) respectively out of a maximum value of 5.

Although the first level was not significant, it seems that overall, the sample would support a football program.

A regression test was then performed to determine if the subjects rating of their likelihood to attend football, likelihood to purchase merchandise, and their Fan Attachment Rating were related. Results indicated a significant model for predicting the Fan Attachment Rating. The resulting equation was  $FAR = 23.432 + 1.512 (\text{Likelihood to Buy Merchandise}) + 3.028 (\text{Likelihood to Attend})$  ( $p < .001$  for all coefficients). This meant that the fan attachment rating could be determined by inputting the 1-5 rating of likelihood to buy merchandise and likelihood to attend into the equation above. The  $R$ -value for the regression was .662 indicating a high degree of correlation and an  $R^2$  of .438.

Independent T-tests were conducted comparing gender (Table 6), athletes (Table 7), and upperclassmen vs. underclassmen (Table 8). Among those surveyed, there were no significant differences between males and females except that females would likely attend more athletic events outside of football if a football team were started at the university. There were also no significant differences between the athletes' behaviors regarding starting a football team. The differences were apparent when comparing underclassmen (1<sup>st</sup> and 2<sup>nd</sup> year students) and upperclassmen (3<sup>rd</sup> year and higher). The underclassmen significantly scored higher on all 6 future behavior variables.

### **Discussion**

The purpose of this study was to analyze the perceptions of current students on whether a university should start an NCAA college football program. The researchers



found support for the research hypotheses. Those who had attended past sporting events were found to be more likely to want to attend future university football games and showed a great intention to purchase university merchandise if the school started a football program. This finding is consistent with previous research that found identification with the team (Kim et. al, 2013) and past attendance (Shapiro et al., 2013) were significant predictors of future behavior in regards to attendance at future events. We also found that those with a higher FAR were more likely to intend to attend games and to purchase merchandise in the future. This finding is also consistent with the past findings that identification with the team can significantly predict future behaviors (Kim). Lastly, we found that the POS group were also more likely to want to attend football games and to purchase merchandise. There was no previous research found that analyzed this relationship between playing sports and future intentions to attend athletic events and to purchase merchandise of the organization.

Analysis of the data showed many important details concerning the initiation of a football program at this university. The first finding showed that of over 800 surveyed, only 79 of the subjects had less than a 30 for their FAR score. This demonstrates that there is a high level of attachment and identification with the university's current athletic program. On the basis of football game attendance, 70% (n = 583) of the students surveyed said they would attend 5 or more games and 45% stated they would pay \$10 or less per ticket to attend the football games. At \$10 per ticket for 45% of the schools population, that is a \$27,000 revenue on tickets from just the student body alone per game. At only 5 games for those students, that is a \$135,000 revenue, plus the additional

games that those students do attend. Additionally, 77.1% of those surveyed said they would attend university football games, while 72.9% said they would attend other athletic events if the university began a football team. Of the subjects, 66.6% said they would stay over the weekend to attend football games, 57.7% said they would join the athletics' fan club, 78.2% would attend tailgates, and 68.3% would purchase more university merchandise if a team was created. These numbers show a high amount of support for if the university were to begin a football program.

Throughout this study, there were strengths and limitations that should be addressed. The strengths of the study included a large sample size that was diverse and representative of the population at the university. The demographics of our study were similar to the make-up of the university including class, gender, and race. This supports the external validity of the sample. A large percentage of those surveyed were in support of adding a football team, which may not be truly representative of the student body population. Limitations of the study included a self-report survey and volunteer sample. Data was collected for a short period of time (3 weeks) although the response and completion rate was high. In the future, researchers could conduct the study for a longer period at more universities. Additionally, understanding the perceptions of the faculty, staff, alumni, and community members surrounding the university should be a focus of future research.

Overall, our results show that students at this university would be willing to support the addition of a football program, through attendance to games, purchasing of merchandise, and support of other athletic teams.



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**Table 1.**  
***Sample Demographics***

Characteristics	<i>n</i>	%	<i>M</i>	<i>SD</i>	<i>MISS</i>
Gender					
Male	212	25.5			
Female	621	74.5			
Age	833		23	.884	0
College					
Arts & Sciences	405	48.6			
Business Administration	96	11.5			
Education	252	30.3			
Visual & Performing Arts	51	6.1			
Undeclared	29	3.5			
Year in school					0
First Year Undergraduate	302	36.3			
Second Year Undergraduate	179	21.5			
Third Year Undergraduate	130	15.6			
Fourth Year Undergraduate	144	17.3			
Fifth or More Year Undergraduate	31	3.7			
Graduate or professional	47	5.6			
Race/Ethnicity					0
White/Caucasian	541	64.9			
African American	226	27.1			
Hispanic/Latino	18	2.2			
Asian/Pacific Islander	8	0.9			
American Indian/Alaskan/Hawaiian	3	0.4			
Other	37	4.4			
Living Arrangement					0
On-Campus Resident	524	62.9			
Off-Campus Commuter	309	37.1			

**Table 2***Summary of Past Behaviors in Attending Sports*

Sport Attended	<i>f</i>	% Attended (N=833)
Men's Basketball	370	44.4
Women's Basketball	198	23.8
Baseball	152	18.2
Cross Country	44	5.3
Lacrosse	63	7.6
Men's Soccer	306	36.7
Women's Soccer	208	25.0
Softball	64	7.7
Men's Tennis	32	3.8
Women's Tennis	29	3.5
Volleyball	294	35.3
None of the Above	243	29.2



**Table 3***Summary of Past Sports Played*

Sport Played	<i>f</i>	% Played (N=833)
Baseball	106	12.7
Basketball	275	33.0
Football	126	15.1
Soccer	238	28.6
Softball	144	17.3
Tennis	82	9.8
Track and Field	183	22.0
Volleyball	153	18.4
Other	355	42.6

\*674 Subjects reported having played a sport in the past. “Other” responses were predominately Cheerleading, Cross Country, Golf, Swimming, and Wrestling.

**Table 4*****T-Test Past Behaviors***

Variables	Attendance	<i>n</i>	<i>M</i>	<i>p</i>
Likely to Attend	No	237	3.65	
Likely to Attend	Yes	581	4.20	.000
Football	No	237	3.31	
Football	Yes	581	4.14	.000
Others	No	347	3.27	
Others	Yes	581	3.99	.000
Likely To Stay	No	237	3.18	
Likely To Stay	Yes	581	3.76	.000
Weekends	No	237	3.62	
Weekends	Yes	581	4.25	.000
Likely Join Fan Club	No	237	3.54	
Likely Join Fan Club	Yes	581	4.01	.000
Tailgates	No	237	3.54	
Tailgates	Yes	581	4.01	.000

**Table 5***T-Test Played Organized Sports*

Variables	Attendance	<i>n</i>	<i>M</i>	<i>p</i>
Likely to Attend	No	154	3.82	
Football	Yes	664	4.09	.003
Likely to Attend Others	No	154	3.47	
Others	Yes	664	4.00	.000
Likely To Stay	No	154	3.58	
Weekends	Yes	664	3.83	.225
Likely Join Fan Club	No	154	3.19	
	Yes	664	3.69	.576
Likely Attend Tailgates	No	154	3.74	
	Yes	664	4.15	.002
Likely to Purchase	No	154	3.65	
	Yes	664	3.93	.018

**Table 6***Gender Comparison*

Variables	Gender	<i>n</i>	<i>M</i>	<i>p</i>
Likely to Attend Football	Male	208	3.99	.221
	Female	610	4.06	
Likely to Attend Others	Male	208	3.82	.012
	Female	610	3.92	
Likely To Stay Weekends	Male	208	3.78	.324
	Female	610	3.78	
Likely Join Fan Club	Male	208	3.63	.107
	Female	610	3.58	
Likely Attend Tailgates	Male	208	4.03	.093
	Female	610	4.8	
Likely to Purchase	Male	208	3.85	.210
	Female	610	3.89	

**Table 7***Athlete Comparison*

Variables	Athlete	<i>n</i>	<i>M</i>	<i>p</i>
Likely to Attend Football	Yes	65	4.23	.576
	No	753	4.03	
Likely to Attend Others	Yes	65	4.35	.352
	No	753	3.86	
Likely To Stay Weekends	Yes	65	4.09	.113
	No	753	3.76	
Likely Join Fan Club	Yes	65	3.85	.613
	No	753	3.57	
Likely Attend Tailgates	Yes	65	4.26	.379
	No	753	4.05	
Likely to Purchase	Yes	65	3.91	.639
	No	753	3.87	

**Table 8***Class Comparison (Underclassmen vs. Upperclassmen)*

Variables	Class	<i>n</i>	<i>M</i>	<i>p</i>
Likely to Attend Football	Under	469	4.37	
	Upper	349	3.60	.000
Likely to Attend Others	Under	469	4.20	
	Upper	349	3.49	.000
Likely To Stay Weekends	Under	469	4.16	
	Upper	349	3.27	.000
Likely Join Fan Club	Under	469	4.00	
	Upper	349	3.05	.001
Likely Attend Tailgates	Under	469	4.32	
	Upper	349	3.73	.000
Likely to Purchase	Under	469	4.16	
	Upper	349	3.50	.000

**APPENDICES**

## Appendix A

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IRB #  
TO BE COMPLETED BY SPAR

**Winthrop University**

**REQUEST FOR REVIEW OF RESEARCH INVOLVING HUMAN SUBJECTS**  
**Institutional Review Board**

RESEARCHER OF RECORD: Zachary Ringlein COLLEGE/DEPARTMENT: PFSH PHONE NUMBER: HOME [REDACTED] WORK: [REDACTED] EMAIL: ringleinz2@winthrop.edu CELL PHONE: [REDACTED] ADDRESS: [REDACTED] STATUS: <input type="checkbox"/> Faculty or Staff (If a student, complete faculty advisor section) <input checked="" type="checkbox"/> Graduate Student <input type="checkbox"/> Undergraduate Student	CO-RESEARCHERS: Dr. Joni Boyd, Dr. Janet Wojcik, Dr. David Schary, Dr. Jason Chung FACULTY ADVISOR: Joni Boyd ADVISOR PHONE: HOME: [REDACTED] WORK: [REDACTED] EMAIL: boydj@winthrop.edu CELL PHONE: [REDACTED] ADDRESS: [REDACTED]
TITLE OF RESEARCH: ANALYZING STUDENT PERCEPTIONS OF STARTING A NEW FOOTBALL PROGRAM AT A UNIVERSITY	
DATES OF THE RESEARCH PROJECT: Approval Requested for Start Date: 10/6/2015 (The requested start date should be at least 2 weeks after the next scheduled meeting of the IRB) End Date: 10/6/2016 (Maximum of one year; must be renewed annually)	
IS THIS RESEARCH BEING FUNDED BY RESEARCH GRANT? <input type="checkbox"/> YES; Sponsor: <input type="checkbox"/> Funding Applied for; Sponsor: <input checked="" type="checkbox"/> NO	
1.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is this activity being carried out by student as a classroom assignment to be reviewed by the faculty member. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Will the information gathered or developed in this activity be used in a presentation or publication outside of the classroom? If you checked yes to both questions above, please explain how the information will be used outside of the classroom: I intend to present the findings at a conference or have the findings published for the school's purpose going forward.
2.	INDICATE THE TYPES OF MEMBERS OF THE RESEARCH TEAM WHO WILL HAVE DIRECT CONTACT WITH HUMAN SUBJECTS: <input checked="" type="checkbox"/> FACULTY MEMBER <input type="checkbox"/> STAFF MEMBER





	<input type="checkbox"/> UNDERGRADUATE STUDENT <input checked="" type="checkbox"/> GRADUATE STUDENT <input type="checkbox"/> OTHER; SPECIFY:																		
3.	<p>A. BRIEFLY DESCRIBE THE PURPOSE OF THE RESEARCH IN NON-TECHNICAL LANGUAGE: The purpose of this research is to analyze how the current students of Winthrop University feel towards the school starting a college football program.</p> <p>B. DESCRIBE RESEARCH PROTOCOL OR METHODOLOGY TO BE USED: I will be using an online survey based on The Manual for the Points of Attachment Index by Shapiro &amp; Trail. The survey will be administered through Qualtrics website and is designed to find out whether the students currently identify and attend Winthrop University athletics, and whether they would be interested in a college football team at Winthrop University.</p>																		
4.	<p>EXPLAIN BRIEFLY BUT COMPLETELY WHAT TASKS OR ACTIVITIES THE SUBJECTS IN THIS RESEARCH WILL BE DOING (If a survey/questionnaire is to be used, state how many questions will be asked and the expected time to complete the survey): The subjects will be taking a survey of approximately 37 questions including demographic questions. The survey should take approximately 10 minutes.</p>																		
5.	<p>DESCRIBE SUBJECTS FOR THIS RESEARCH, INCLUDING A STATEMENT OF WHO WILL BE RECRUITED AND THE ANTICIPATED POPULATION SIZE: Current Winthrop students over the age of 18. Must be enrolled at Winthrop, 18 or older, and they must agree to participate. I am hoping to get at least 100 responses minimum.</p> <p>DO YOUR SUBJECTS INCLUDE ANY OF THE FOLLOWING:</p> <table border="0"> <tr> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td>Infants and children younger than 7 years?</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td>Institutionalized mentally impaired people?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td>Students enrolled in your own classes?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td>Students enrolled at Winthrop University?</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td>Prisoners?</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td>Other special populations? Specify -</td> </tr> </table>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Infants and children younger than 7 years?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Institutionalized mentally impaired people?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Students enrolled in your own classes?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Students enrolled at Winthrop University?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Prisoners?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Other special populations? Specify -
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Infants and children younger than 7 years?																	
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6.	<p>DESCRIBE HOW SUBJECTS WILL BE RECRUITED FOR THIS RESEARCH: Basic instruction and all Health 300 classes at Winthrop University will be asked to participate in the survey. Basic instruction classes are activity classes that students choose to participate in as electives and are not required core classes such as Intermediate Basketball, Weight Training, etc. Health 300 is a basic health class that many majors across the University choose to take as an elective or along with their major requirements. Each instructor will be asked if they mind bringing their class to participate after class by using the computer lab in the West Center. I will also be placing flyers on bulletin boards around campus with links to the survey.</p>																		
7.	<p>HOW WILL YOU ASSURE THAT PARTICIPATION OF THE SUBJECTS IS VOLUNTARY? There will be a written statement at the beginning of the survey which will say "By choosing to continue, you agree to take part in the study." Participants also may stop participating in the survey at any point if they do not wish to continue.</p>																		
8a.	<p>CAN THE HUMAN SUBJECT BE DIRECTLY IDENTIFIED BY: <i>(For any responses of "yes" indicate in the space provided how the subject's privacy will be protected.)</i></p> <table border="0"> <tr> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td>Name on Response form:</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td>Photograph:</td> </tr> </table>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Name on Response form:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Photograph:												
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Name on Response form:																	
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Photograph:																	

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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Television/VCR/DVD tapes: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Audiotape: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Coded Research Forms: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Detailed Biographical Data: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Informed Consent, Assent or Parental Permission forms: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Other.
8b.	<p>If you checked yes to any item in 8a; then:</p> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Will personally identifiable data be shared with others outside of this research team? If you checked yes, please explain.
9.	<p>THE RESEARCHER SHALL MAKE EVERY POSSIBLE ATTEMPT TO MAINTAIN CONFIDENTIALITY OF THE RESEARCH AND THE HUMAN SUBJECTS. IF FOR SOME REASON, THE RESPONSES, INFORMATION, OR OBSERVATIONS OF THE SUBJECT BECAME KNOWN TO PERSONS OTHER THAN THE RESEARCHERS, COULD THIS INFORMATION POTENTIALLY PLACE THE SUBJECT AT RISK OF:</p> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No DAMAGE TO HIS/HER FINANCIAL STANDING? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No DAMAGE TO HIS/HER PRESENT OR FUTURE EMPLOYABILITY? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No CRIMINAL OR CIVIL LIABILITY? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PSYCHOLOGICAL/EMOTIONAL PROBLEMS?
	EXPLAIN ANY "YES" ANSWERS AND STEPS THAT HAVE BEEN TAKE TO MINIMIZE RISK:
10.	<p>ARE ANY OF THE TECHNIQUES LISTED BELOW INVOLVED IN THE RESEARCH?</p> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No INVASIVE MEDICAL PROCEDURES? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No NON-INVASIVE MEDICAL PROCEDURES? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No STRENUOUS EXERCISE? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No OTHER PHYSICAL TESTING
	EXPLAIN ANY "YES" ANSWERS AND STEPS THAT HAVE BEEN TAKE TO MINIMIZE RISK:
11a	DESCRIBE HOW LEGALLY EFFECTIVE INFORMED CONSENT WILL BE OBTAINED AND ATTACH A COPY OF THE CONSENT FORM. IF MINORS ARE TO BE USED AS RESEARCH SUBJECTS, DESCRIBE PROCEDURES USED TO GAIN CONSENT OF THEIR PARENT(S), GUARDIAN(S), OR LEGAL REPRESENTATIVE(S). All subjects will be 18 or older and will agree to participation by continuing on from the written statement prior to beginning the survey.
11b	<p><b>WAIVER OF SIGNED INFORMED CONSENT REQUIREMENT</b></p> <p>TO REQUEST A WAIVER OF A SIGNED INFORMED CONSENT, COMPLETE THE FOLLOWING:</p> <p><input type="checkbox"/> The only record linking the subject and the research would be the consent document, and the principal risk will be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern. Section 46.117(c)1</p> <p><input type="checkbox"/> The research presents no more than minimal risk of harm to the subjects, and involves no procedures, for which written consent is normally required outside of the research context. Section 46.117(c)2</p> <p><input type="checkbox"/> The research or demonstration project is to be conducted by or subject to the approval of state or local government officials and is designed to study, evaluate, or otherwise examine (i)public benefit or service programs; (ii)procedures for obtaining benefits or services under these programs; (iii)possible changes in or alternatives to those programs or procedures; or (iv)possible changes in methods or levels of payment</p>



	<p>for benefits or services under those programs; and the research could not practicably be carried out without the waiver or alteration. Section 46.116(c)</p> <p><input checked="" type="checkbox"/> The research involves no more than minimal risk to the subjects, the waiver will not adversely affect the rights and welfare of the subjects, the research could not practicably be carried out without the waiver, and whenever appropriate, the subjects will be provided with additional pertinent information after participation. Section 46.116(d)</p> <p><b>In cases where the documentation requirement is waived, the IRB may require the investigator to provide subjects with a written statement regarding the research.</b></p>
12.	<p>STORAGE AND DISPOSAL OF DATA AND OTHER RESEARCH MATERIALS:</p> <p>A. How and where will the data and other research material be stored until no longer needed? Files will be encrypted with a password on a USB drive only available to the researcher and thesis committee members.</p> <p>B. When will the disposal of data and research materials take place? December 2018</p> <p><i>At a minimum, investigators must maintain research records for at least three (3) years after completion of the research. All records must be accessible for inspection and copying by authorized representatives of the IRB, any federal department or agency supporting the research, and sponsor, if any. (Source: 45CFR46.115) If the Principal Investigator is a student, then the faculty advisor will be responsible for the record retention. If you are a member of a professional association or society, you may be required by their practices to keep records longer than 3 years.</i></p> <p>C. How will data and research materials be disposed ? USB drive will be erased.</p>
13.	<p>INDICATE ON THE CHECK LIST BELOW, ANY DOCUMENTS THAT APPLY TO YOUR RESEARCH AND ATTACH TO THIS PROTOCOL A COPY OF THE APPLICABLE DOCUMENT.</p> <p><input checked="" type="checkbox"/> SURVEY INSTRUMENT AND/OR INTERVIEW QUESTIONNAIRE</p> <p><input type="checkbox"/> INFORMED CONSENT AGREEMENT</p> <p><input type="checkbox"/> PARENTAL OR GUARDIAN PERMISSION FOR A MINOR CHILD TO PARTICIPATE IN A RESEARCH STUDY</p> <p><input type="checkbox"/> ASSENT TO PARTICIPATE IN A RESEARCH STUDY (AGES 7-14 YEARS)</p> <p><input type="checkbox"/> ASSENT TO PARTICIPATE IN A RESEARCH STUDY (AGES 15 - 17 YEARS)</p> <p><input type="checkbox"/> COPIES OF ANY OTHER MAIL TO BE DELIVERED TO RESPONDENTS OR SUBJECTS (E.G. COVER LETTERS, SCRIPTS OF VERBAL INSTRUCTIONS, ETC.)</p>
14.	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No DO YOU CONSIDER THIS RESEARCH EXEMPT FROM REVIEW BY THE HUMAN SUBJECTS COMMITTEE? IF YES, Please check the reason for exemption from the list below:</p>
a.	<p><input type="checkbox"/> Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (a) research on regular and special education instructional strategies; or (b) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods [45CFR46(b)(1)]</p>
b.	<p><input checked="" type="checkbox"/> Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement) survey procedures, interview procedures or observation of public behavior, unless (a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (b) any disclosure of the human subjects' responses outside the research could reasonably place the subject at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability or reputation. [45CFR46(b)(2)]</p> <p>Research involving children (subjects that have not attained the age of 18 years) is not exempt under this category unless the research involves only the observation of public behavior and the researchers do not participate or impact the activities being observed. [45CFR46.401(b)]</p>
c.	<p><input type="checkbox"/> Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior if (a) the human subjects are elected or appointed public officials or candidates for public office; or (b) federal statute(s) without exemption that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter. [45CFR46(b)(3)]</p>



## **Appendix B**

### Analyzing the Perceptions of a University Starting a New College Football Program

You are being invited to participate in a research study that is examining the perceptions of college students towards Winthrop University starting a NCAA college football program. If you choose to take part in this study, you will be asked to complete a survey that will take about 5-10 minutes. This study consists of a series of questions that are all answered online through Qualtrics (2013). As a participant, you will not benefit directly from this study. Winthrop University will benefit by having a better understanding of how college students feel towards gaining a college football program, and whether the program would be supported. This information could help to influence whether or not Winthrop should push for a football program. There are very few risks related to taking part in this study. The only known risk is potential discomfort in answering questions about how you feel towards Winthrop University athletics. However, we expect this discomfort to be mild, if present at all. The information you provide will remain private. Information obtained through this study will only be used by the research staff. All data will be stored using locked computers with a password. Please know that your participation in this study is voluntary. If you choose not to take part in the survey, there will be no penalty. You may quit the study at any time by closing out of the survey. You may also choose not to answer a question without penalty. If you choose not to participate after beginning the survey, the information that has been told to us will be kept private. Your choice to participate or not participate in this study will not reflect on

you as a student of Winthrop University. Your information will be used strictly for this research study only, will not be shared with anyone else, and you will not receive any spam emails related to participation in this study. If you have any questions or concerns about this study, we encourage you to contact Zach Ringlein, Principal Investigator at 864.979.4622; or Dr. Joni Boyd, Thesis Committee Chair at 803.323.4936. You may also call the Office of Sponsored Programs and Research at Winthrop University at 803.777.7095. By choosing to continue, you agree to take part in the study.

Thank you for your interest in the study!

Zach Ringlein

Physical Education, Sport, & Human Performance Department, Winthrop University

What is your age?

- 17 or younger (1)
- 18-19 (2)
- 20-21 (3)
- 22-24 (4)
- 25+ (5)

If 17 or younger Is Selected, Then Skip To End of Survey

Answer If What is your age? 17 or younger Is Not Selected

Are you currently enrolled at Winthrop University?

- Yes (1)
- No (2)

If No Is Selected, Then Skip To End of Survey

Answer If Are you currently enrolled at Winthrop University? Yes Is Selected

What is your gender?

- Male (1)
- Female (2)

How would you describe yourself?

- Native American (1)
- Asian (2)
- African American (3)
- Hispanic/Latino (4)
- White/Caucasian (5)
- Pacific Islander (6)
- Other (7)

What is your current classification at Winthrop University?

- 1st Year Undergraduate (1)
- 2nd Year Undergraduate (2)
- 3rd Year Undergraduate (3)
- 4th Year Undergraduate (4)
- 5th or More Year Undergraduate (5)
- Graduate Student (6)

Please select the option that best describes your status at Winthrop University:

- On-Campus Resident (1)
- Off-Campus Commuter (2)



What college are you a part of at Winthrop University?

- College of Arts & Sciences (1)
- College of Business Administration (2)
- College of Education (3)
- College of Visual & Performing Arts (4)
- Undeclared (5)

Have you ever played organized sports?

- Yes (1)
- No (2)

What organized sport/sports have you played? (Choose all that apply)

- Baseball (1)
- Basketball (2)
- Football (3)
- Soccer (4)
- Softball (5)
- Tennis (6)
- Track and Field (7)
- Volleyball (8)
- Other (9) \_\_\_\_\_

Are you an athlete at Winthrop University?

- Yes (1)
- No (2)

As a student at Winthrop University, which of the following sporting events have you attended?

- Men's Basketball (1)
- Women's Basketball (2)
- Baseball (3)
- Cross Country (4)
- Lacrosse (5)
- Men's Soccer (6)
- Women's Soccer (7)
- Softball (8)
- Men's Tennis (9)
- Women's Tennis (10)
- Volleyball (11)
- None of the Above (12)

Have you ever attended a high school, college, or professional football game?

- Yes (1)
- No (2)

Choose the option that best describes your feelings toward the statements on the left.	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
I consider myself a fan of all of Winthrop University's athletic teams (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being a fan of Winthrop University's athletics teams is important to me (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider myself more a fan of the individual players on Winthrop University's athletic teams than of the entire team (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel a personal sense of achievement when Winthrop University's athletic teams do well (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I feel like I have won when Winthrop University's athletic teams win (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy the drama of close games (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Winthrop University athletic events provide an escape from my day-to-day routine (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy attending sporting events (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy watching a skillful performance in the games (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like having the opportunity to watch a new sports team (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I enjoy socializing with other people when I watch the games (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider myself a football fan (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider myself a college football fan (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy the novelty of a new college football team (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am a fan of college football regardless of who is playing (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would attend football games if Winthrop University started a team (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How many football games would you attend per season if Winthrop University created a football team?

- 0 (1)
- 1-2 (2)
- 3-4 (3)
- Home games (5-6) (4)
- All games (10-11) (5)

How much would you be willing to pay for tickets to attend a Winthrop University football game?

- \$0 (1)
- \$10 or less (2)
- \$25 or less (3)
- \$50 or less (4)
- \$100 or less (5)
- I would be willing to pay any amount (6)

Would you be willing to pay an increased "athletic fee" included in the cost of tuition if Winthrop University were to begin a football program?

- Yes (1)
- No (2)

Answer If Would you be willing to pay an increased "athletic fee" included in the cost of tuition if Winthrop University were to begin a football program? Yes Is Selected

How much of an increase would you be willing to pay in the "athletic fee" if Winthrop University started a football program?

- \$25 or less (1)
- \$50 or less (2)
- \$75 or less (3)
- \$100 or less (4)
- \$101+ (5)
- I would be willing to pay any amount (6)

Choose the option that best describes your feelings toward the statements on the left if Winthrop University were to create a football team.	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
I am likely to attend future Winthrop University football games (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am likely to attend other Winthrop University athletic events outside of football (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would stay over the weekends to attend football games (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be more willing to join the WU Crew (Winthrop's Athletics Fan Club) (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



I would be more willing to attend tailgates (pre-game get together) (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would buy more Winthrop University merchandise (clothing, decals, etc.) (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>