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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

ATTENDANCE MOTIVATORS AND CONSTRAINTS:  
AN INVESTIGATION OF STUDENTS AT THE  
FOOTBALL CHAMPIONSHIP  
SERIES DIVISION

A Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Philosophy

Kurt C. Mayer Jr.

College of Natural and Health Sciences  
School of Sport and Exercise Science  
Sport Administration

May 2015

This Dissertation by: Kurt C. Mayer Jr.

Entitled: *Attendance motivators and constraints: An investigation of students at the Football Championship Series division*

Has been approved as meeting the requirement for the Degree of Doctor of Philosophy in College of Natural and Health Sciences in School of Sport and Exercise Science, Program of Sport Administration

Accepted by the Doctoral Committee

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Dr. David K. Stotlar, Ed.D., Research Advisor

---

Dr. Dianna P. Gray, Ph.D., Committee Member

---

Dr. Robert Heiny, Ph.D., Committee Member

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Dr. Vish Iyer, Ph.D., Faculty Representative

Date of Dissertation Defense \_\_\_\_\_

Accepted by the Graduate School

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Linda L. Black, Ed.D.  
Dean of the Graduate School and International Admissions

## ABSTRACT

Mayer Jr., Kurt. *Attendance motivators and constraints: An investigation of students at the Football Championship Series division*. Published Doctor of Philosophy dissertation, University of Northern Colorado, 2015.

Much of the previous sport attendance research focuses on the motivations for attendance, while there are a limited number of studies that focus on the constraints and barriers to attendance, or sport non-attendance. Even fewer investigations focus simultaneously on the motivations and constraints to attendance in the sport management literature. Past research has indicated that investigating both attendance factors contributes to a more complete understanding of sport consumer behavior. Further, it appears that while football attendance has been an area of research that has received some attention, there is a dearth of work specifically analyzing the lower levels of football, in particular the Football Championship Series (FCS) division. Therefore, the current investigation contributed to this research area that is lacking inquiry, and contributed to the area of sport consumer behavior in regards to both to motivators and constraints to attendance.

This research aimed to better understand the internal constraints, external constraints, internal motivators, and external motivators that impacted student attendance to FCS football games. The data were collected from currently enrolled students at a mid-sized mountain university that competes at the Football Championship Series division, as this consumer is a strategic target of athletic departments for sport attendance, as well as future support of athletics to aid in the continued existence of collegiate athletic

endeavors. Data collection with pen and paper and on-line surveys resulted in 305 usable surveys.

The data were analyzed to determine which items and factors impacted attendance positively and negatively. Measures of central tendencies indicated FCS student attendance was positively influenced by the motivators of Social, Community Attachment, Drama, and Promotions/Giveaways, while Commitments impacted attendance negatively. The regression results indicated attendance was impacted positively by the Internal Motivators of Team Attachment and Player Attachment, while attendance was negatively impacted by the Internal Constraint of No Interest From Others, the External Constraint of Leisure Alternatives, and the perceived Internal Motivator of Level Attachment. None of the External Motivators were relevant in the selected regression model.

Overall, it appears there are several variables that impact student attendance both positively and negatively at the FCS level. Gaining a better understanding of the motivations and constraints to attendance can lead to a more complete understanding of sport consumer behavior, and aids marketers to better retain, and increase the consumption of, their current student attendees by knowing which factors increase or decrease their attendance to the contests.

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## DEDICATION

I would like to dedicate this project to the memory of my Grandmother, Nancy DePalma. I think back to our times together, especially when I was younger where the two of us would watch the Miami Dolphins games together and you would quiz me during the commercial breaks for my test or quiz the next day. Those times with you will always be with me. If only you could be here to see where my academic pursuits have taken me since you have been gone. I hope that I have made you proud.

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## CHAPTER I

### INTRODUCTION

Among the sporting options available in the United States, football is the most popular (Scarborough, 2012a; Scarborough, 2012b). Football has viewing options at the professional level in the National Football League (NFL), as well as on college campuses (Rovell, 2014a, Scarborough, 2012a). In college football there are multiple levels of competition including the Division I Football Bowl Subdivision (FBS) formerly Division I-A, the Football Championship Series (FCS) formerly Division I-AA, Division II, Division III, and junior college football (Lilly, 2012). However, the numerous available options to view football also brings increased competition between sport organizations for the attention and spending capacities of these football consumers (Kim & Trail, 2010; Meek, 1997; Rovell, 2014b). In the present consumer environment, the competitive nature of the sport industry makes customer retention more difficult for organizations. Accordingly, the concept of customer retention is an essential information area in the sport marketplace, principally with respect to game attendance and the organizations that rely on the behavior of these consumers (Lavarie & Arnett, 2000; McDonald, 2010; McDonald & Stavros, 2007; Mullin, Hardy, & Sutton, 2007; 1993; Zhang, Pease, & Smith, 1998).

Sport marketers and sport organizations consider the objective of retaining their current customers an important matter, where the goal is to increase customer involvement and commitment by increasing the frequency of attendance and

consumption (Mullin, et al., 2007). In order to increase sport consumption, researchers and practitioners have found it beneficial to understand the factors that motivate people to attend a sport contest (McDonald & Stavros, 2007; Mullin et al., 2007; Woo, Trail, Kwon, & Anderson, 2009). If the factors that motivate a person to attend a football game are understood, marketers can appeal to these areas in their marketing and promotional tactics for more focused, effective, and strategic target marketing efforts which increase the likelihood of attendance (Bernthal & Graham, 2003; Funk, Mahony, & Ridinger, 2002; Mullin et al., 2007; Wann, Grieve, Zapalac, & Pease, 2008; Wigley, Sagas, & Ashley, 2002; Woo et al., 2009). Hence, the area of motivations which attract spectators to attend a sport event has been well researched in the sport management literature (Funk, Mahony, Nakazawa, & Hirakawa, 2001; Sloan, 1989; Trail, Anderson, & Fink, 2000; Wann, 1995; Woo et al., 2009).

However, while sport attendance motivators have been well documented, this work only provides half the picture to understanding sport consumer attendance (Kim & Trail, 2010; Trail & Kim, 2011). Specifically, past work has indicated consumers evaluate both positive and negative aspects of a decision (Howard & Sheth, 1969), where the negative elements can be weighed more heavily in the decision making process (Kanouse, 1984). Therefore, another area that can impact sport consumption is the factors that constrain one's attendance. This area, the topic of non-attendance, has been an often unnoticed aspect of sport consumer behavior. In particular, even though a person is interested in attending a sport event there are an assortment of factors which can limit one's attendance, such as weather, lack of team success, or other sport entertainment options (Trail, Robinson, & Kim, 2008). Understanding these attendance barriers can aid

an organization to adjust their sport event offerings to retain customers, increase their consumption, and improve the service to these existing consumers (Kim and Trail, 2010).

If there is an understanding of the factors that contribute to the non-attendance behavior of past attendees, there is potential to increase their consumption (Kim & Trail, 2010; Trail et al., 2008). These consumers have already successfully navigated their constraints at least once to attend a game, and this past attendance behavior indicated an interest in the sport product (Kim & Trail, 2010; Trail et al., 2008). Therefore, the sport organization no longer has to gain their initial interest, and does not have to spend time and efforts towards the more costly area of customer acquisition (McDonald, 2010; Mullin et al., 2007). Customer acquisition would have to be conducted for those who have not attended, as they have not previously expressed the same level of interest in the product. This makes past attendees a very appealing segment to the sport organization in terms of customer retention and increasing consumption. Subsequently, there is a need to better understand the segment of people that have already attended a football game, particularly at the non-premier level of football, from the perspective of both motivators and constraints to attendance.

If both the factors that motivate and constrain attendance to football contests are understood this will lead to a more comprehensive understanding of sport consumer behavior (Kim & Trail, 2010; Trail & Kim, 2011). Further, sport organizations can utilize this information to make the necessary adjustments and improvements to their sport event experience, strengthen motivators, and alleviate constraints. In turn, this will aid in retention of current customers and increase their consumption through more game attendance (Kim & Trail, 2010; Trail & Kim, 2011). An increase of consumption at a

football contest can have influences over many avenues. The area of ticket sales can be increased, as can the area of auxiliary revenues such as refreshments, merchandise, and parking sales (Brown, Rascher, Nagel, & McEvoy, 2010; McDonald & Rascher, 2000; Mullin et al., 2007). An increase in game attendance can also contribute to help create a better arena or stadium atmosphere, which may impact the performance of a team, as well as the performance of the officiating crew (Anderson & Pierce, 2009; Greer, 1983; Pollard, 2008). Further, more consumers attending a sporting event, particularly of a young and educated demographic, are appealing to event and athletic department sponsors (James & Ross, 2004; Pitts & Stotlar, 2007; Trail et al., 2000).

Football attendance has also been noted as an integral component to the college experience of students (Wells, Southall, & Peng, 2000). In addition to being considered an essential element of the college experience, others have noted attending football games is important for campus excitement, student involvement, and prestige (Ferreira, 2009; Shackelford & Greenwell, 2005; Wells et al., 2000). Similarly, student attendance to college football games has been mentioned as an important issue for future support of the athletic department. Students have been deemed a target market for current attendance in order to increase the likelihood of continued loyalty and future support through alumni attendance, donations, booster club membership, and merchandise consumption (Ferreira & Armstrong, 2004; Fink, Trail, & Anderson, 2002b; Greenwell, 2007). Therefore, there is a need to understand the factors that motivate and constrain student attendance to college football games.

### **Statement of the Problem**

Overall, as past research has indicated that investigating both motivators and constraints to attendance contributes to a more complete understanding of sport consumer behavior (Kim & Trail, 2010; Trail & Kim, 2011), there is a need to investigate this complex and multifaceted area of sport consumption. However, the academic research that jointly investigates the areas of motivators and constraints to attendance is very limited (Funk, Alexandris, & Ping, 2009; Kim & Trail, 2010; Pritchard, Funk, & Alexandris, 2009; Trail & Kim, 2011). Therefore, the purpose of this study was to investigate both the motivators and constraints to attendance, and contribute to this under-researched area of sport consumer behavior. In particular, this research aimed to better understand the factors which negatively impacted behavior and constrained attendance at Football Championship Subdivision games, as well as factors that positively impacted behavior and motivated attendance to games. This investigation should also provide valuable information to marketers in the field to better understand football game attendance at this level. As past research indicated (Kim & Trail, 2010; Trail & Kim, 2011; Trail et al., 2008), if both of these areas are better understood, there is potential to alter the current sport offering and increase attendance. The rationalization for this study, selection of the Football Championship Subdivision context, and research questions are further explored below.

### **Rationale for the Study**

The popularity of football is well established, as both professional and college football have over 100 million fans (Scarborough, 2012b). College football includes over 44 million avid fans (i.e., 19% of the adult population in the United States of America),

attracts over 88 million television viewers, and 19 million radio listeners (Scarborough, 2012a). Nonetheless, much of this attention is typically directed towards the higher levels of football in the NFL and FBS (Lilly, 2012; Scarborough, 2012a).

These football options at the professional and collegiate levels, as touched upon earlier, also result in competition between these levels. Thus, organizations can benefit from understanding the behavior of their consumers, and this information would be most useful to football organizations that have struggled with their game attendance and organization finances. However, little consideration has been given to the lower levels of football, in particular the FCS, where their attendance and finances are not as stable as the more prominent football areas in the NFL and FBS (Brown et al., 2010; Fulks, 2013; NCAA, 2014; Ozanian, 2013 Zagier, 2010).

### **Football Attendance**

The NFL and FBS have very highly attended games, with an average game attendance of 68,339 and 45,671 spectators for the 2013 season, respectively (NCAA, 2014; NFL Attendance, 2013). The average Football Championship Subdivision game attendance was 8,593 spectators, but four schools eclipsed 20,000 per game (National College Football Attendance, 2013). Thus, while the Football Championship Subdivision level has lower attendance, it has room for improvement and has also shown potential for higher game attendance.

### **Football Finances**

College football programs are unique in that they can generate large amounts of revenue for the athletic department, the sector in which the football program operates (Fulks, 2013). Typically, most other college sports, except for possibly men's basketball,

are not profitable (Fulks, 2013). The football revenue is typically distributed to help support the other sport offerings in the athletic department (Zagier, 2010). Still, these figures can vary greatly depending on the college level that is considered.

At the FBS level, 23 of the 123 athletic departments reported a profit for 2012, but 68 institutions reported a profit in football for the 2009 season with a median value of \$8.8 million (Zagier, 2010) which generated \$2.7 billion in 2010 (Bolton, 2012). In the FCS level, none of the 124 athletic programs were operating in the black (Fulks, 2013; Zagier, 2014). Still, there is hope for financial growth at the FCS level, as generated athletic department revenues grow by 14% over a one year span, with one school reporting \$19 million in revenues (Sander, 2011). Of note, the highest revenue figure generated by a football team at the FCS level was slightly above \$8 million for 2012 season (United States Department of Education, 2012), near the median FBS value. Thus, the FCS appears to have potential to also earn football revenue to aid in offsetting athletic department expenses, and had less costs than their brethren in the FBS (Steinbach, 2013).

As the above figures indicate, the financial figures of FCS athletic departments are not in a sustainable pattern as none of the athletic institutions are currently operating at a profit. While the FCS financial figures appear to indicate potential room for revenue growth, and attendance figures indicate potential for increased fan patronage, the disparity of these figures compared to other levels of football also indicate that the FCS has less room for errors in their future planning and budgeting. As such, there is a need to better understand the patrons at the FCS level, to increase their sport consumption for the continued existence of FCS athletics. These areas may become even more important

given two new developments in college football: the possibility of losing the “budget game” in the near future, and diminishing student attendance.

**Budget game.** Football Championship Subdivision finances could become even more important if the “budget game” portion of their athletic funds is eliminated. A “budget game” is a football contest that is likely to result in a loss for an FCS school that agrees to play a typically more talented FBS school, in exchange for a payment usually above one hundred thousand dollars (Faure & Cranor, 2010). Many FCS athletic departments rely on the financial considerations of these games (i.e., one to two per year) to support teams and make their yearly budget, as it is the third largest area of their annual revenue at over 10% (Faure & Cranor, 2010; Fulks, 2013). Recently, one of the top FBS athletic conferences, the Big Ten, decided to no longer schedule FCS opponents to improve postseason résumés of their schools for the new playoff system starting with the 2014 season (Myerberg, 2013a; Myerberg, 2013b). The new four team FBS College Football Playoff will take into account the strength of schedule a team plays in their selection process. Not having an FCS opponent could bolster a team’s schedule quality by adding another conference game or talented FBS opponent. Two football teams in another premier FBS athletic conference, the Southeastern Conference, have also expressed a desire to no longer play FCS opponents (Solomon, 2014a). If no longer scheduling FCS opponents becomes a trend across all of the FBS, these FCS athletic departments will have to generate further revenue, decrease expenses, or both, to continue to be able to financially exist. Typically, decreasing expenses mean cutting budgets and/or sports. So, it would behoove athletic departments to proactively explore



ways to increase their future revenue potentials, which typically include the football program (Zagier, 2010).

Presently, the top two FCS athletic department revenue sources are donations and tickets sales at 28% and 16%, respectively (Fulks, 2013). These areas are frequently related with the other through game attendance, as a monetary donation requirement is often linked to football season ticket purchases (Brown et al., 2010). A logical step would be to increase these revenues to contribute to financial stability, particularly as game attendance increases aid in producing additional game-day auxiliary revenues (Brown et al., 2010). However, these revenues may also decrease as the next generation of fans, current students, may not attend games.

**Lacking consistent attendance.** A recent report commented on the trend of typically successful and well-attended FBS schools not having their students consistently attend football games (Rovell, 2014b). This concerns many in collegiate athletic departments as the current students are the near-future season-ticket holders that donate to the athletic department, which supplements its financial viability (Rovell, 2014b). If the more prominent FBS schools are struggling with student attendance, then student non-attendance at the FCS level is even more important given their struggling financial figures (Fulks, 2013; Greenwell, 2007; NCAA, 2014). These schools appear to have little room for error in revenue generation, especially if the “budget game” is lost in the coming years, and must garner as much support as possible.

Therefore, it is important to understand why students are not attending FCS football games, in order to be able to maximize possible revenues and fan support, for the continued existence of FCS athletic departments through financial stability. However, the

literature is limited in sport non-attendance, and only one study to date has focused on student non-attendance in the area of football at the Division I level, which did not denote if it was conducted at the FBS or FCS level (Trail et al., 2008). Further, there appears to be no explicitly FCS-focused student investigations in sport attendance or non-attendance. In particular, there appears to be no investigation of attendance motivators and constraints for college football, as the past research has focused on women's basketball (Kim & Trail, 2010; Trail & Kim, 2011), professional sport (Casper, Kanters, & James, 2009; Pritchard et al., 2009), or international sport (Funk et al., 2009; Kim & Chalip, 2004). Given the lack of attention the sport non-attendance area has received, particularly at the FCS level, there appears to be a deficiency in the understanding of FCS sport consumer behavior. Further, literature has suggested that sport motives can vary by specific sport, sport type, and level of sport (Bernthal & Graham, 2003; Ferreira, 2009), and Trail and Kim (2011) suggested that low attendance teams may need to understand constraints more than motivators. As such, there is a need for research in this area, and this work was focused at the FCS level of college football. Research in this area would not only extend the literature, but potentially help the finances and continued existence of FCS college athletic departments. Once the factors that motivate and constrain attendance are better understood, athletic departments can tailor their marketing efforts based upon what drives consumers to purchase their product, and alter their event offerings, to increase sport event consumption (Bernthal & Graham, 2003; Funk et al., 2002; Trail, Fink, Anderson, 2003).

The purpose of this study was to investigate both the motivators and constraints to attendance, and contribute to this under-researched area of sport consumer behavior. To aid in this process, the following research questions were developed:

- Q1 What are the item(s)/factor(s) that influence students to attend Football Championship Subdivision football games?
- Q2 What are the item(s)/factor(s) that influence students to not attend Football Championship Subdivision football games?
- Q3 Are there internal constraints that negatively influence/predict student attendance to Football Championship Subdivision football games?
- Q4 Are there external constraints that negatively influence/predict student attendance to Football Championship Subdivision football games?
- Q5 Are there internal motivators that positively influence/predict student attendance to Football Championship Subdivision football games?
- Q6 Are there external motivators that positively influence/predict student attendance to Football Championship Subdivision football games?

### **Delimitations**

The delimitations placed on this study are as follows:

*Motivations and constraints to attendance predictors:* There is not an abundance of research on the combined area of motivators and constraints to attendance. This study utilized a previously validated and implemented survey, believed to be the most comprehensive in the area, which was based upon a review of the related literature. However, there still may be other possible motivators and constraints to attendance not included in the survey, and these variables may also prove useful in understanding this area of sport consumer behavior.

*Student attendance behavior at the Football Championship Subdivision level:*

This study examined motivators and constraints to attendance for a single National Collegiate Athletic Association (NCAA) football program in the FCS. It cannot be

assumed that the results of this study can be generalized to other athletic programs, groups of students, or sporting patrons. Further, the results may not be generalizable to other sports (e.g., basketball, soccer, baseball, etc.) or level of sports (e.g., other levels of the NCAA competition such as Division I FBS and Division II and III, professional sport, etc.). However, as the Football Championship Subdivision has not received the same attention as other levels of sport, the intention was to focus solely on the Football Championship Subdivision level and maintain specificity to this level and the sport of football. Further, student behavior is of current interest to athletic departments, and the decision was made to isolate the behavior of this portion of sport attendees.

### **Limitations**

This study was limited in the following manner:

*Self-Reported data:* The data obtained for this study was from survey responses. All responses were assumed to be truthful and factual from the scope of self-reporting surveys, per the nature of survey research. Some of the provided information, via the survey, may not be entirely accurate.

*Sample/Respondents:* This research contains responses of currently enrolled students at one university in the FCS. Responses are not representative of the local community/alumni, which were beyond the scope of this current research. The responses used in the sampling frame for this study may not be representative of FBS, Division II, Division III universities, or other/all Football Championship Subdivision institutions, as well as other sports.

*Selection:* Given the proximity of the researcher, distance to other Football Championship Subdivision institutions, and lack of financial resources available for

research, the convenience of the geographic location of the one sampled institution also led to its selection as an institution of interest.

*Time:* Respondents were surveyed about their behavior at the end of the year 2014, and the beginning of the year 2015. In time, these reasons could change, and alter the reliability of the findings.

### **Definition of Terms**

*The National Collegiate Athletic Association (NCAA):* In the United States of America, this organization is the largest non-profit association that oversees and governs intercollegiate athletics and playoff contests. The voluntary members of the NCAA are higher-education academic institutions, and these institutions and their student athletes (i.e., students enrolled at the institution that athletically compete for the school) are subject to the rules and regulations of the organization. There are membership levels at the Division I, II, and III levels, with Division I being sub-classified as FCS or FBS if the school competes in the sport of football.

*Football Bowl Subdivision (FBS):* Teams that compete at the Division I level in the NCAA, and compete to play in the four team national championship playoff, or bowl games. This level was formally referred to as Division I Single A, and is typically deemed the highest and premiere level of college football competition (Lilly, 2012).

*Football Championship Series (FCS):* Teams that compete at the Division I level in the NCAA, and compete to play in the end of season playoff tournament that features 24 teams (Solomon, 2014b). This level was formally referred to as Division I Double A, or DI-AA, and is typically deemed the second highest level of college football competition but not the premiere level (Lilly, 2012).

*Attendance:* Buying a ticket to an athletic contest does not constitute having been present for the sporting event, rather the concept implies having been physically present at the stadium/arena when a contest is being played between two teams or athletic competitors.

*Athletic department:* The division of an academic institution that provides athletic program offerings for its student-athletes. These offerings can include many different sports, such as football, basketball, soccer, track and field, field hockey, lacrosse, and swimming among others for both genders. Typically, the athletic department employs coaches, marketing personnel, media personnel, academic advisors, sports information personnel, and others to ensure the proper functioning of the department. This includes aiding in the success of student-athletes and athletic teams. The department is responsible for fielding the appropriate teams in athletic contests, hosting certain contests, organizing all athletic activities, and accounting for their athletic offerings and budgets. Sport teams operate within the athletic department.

*Sport consumer behavior:* The decision making process that takes place for an individual in deciding to select, purchase, and/or use a sport product/service. In the case of this research, sport consumer behavior relates to the factors that influence the decision making process of attending or not attending a sport event. This includes both the pre and post processes of actions, including satisfaction or dissatisfaction based upon event expectations (Kim & Trail, 2010; Pitts & Stotlar, 2007, p. 143-149; Trail et al., 2008)

*Attendance motivators:* A factor that attracts or stimulates a person to spectate a sport event. A motivator is considered a positive influence on sport attendance behavior

(Funk et al., 2009; Kim & Trail, 2010, p. 205; Trail & Kim, 2011), which can be internal or external.

*Internal attendance motivators:* Inner psychological cognitions and reasoning that spurs behavior to occur in the form of sport attendance (Kim & Trail, 2010, p. 194).

*External attendance motivators:* Social or environmental aspects, as well as physical or tangible reward features, that attracts one to sport attendance (Kim & Trail, 2010, p. 194).

*Attendance constraints:* A factor, or factors, that limits, inhibits, or is a barrier for an individual in attending a sport spectating event (Kim & Trail, 2010, p. 191; Trail & Kim, 2011). Constraints are considered deterrence to a behavior, and negatively influence sport attendance (Funk et al., 2009; Kim & Trail, 2010, p. 205). Constraints can be deemed internal or external.

*Internal attendance constraints:* Inner psychological cognitions and reasoning that deter sport event attendance behavior (Kim & Trail, 2010, p. 194).

*External attendance constraints:* Social, environmental, or interfering aspects (e.g., outside of a person, the opposite of psychological) that limit or decrease the likelihood of the individual attending a sport event (Kim & Trail, 2010, p. 194; Trail et al., 2008).

*Non-Attendance:* When a person does not attend a sport spectating event.

## CHAPTER II

### REVIEW OF LITERATURE

Sport is a popular entertainment activity, and while the magnitude of the industry is debatable (Pitts & Stotlar, 2007), its popularity as a spectator activity and its potential for revenue is unquestionable. This popularity is evidenced in the number of spectators that attended sporting contests, as The Sport Business Research Network and National Sporting Goods Association estimated there were 178,624,000 yearly attendees in the United States (Sport Business, 2012). These attendance figures can lead to substantial organizational revenues, and Plunkett (2012) estimated the sport spectating industry at \$31.4 billion. However, given this popularity and potential financial gains, the sport event entertainment area has evidenced an increase in competition for these sport consumers (Meek, 1997; Pitts & Stotlar, 2007). If the factors that impact attendance and the motives that drive sport consumer behavior are better understood, it is possible for the sport marketer to tailor efforts that will increase sport event consumption (Funk et al., 2002; Trail, Fink, & Anderson, 2003). This increased consumption can lead to more revenue for the organization from ticket sales, and auxiliary area returns such as parking, concessions, and merchandise sales (Brown et al., 2010; Mullin et al., 2007). Further, more consumers are also appealing to sponsors (James & Ross, 2004; Trail et al., 2000), and an increase in stadium attendees can provide a better game atmosphere that may potentially influence team performance and officiating (Anderson & Pierce, 2009; Greer, 1983; Pollard, 2008).



Sport consumer behavior is of particular interest to sport researchers and sport managers alike. It has received considerable attention in the sport management literature given the potential organizational benefits, and the sheer volume of spectators at sporting events. Below is a review of the myriad of relevant literature this topic has received, in particular with a focus on the motivations to attendance, as well as the popular measurements and models utilized in sport attendance research. After this topic is presented, the area of non-attendance and constraints to attendance is explored, followed by a brief overview of research on the sport of football.

## **Sport Attendance**

### **Factors Impacting Attendance and Consumer Behavior**

Noll (1974) was one of the first investigations of factors that impact attendance in the seminal work that examined North American professional baseball, basketball, football, and hockey. The factors of winning percentage/team quality, previous success, number of star players on the team, facility age, city population, league membership, locality, and uncertainty of game outcome were identified to positively impact attendance. The factors of income, sport competition, ticket price, racial composition of a city/stadium location, city population, league membership, losing, and weather negatively impacted attendance. The areas of non-sport/entertainment competition, and other professional sport teams in the market were also explored. Since this work, there have been an abundance of studies incorporating many varying factors and their impact on attendance.

There have been numerous investigations on the impact of stadium age on attendance and the honeymoon effect (i.e., an organization receiving a boost in

attendance from the novelty of people wanting to explore the new stadium) of new stadiums increasing attendance (Brown, Nagel, McEvoy, & Rascher, 2004; Coates & Humphreys, 2005; Howard & Crompton, 2003; Leadley & Zygmunt, 2005, 2006; McEvoy, Nagel, DeSchriver, & Brown, 2005; Roy, 2008; Zygmunt & Leadley, 2005). Facets of stadium offerings and factors have been explored (Garland, Macpherson, & Haughey, 2004; Hansen & Gauthier, 1989; Trail, Anderson, & Fink, 2002; Wakefield & Sloan, 1995), and the impact of event surroundings, or sportscape factors, of a non-stadium event on attendance (Lambrech, Kaefer, & Ramenofsky, 2009). Others have investigated the influence of a player on game attendance (DeSchriver, 2007; Lawson, Sheehan, & Stephenson, 2008), teams and roster changes (Maxcy & Mondello, 2006; Morse, Shapiro, McEvoy, & Rascher, 2008; Rivers & DeSchriver, 2002; Zhang, Pease, Hui, & Michaud, 1995), and ticket scarcity and price (Lee & Bang, 2003; Wann, Bayens, & Driver, 2004). The impact of media coverage on attendance (McEvoy & Morse, 2007; Zhang et al., 1998) has been investigated, as has the positive impact of the number of promotions and their quality (Lee & Bang, 2003; McDonald & Rascher, 2000; Zhang et al., 1995).

There is research on the game-time and schedule impacting attendance (Hansen & Gauthier, 1989; Lee & Bang, 2003; Zhang et al., 1995), as well as spectator demographics (Zapalac, Zhang, & Pease, 2010; Zhang et al., 1995). Investigations have also focused on the gender of the playing team impacting attendance (Ferreira & Armstrong, 2004; Fink et al., 2002b; Ridinger & Funk, 2006), the gender of the spectators attending the event (Fink, Trail, & Anderson, 2002a; Fink et al., 2002b; Ridinger and Funk, 2006; Trail et al., 2002), as well as investigations specifically about

attendance of female sporting events (Shackelford & Greenwell, 2005; Zapalac et al., 2010; Zhang et al., 2003).

Sport attendance research is not limited to just North America sport as it has also been investigated internationally (Clowes & Tapp, 2003; Davies, Coleman, & Ramchandani, 2010; Dhurup, 2010; Garland et al., 2004; Hoye & Lillis, 2008; Ward, 2009), and even the proper way to measure attendance at an event (Davies et al., 2010). Given the breadth and depth of the above investigations on the positive effects of factors impacting attendance, there is minimal research on the negative and substitute factors impacting spectator attendance (which is also explored further below from a constraint and non-attendance perspective).

**Negative attendance factors and substitute behavior.** While Noll (1974) explored factors which had a negative impact on attendance, this area has not been given much attention. Few studies have touched upon negative attendance factors and substitute attendance behavior. Zhang, Smith, Pease, and Jambor (1997) explored 15 other entertainment options in five areas (i.e., professional and amateur sports, recreational participation, arts, television, and dining/night clubs in The Scale for Entertainment Choice) that were attendance competitors of a minor league professional hockey team. Descriptive statistics and stepwise multiple regression analyses indicated the primary competitors for the hockey club were other professional sports, movies, recreational participation, and watching TV. However, minimal variance was explained with 3.1% being the largest figure.

Ferreira (2009) explored substitute attendance behavior when the spectator's first preference for sport viewing was unavailable with spring semester college sports (i.e.,

men's and women's basketball, track and field, tennis, and baseball and softball). Results indicated these students were more likely to substitute between same sports (e.g., men's basketball for women's basketball) more so than sport-gender substitutes (e.g., men's basketball for men's tennis). Thus, it appears that sports with offerings for both genders compete more strongly with one another for spectators, and could negatively impact the attendance of the other team. It should be noted, the empirical generalizability of this study is not of interest, just its inclusion as work that touches on the negative attendance component. Hansen & Gauthier (1989) also touched upon the negative impact of factors between professional sport leagues (i.e., Canadian Football League, NFL, National Hockey League (NHL), National Basketball Association, Major League Baseball (MLB), and the Major Indoor Soccer League). The factors included were economic, demographic, attractiveness of the team, and game time. However, the importance of these factors to attendance were based upon survey responses of marketing/promotion department heads, and not the spectators attending the games. In general, while there is minimal research on the negative impact of attendance, there is an abundance of literature in another area concerning sport spectating, the social-psychological area of sport consumer behavior which is also referred to as the motives of sport event attendance.

### **Social-Psychological Sport Consumer Behavior**

The area of sport consumer behavior has received considerable attention. Cialdini et al. (1976) investigated perhaps one of the first sport consumer behavior works, with their research on basking in reflected glory (BIRGing) of the university football team. Results indicated that students wore more school apparel after a victory, and used "we" to describe success of the team after a win, and "they" when unsuccessful. BIRGing was

deemed to be conducted to enhance a person's public image/concept, self-esteem, and prestige over another. While Cialdini et al. alluded to the concept of distancing from unsuccessful others to avoid negative feedback, this effect was not controlled in the study. Snyder, Lassegard, and Ford (1986), while not a sport study, controlled for this effect. It was termed cutting off reflected failure (CORFing) where the failure group had less association with their group than the successful or no information groups. BIRGing and CORFing were again explored in a sport realm by Wann and Branscombe (1990), with an investigation of fan identification levels with a basketball team. Results indicated those highly identified with the team, "die-hard" fans, were more likely to BIRG after successes and less likely to CORF after losses, while those with lower identification levels, "fair-weather" fans, were less likely to BIRG but more likely to CORF.

This area was then extended to a sport spectator context as Wann and Dolan (1994) investigated BIRGing and CORFing of sport attendees' team identification levels with game result attributions. The highly identified individuals attributed the win to internal factors (e.g., player skills), and the loss to external factors (e.g., poor officiating) to protect their self-esteem. The lower identified individuals had these same results, but to a much lower degree and were less concerned with defeat. The above work impacted future sport consumer behavior work, as the field trended to investigate the motives of sport attendees in the sociological and psychological perspectives.

**Sport motivation.** Sloan (1989), perhaps the first work to put forth explanations for sport spectator motives, investigated a range of theories and rationales for spectator behaviors, one of which Maslow's (1943) theory of human motivation and hierarchy of needs. Since this work, a variety of measurements and factors have been proposed in an

effort to better explain and predict the motives and behavior of sport spectators, and their impact on attendance.

Based on the work of Sloan (1989) and Maslow (1943), Milne & McDonald (1999) and McDonald, Milne, & Hong (2002) explored motivations of the sport spectator and sport participant. Another work in this area was from Kahle, Kambara, & Rose (1996), which developed a fan attendance motivation model specifically for college football based on Kelman's functional theory of attitudinal influence (1958, 1961, 1974). The model consisted of attendance being influenced by internalization (i.e., an attachment to, or an enduring love, of the game), camaraderie (i.e., a moderator of compliance and obligation), and self-expression (i.e., a moderator of identification with a winner and self-definition experience).

Funk et al. (2001) also utilized previous motivation work (e.g., Kahle et al., 1996; Sloan, 1989; Wann, 1995) to develop the Sport Interest Inventory (SII), a 10 factor 30 item measurement to explore consumer motives at women's sporting events (i.e., the opening round matches of 1999 Women's World Cup). The 10 motive factors included: sport interest, vicarious achievement, excitement, team interest, supporting women's opportunity in sport, aesthetics, socialization, national pride, drama, and player interest. Funk et al. (2002) extended the SII to include the four factors from Funk et al.'s (2001) qualitative analysis (i.e., players as role models, entertainment value, bonding time with family, and wholesome environment) of Funk et al. (2001), collectively with the original 10 factors. Overall, the new model explained more variance than the original model, provided a more complete avenue for researchers to analyze spectator motives at women's sporting events, and explained support of a sport. Funk, Ridinger, and

Moorman (2003) extended the SII again, this time to include four more motivators (i.e., bonding with friends, knowledge of the sport, escapism, and customer service) and test it in another women's sport context via the professional basketball level.

While the above work differentially explores sport motivations, the main body of motive research in the sport management literature appears to be focused around two scales: the Sport Fan Motivation Scale (SFMS) and the Motivation Scale for Sport Consumption (MSSC). These are further explored below.

*Sport fan motivation scale.* Wann (1995) developed the SFMS as a result of the lack of research in the area of sport fans and spectators in a sport psychological or sociological perspective. Based upon previous empirical work of other researchers and their hypotheses (e.g., Sloan, 1989; Zillmann, Bryant, & Sapolsky, 1989), Wann categorized these sport motivation components into eight types: eustress (i.e., positive levels of arousal or stress), self-esteem benefits, escape from everyday life, entertainment, economic (i.e., gambling and wagers), aesthetic/artistic qualities of the sport/game, group affiliation, and family.

Wann (1995) then developed an instrument based on these eight sport motivators that included 38 items for sport fan involvement on an eight-point Likert-type scale. The survey also included demographic, sport involvement, and sport identification information. Next, the relationships, factor structure, and measures of the SFMS were examined by surveying college students and recreational softball league adults. Exploratory Factor Analysis (EFA) was then utilized to eliminate poor items and determine the number of factors. The EFA indicated seven factors as eustress and self-esteem loaded to the same factor, but the authors decided to keep the eight factor model

based on the a priori theory. Also, the items were reduced where each dimension contained only three items, except family which had two items. Subsequently, a Confirmatory Factor Analysis (CFA) was conducted to determine the fit of the data to the model. The eight factor model was deemed to fit the data extremely well, better than the seven factor model that was also tested, and was internally consistent and normally distributed. Correlation analysis was also conducted. This study supported the psychometric properties of the SFMS. The model was then tested in another setting for test-retest reliability.

The second study was conducted with undergraduate students and the 23 item SFMS. The survey was also given two months later as a retest. The CFA supported the fit of the first analysis. Correlations with the SFMS and sport preferences were significantly positively correlated with 10 of the sports, which indicated the validity of the scale in different sport areas.

Wann, Schrader, and Wilson (1999) further validated the factor structure of the SFMS through utilization of a more varied and randomly selected sample of adults through phone surveys. This sample was selected to enhance generalizability of the scale, and the CFA again indicated the data fit the model well. Of note, entertainment was the highest scoring item, and economic/gambling was the lowest.

Wann et al. (1999) also conducted two other studies in the article. One explored sport type preferences (i.e., individual vs. team; aggressive vs. non-aggressive), with higher SFMS scores of aesthetics linked to individual sport preferences, eustress and self-esteem to team sport, aesthetic to non-aggressive sport, and economic linked to aggressive sport. The next study analyzed intrinsic and extrinsic motivations of fans and



athletic participants, where participants were more likely to view themselves as a sport fan than participant.

***Motivation scale for sport consumption.*** Trail et al. (2000) proposed a model for sport spectator consumption behavior, with a component in it that would later to be known as the MSSC. The model was composed after a thorough review of the past sport spectator literature and integration of previous sport model facets (e.g., Kahle, et al., 1996; Milne & McDonald, 1999; Sloan, 1989; Wann, 1995; Zillmann, et al., 1989). The goal was to develop one model for a suspected enhancement of the understanding of sport consumer behavior, and particularly to have more of an emphasis on the motivational components. The model contained six general factors that influence sport consumption: motives (i.e., what would become the MSSC), level of identification, expectancies, confirmation or disconfirmation of expectancies, self-esteem responses, and affective state of the individual. The factors function sequentially (see Trail et al., 2000 for further explanation). The MSSC contained nine motives: achievement, acquisition of knowledge, aesthetics, social interaction, drama/excitement, escape (e.g., relaxing), family, physical attractiveness of participants, and quality of physical skill of participants.

Trail and James (2001) then tested the MSSC portion of the proposed sport spectator consumption behavior model for validity and reliability. Also, in this testing, the model was compared to previous models (i.e., Kahle et al., 1996; Milne & McDonald, 1999; Wann, 1995) for concerns of validity and limitations. The nine motive factors with 27 items were tested through mailing surveys to MLB ticket holders in lower, middle, and upper level seating locations. The team identification index (TII) was also included in the survey, a three item measure of identification with the team. Results indicated the

model fit the population well, and performed well on convergent validity, discriminant validity, and concurrent validity. Overall, the MSSC demonstrated the best psychometric properties to accurately and reliably measure sport spectator motivations comparatively to other measures. However, the authors noted there was still room for improvement (i.e., the family factor).

The full spectator model, as proposed by Trail et al. (2000) and noted above, was then tested in Trail, Fink, and Anderson (2003). Upon the test results, the authors suggested development of a new model based on the data not fitting some of the theorized relationships between the variables. However, each of the scales, including the MSSC and TII, showed good consistency and validity. Thus, it was suggested that the scales should be utilized in the future to represent the appropriate construct. This is further supported by the above information on the testing of the MSSC's psychometric properties. Further model testing of sport consumption behavior has also taken place, but for the sake of brevity, only the attendance models relating to the MSSC with another area are explored below (see Fink et al. (2002a), Laverie and Arnett (2000), Trail, Robinson, Dick, and Gillentine (2003), Robinson, Trail, Dick, and Gillentine (2005), and Woo et al. (2009) for a further review).

**Sport spectator motive research.** The sport motive research has been developed in many different sport settings utilizing multiple frameworks. The SFMS has been employed for sport attendance research (Wann, Frederick, Grieve, Zapalac, & Pease, 2008; Wigley et al., 2002). Further, sport motivation has been explored at both the professional and collegiate levels of baseball (Bernthal & Graham, 2003; James & Ross, 2002; Snipes & Ingram, 2007; Wann et al., 2008; Wigley et al., 2002), basketball (Genter

et al., 2011; James & Ridinger, 2002; Pease & Zhang, 2001; Ridinger & Funk, 2006; Snipes & Ingram, 2007; Wann et al., 2008), and football (Prinsen & Lubbers, 2008; Swanson, Gwinner, Larson, & Janda, 2003; Wann et al., 2008). The attendance motives of sport spectators have also been explored in other less popularized sports such as soccer (Snipes & Ingram, 2007; Won & Kitamura, 2007), softball (James & Ross, 2004), wrestling (James & Ross, 2004; Wann et al., 2008), and Wann et al. also explored the areas of figure skating, gymnastics, boxing, auto racing, tennis, golf, and hockey.

The MSSC has also been utilized in attendance work (Byon, Cottingham, & Carroll, 2010; Fink & Parker, 2009; Gencer, Kiremitci, & Boyacioglu, 2011; Hove & Lillis, 2008; James & Ridinger, 2002; James & Ross, 2004; James and Ross, 2002; Won & Kitamura, 2007), as well as utilized in the development of a motivation scale for spectator consumption of disability sport (Cottingham et al., 2014). These and other sport motives have been further explored in the contemporary sport research. In the sport behavior models, the research has shifted to incorporate other areas of consumer behavior with sport motives to more extensively explain sport spectators.

**Model testing of attendance motivation with another area.** Past work (Fink et al., 2002a; Wann, 1995; Wann & Branscombe, 1993) has indicated the relationship of motives and other areas (e.g., team identification) can explain more variance of consumer behavior than simply motives. As a result of this work, the model testing of sport motives to explain sport consumer behavior (noted above) has shifted to include other areas jointly with sport motives. This resulted in Robinson and Trail (2005) incorporating and testing multiple interest and identification points with motives (i.e., the MSSC), and the creation of the Points of Attachment Index (PAI). This 21 item PAI measured multiple

points of identification which reflect psychological connection toward an entity. In this case, it was via the seven factors of the team (i.e., the TII), players, coach, community, sport, university, and level of sport (e.g., college or professional) based on social identity theory (Tajfel & Turner, 1986). Results indicated that again the relationship of motives and identification explained more spectator behavior than separate analyses.

The most recent model development by Woo et al. (2009) extended the work of Trail, Robinson, et al. (2003) and Robinson et al. (2005) in predicting sport behavior of fans and spectators from motives and identification. There was a distinction made between fans and spectators, where spectators were observers and fans had more of a social-psychological connection to team entities. Woo et al. incorporated four models in the tests, two of which were very similar to those in Trail et al. The two new models differed, where escape was the only overarching fan motive, and social interaction was moved to the fan side. Fan motives included vicarious achievement and social interaction, while spectator motives included skill, aesthetics, drama, and knowledge. Fan motives lead to organization identification, where points of attachment include the team, coach, university, and players. Spectator motives lead to sport identification, where points of attachment are with the sport or the level of the sport. Further, in one model there was a relationship between organization identification and sport identification, where each can influence the other. Results indicated this relationship existed, but only in the direction of the organization influencing sport identification. As such, the new Model D was the most representative for explaining the relationship among motives and points of attachment for college student fans and spectators, and their attendance behavior to football games.

Thusly, fans and spectators can have differing motives and points of attachment for their attendance decisions, but everyone attends to escape.

Altogether, while sport consumer behavior, particularly sport attendance and sport motives, have been a popular sport research area, there is a need to extend the literature. The review above dictates that the factors impacting attendance are well understood, but the negative factors and constraining factors need to be further explored. It has also been noted that sport consumer behavior would benefit from incorporating motives with other areas to better explain sport spectators and increase the explained variance of models (Fink et al., 2002a; Robinson & Trail, 2005).

Fortunately, there is a definitive body of sport attendance and motive literature to build upon, and combine with other areas to better explain and understand sport consumer behavior. Based on this previous work, the sport consumer behavior literature would benefit from incorporating sport attendance motives with attendance constraints to explore sport spectator relationships. Thus, non-attendance and constraints to sport attendance are further explored below.

### **Sport Non-Attendance**

In the sport management literature the area of motivators to attendance have been well researched, but this is only one portion of understanding the sport spectator (Kim & Trail, 2010). Another portion is the topic of sport non-attendance, the barriers and constraints that can limit consumer attendance, which has been minimally investigated. Based on the paucity of sport non-attendance research, and previous results having indicated disagreement between what marketers and attendees value in effective marketing techniques to attend a game (Dick & Turner, 2007), it is likely that marketers

are misinformed about why people are unable to attend. If non-attendance was better understood, marketers could create strategies to further meet the needs of current consumers and alleviate constraints to increase their attendance. An increase in attendance would aid organization finances through more ticket sales and auxiliary revenues, as well as improve the game atmosphere (Havard & Dwyer, 2012). It would also save the organization time and effort through increasing usage of past attendees (i.e., customer retention), and not having to put forth as many resources towards the more costly area of new customer acquisition (McDonald & Stavros, 2007). This may also shed light on the non-attendance of potential customers as well. Overall, investigating non-attendance will lead to a more complete understanding of sport consumer behavior. The sport non-attendance research is further explored below.

### **Early Non-Attendance Research**

The investigations by Schurr, Ruble, and Ellen (1985) and Schurr, Wittig, Ruble, and Ellen (1988) were among the firsts in the area of sport non-attendance. Each inquiry analyzed demographic and personality characteristics to determine the differences between the students that had attended and those that did not attend a men's collegiate basketball game. Schurr et al. (1988) included a second game the following year when a star player was present for the sophomore students, and comparisons were made to their behavior the previous year. While these studies did include both attendance and non-attendance, it examined basic student traits and did not include motivations nor actual constraints or barriers to attendance.

Another of the earlier non-attendance investigations was conducted by Tomlinson, Buttle, and Moores (1995), and it did explore the factors, as opposed to traits,

which influenced and discouraged fan attendance. Questionnaires were administered to people at baseball, basketball, and football games. The study utilized a front room-back room framework, which was likened to a Herzberg effect (i.e., factors of job satisfaction are different from job dissatisfaction in employee motivation) in that certain factors motivated attendance while separate different factors impacted non-attendance (Herzberg, Mausner, Snyderman, 1959). The front room factors were deemed in-stadium factors controllable by management, and consisted of the general atmosphere, availability of food and drinks, stadium cleanliness, stadium design, cheerleaders, social opportunity, pre-match entertainment, off-field entertainment, behavior of fans, the band, and the actual seats available. The back room factors were deemed non-front room factors that are controllable by management, and contained tradition, evening game, price of tickets, ease of access to the stadium, availability of parking, weekend game, the game being live on television, star players, community support, and child facilities.

Mean results indicated fans were motivated to attend for the front room factors, chiefly the atmosphere at the game, the stadium design, social opportunity, and concessions. Most of the non-attendance was influenced by back room factors, largely the ticket price, the game being shown on television, the absence of children facilities, stadium accessibility, and available parking. Tomlinson et al. conveyed that an organization could manage attendance through being aware of these factors, and handling them accordingly by adapting their offerings and providing better entertainment options and customer service (Tomlinson et al., 1995).

The work of Tomlinson et al. (1995) has also been extended to international settings. Robertson and Pope (1999) explored attendance and non-attendance of

professional Australian Rules football and rugby. The main focus of this work pertained to product bundling between two teams, but there were some noteworthy results. For the football spectators, results indicated the facility positively impacted attendance, while the rugby results deemed game attendance was positively influenced by ease of excitement and negatively influenced by facilities and other entertainment. Douvis (2007) also conducted an investigation partially based on the framework of Tomlinson et al. (1995), exploring non-attendance of Greek professional men's basketball. However, there appear to be some issues in the framework of this study, as well as the rigor and generalizability of the work. More recently, non-attendance sport investigations have primarily moved away from the Tomlinson et al. (1995) framework to include more than just the team and stadium elements.

### **Modern Non-Attendance**

The modern non-attendance research has explored more detailed alternatives, barriers, and conflicts to attendance, as well as personal and psychological aspects. Most of the recent non-attendance work has utilized a leisure constraints framework, or moved towards a model that incorporates both attendance constraints and motivations. The theory of hierarchical leisure constraints is further explained below, as well as studies that have utilized the framework.

**Leisure constraints theory.** The topic of constraints has been extensively examined in leisure research (Godbey, Crawford, & Shen, 2010). Out of this empirical work, the theory of hierarchical leisure constraints, also known as leisure constraints theory (LCT), has been developed to aid in understanding and predicting leisure behavior.



Leisure constraints theory emerged when Crawford and Godbey (1987) introduced a leisure constraints behavior framework regarding the preference-participation relationship, and proposed three discrete models: intrapersonal, interpersonal, and structural constraints. Crawford and Godbey defined intrapersonal constraints as an individual's internal psychological states and attributes of leisure preferences (e.g., anxiety, fatigue, religiosity, prior socialization, subjective evaluation of appropriateness/availability, reference group attitudes, perceived skill, etc.). Interpersonal constraints were deemed social interactions and relationships between an individual and their characteristics, which may influence preference/participation in companion leisure (e.g., absence of a suitable partner or relationship to engage in an activity). Structural constraints represented external environmental or situational barriers which interfere between the established leisure preference and participation (e.g., family, financial resources, season, climate, work).

Crawford, Jackson, and Godbey (1991) extended LCT when the conceptualization of the constructs was integrated to a single model. In the model, constraints are encountered hierarchically, beginning with intrapersonal, then interpersonal, followed by structural. Each constraint was deemed a barrier, where participation resulted from the absence of constraints.

Jackson, Crawford, and Godbey (1993) refined the framework where participation is no longer only possible when not encountering a constraint, as the negotiation process and balance proposition were introduced. As such, participation comes from negotiating through the constraints, and balancing levels of participation benefits with perceived motivations and constraints, which modifies participation levels. The participation levels

concept is relevant to the current study, as even with the interest of an individual to attend a game, there can still be factors constraining attendance.

It should be noted that a recent sport consumption investigation by Trail and Kim (2011) found no support of a constraint hierarchy for leisure decision making. The framework of Trail and Kim was a new model of internal and external constraints and motivators (noted below in Kim and Trail (2010)) that was not solely in the constraint area, though the original constraint work was based on LCT. However, Godbey et al. (2010) recently recapitulated LCT from its formation. The review supported the ability of the framework to be utilized in other areas, and supports the transition of LCT to examine forms of behavior in sport.

**Constraints to attendance.** One of the first investigations which utilized a LCT framework in a sport context was Trail et al. (2008) in their research of student structural attendance constraints to collegiate football games. To date, it appears there has been only one study conducted on football non-attendance, which did not note if the investigation was at the FBS or FCS level, or in which region of the country (Trail et al., 2008). The first objective of this study was to create a comprehensive list of structural constraints to sport attendance from the relevant literature, and the perspectives of spectators and athletic department personnel. This resulted in a survey where one section contained 20 structural constraint items (e.g., weather, cost, team success, stadium location, other commitments, etc.) and another section pertained to 18 alternatives to attending (e.g., watching other college football on TV, attending a movie, etc.). The second objective was to create categories through factor analysis of the structural constraints list. The principal component analysis of the non-venue structural constraints

(noted above), as there was no preexisting scale for sport attendance constraints, was interpretable for seven factors which explained 63.5% of the variance. Only nine items did not load to a factor. After some investigator adjustments, there were nine constraint factors (i.e., leisure activities, other sport entertainment, financial cost, weather, lack of success, social commitments, stadium location, game on radio/TV, and work/school commitments) for the 29 items (Trail et al., 2008).

The final objective for Trail et al. (2008) was to determine if there were differences between males and females, and attendee and non-attendees, in terms of structural constraints to attendance. The multiple analysis of variance (MANOVA) results indicated there were not any constraint differences based on past sport consumption, but there were significant differences based on gender. The results indicated six of the nine factors differed by gender (i.e., other sport entertainment, game on radio/TV, weather, social commitments, work/school commitments, and lack of team success) but only three had large enough effect sizes and power values for interpretation. Mainly, the other sport entertainment options and the lack of team success constrained the attendance of males more than females, while females were more constrained by weather. Item mean values indicated the top three constraints that moderately deterred attendance were weather, work/school commitments, and social commitments (Trail et al., 2008). Based upon the results, Trail et al. lamented organizations need to recognize the sport product is in competition with other sport entertainment, as well as incorporate the other commitments potential attendees may have that could interfere with their attendance.

An extension of Trail et al. (2008) was conducted by Havard and Dwyer (2012) in their investigation of student non-attendance at men's college basketball games. Much of the same framework and constraint items were utilized with additional intrapersonal constraints. Results of the MANOVA indicated no differences between attendees and non-attendees, but significant differences between those that played competitive high-school basketball and those that did not participate. Also, there was a significant interaction effect between those that played basketball and had attended a previous basketball game at the university. Thus, those with a playing background were less constrained in basketball attendance with the lack of interest factor than others. Also, the mean scores indicated commitments (i.e., family, school, work, and religious) were the highest items that constrained attendance (Havard & Dwyer, 2012).

Some other studies have also investigated non-attendance, albeit in slightly different manners than the extant research. Lock and Filo (2012) qualitatively investigated why a person selected to not attend soccer matches of a semi-professional Australian club through the use of a single response open-ended questionnaire. Results indicated the themes of cognitive apathy and disidentification were prominent response areas of why people did not attend.

Another perspective of non-attendance investigations explored the attitudes and behaviors of season ticket holders that gave up their membership. The mixed method approach by McDonald and Stavros (2007) of the Australian Football League (AFL) and National Rugby League directed lifestyle changes impacted rejoining behavior. Members did not renew because they were unable to attend games, followed closely by changes in the family structure that made it difficult to attend. McDonald (2010) continued this work

by exploring two AFL teams and if members renewed or did not renew their tickets. Different analyses (i.e., logistic regression, descriptive, correlations) attributed length of membership and games attended as predictors of renewal behavior. The longer a member had held their season tickets, and the more games the member attended, the more likely they were to renew. Further, the highest chance for non-renewals of members came in their first three years of membership, particularly year one was critical, and these members were at a higher overall risk of not renewing until their fifth year. Of note, only McDonald and Stavros (2007) touched upon the original motivations for becoming a season ticket holder. As noted above with motives being incorporated with other behavior measures, in this same vein some research has made efforts to better understand and explain consumer behavior by incorporating attendance motivations with attendance constraints. The rationale dictates that with these two facets being explored together, the results will lead to a more comprehensive understanding of sport attendance.

**Motivators and constraints to attendance.** Unlike all but one of the above studies, there is also work that includes both constraints and motivations to attendance, although at varying levels. The purpose of Casper et al. (2009) was to better understand attendance constraints of current spectators to one NHL team based on ticket holder type (e.g., season ticket, mini plan, and single game). Additionally, Casper et al. aimed to test the negotiation thesis by comparing constraint variables across spectator motivations (via the MSSC) and team identification. The items of cost and time were the most relevant constraints based on mean values, followed by lack of social interaction, facility issues, and lack of interest. Also, an analysis of variance of constraints by ticket type with a Scheffe post hoc indicated each constraint differed significantly based on ticket type (i.e.,

time and facility cleanliness perceived as significantly higher constraints for single game attendees than season ticket holders, cost a greater constraint for mini plan and single game holders, and facility accessibility, lack of social interaction, and lack of interest greater constraints for single game attendees than season and mini plan holders).

Also, Pearson correlation coefficients were utilized to analyze the negotiation thesis. The cost constraints were identified to significantly lower motivation of consumers to attend, and the correlation increased as ticket size decreased (i.e., the cost lowers motivation of single ticket holders more than mini and season ticket holders, and a similar relationship when comparing mini plan holders to season ticket holders). Perceived time constraints were also found to lower motivation of season ticket holders, and each of the constraints variables significantly lowered team identification across at least one ticket level. The authors noted the significant correlations were low values, but they still indicated even the most motivated or identified fans perceived constraints to their spectatorship, and had not completely negotiated all constraints. However, the perceptions of constraints decreased as usage increased (Casper et al., 2009).

While motivation was only a small component of the Casper et al. (2009) study, it was nonetheless included in the sport consumer process. This aided to give a more complete understanding of consumer behavior than motivations or constraints to attendance as isolated parts. Conversely, Pritchard et al. (2009) focused their repeat attendance study more on motivations, with the inclusion of only one portion on a constraint.

The aim of Pritchard et al. (2009) was to understand consumer behavior in terms of motivation and repeat attendance of MLB spectators, and the impact of media

consumption and constraints on attendance. The constraint was deemed the one factor that most frequently limited attendance through an open-ended question. These constraints were then categorized to three areas, of which external was the most prevalent (e.g., work and other social obligations), followed by the internal group (e.g., personal and family commitments), and then the no constraints group. Examination of the results indicated an indirect route from motivations to repeat attendance existed, where a strong motivation increased consumer involvement and media use, which prompted repeat attendance. Pritchard et al. (2009) noted although motivation and media use explained a portion of behavior, there is still unexplained variance which gives credence to inclusion of attendance constraints for further consumer behavior explanation.

Other constraint and motivation to attendance research has been conducted in the area of mega-sporting events. Kim and Chalip (2004) investigated American travel intentions to the 2002 World Cup in Asia via motivations with financial and risk constraints. More recently, Funk et al. (2009) examined motives and constraints on intentions to attend the 2008 Beijing Olympic Games. The authors noted the negotiation-balance proposition of LCT allowed for interaction between constraints and motivators in their investigation, and grouped constraints in interpersonal, intrapersonal, and structural constructs.

A mixed methods approach was conducted by Funk et al. (2009) where interviews, multivariate regressions, and a structural equation model indicated motivations and constraints have independent unique influence on behavior, positively and negatively, respectively. Overall, participants would travel when benefits increased and intrapersonal constraints decreased, but would not travel when both increased. It

should be noted, attendance at a mega event requires a large investment quite different from a typical professional or collegiate game in America. While Funk et al. (2009) illustrated the benefits of understanding both motives and constraints for tourism travel to a sporting event, this is not “normal” sport attendance in America. Kim and Trail (2010) also saw the benefits of incorporating both motives and constraints, and developed a new model to explain sport consumer behavior for a more typical sport setting.

**Sport consumer behavior model of constraints and motivators.** Kim and Trail (2010) developed a sport spectator model that explained the relationship among constraints and motivators to attendance, and then tested the model with a sample at a women’s professional basketball game. The model utilized previous sport research and LCT with the negotiation-balance proposition. Attendance was predicated on internal and external constraints and motivators, rather than three constraints and no motivators. The authors designated that motivators positively influenced attendance, while constraints negatively influenced attendance. Further, interpersonal and intrapersonal constraints were combined to become internal constraints, as Kim and Trail rationalized some factors may belong to both types (e.g., no interest of family/friends, lack partner). External constraints were essentially structural constraints. Also, the internal and external motivators were added to better understand and predict behavior.

The survey instrument was piecemeal from previously validated research (e.g., MSSC, Trail & James, 2001; PAI, Robinson & Trail, 2005; Venue Service Experience Survey, Trail et al., 2002; Structural Constraints, Trail et al., 2008), while also adapting and incorporating new items. This survey was perhaps the most comprehensive attendance work with over 80 items in 11 constraint and 16 motivational constructs. The



model indicated good fit, and the stepwise regression explained 34% of the variance in attendance. The internal motivator of attachment to the team positively impacted attendance ( $R^2 = 0.21$ ), while the internal constraint of lack of success ( $R^2 = 0.10$ ) and external constraint of leisure alternatives ( $R^2 = 0.03$ ) negatively influenced attendance. The authors deemed partial model support, as no external motivator impacted attendance, but provided explanations to aid support of the model and account for the lacking external motivator (e.g., the people did not perceive the team as aesthetically pleasing, the promotions were not effective, etc.). It was suggested the four dimension model be retested with different samples and teams, but it appears only one study has tested a version of the model (i.e., Trail & Kim, 2011).

Trail and Kim (2011) examined the influence of constraints and motivators in three tests: a general correlated model, a hierarchical model, and a moderated model where constraints moderated the relationship between motives and attendance. The instrument included 20 constructs evenly spread between the two factors, where motivators had a positive impact on attendance, and constraints a negative impact to attend women's college basketball. This instrument was similar to Kim and Trail (2010), but not identical. The results suggest support for the correlated model where each constraint and motivator portion impacted attendance almost entirely in the expected direction. Also, each area (i.e., all internal motivators, all external motivators, three of four internal constraints, and three of six external constraints) impacted attendance. In another model, the results suggested some support for constraints moderating motivation effects on attendance. Lastly, the data indicated no support of the hierarchal model.

Overall, it is evident that while the sport non-attendance area has not been richly investigated, there is a growing body of literature. This area has also started to be conducted collectively with attendance motivations. This dichotomous approach of attendance and non-attendance, or motivations and constraints to attendance, is leading to a more complete understanding of sport consumer behavior. The sport management field, both practitioners and academics, would greatly benefit from continued growth in this research area to better understand the behavior of the sport spectator. In particular the Football Championship Subdivision level, which has not been a topic of academic research, could reap insights from an investigation in this area.

### **Football Attendance**

The topic of football has been popular in the sport attendance research, having been investigated in many different aspects and on several different levels of competition. One obvious area is the impact of football stadium factors on attendance. Wakefield and Sloan (1995) surveyed attendees at five SEC Division I FBS college football games on the impact stadium factors (i.e., parking, cleanliness, crowding from stadium design, food service, and fan control), had on their spectator attendance and the desire of wanting to stay at the game in the stadium and attend in the future. Results of covariance structural modeling indicated all factors impacted attendance and enjoyment at the game, where perceived crowding had the most impact and fan control was the least important factor. There has also been research conducted on sport motivations to football attendance.

### **Football Attendance Motivations**

Motivations to football attendance have also been conducted. In the examination of eight motives (i.e., the SFMS) and 13 sports (i.e., professional baseball, college and

professional football, figure skating, gymnastics, professional hockey, boxing, auto racing, tennis, college and professional basketball, professional wrestling, and golf), college and professional football were among the sports analyzed through student survey responses (Wann et al., 2008) . The results indicated the eustress motives were higher for professional football, and the self-esteem and family motives were higher for college football. Interestingly, the college football and professional football scores did not significantly differ on any motive, with the entertainment, eustress, group-affiliation, and self-esteem motives all scoring above the mid-point.

In another investigation of sport attendance motives, Swanson et al. (2003) researched football game attendance of students partially based on the SFMS, and if there were gender differences based on attendance motivations or communicating with others about attending in the future (e.g., verbal, email, etc.). While the main focus was on gender differences and appealing to these demographics, this work provides another example of football attendance being based upon certain motives, in this case team identification, eustress, group affiliation, and self-esteem enhancement. Prinsen and Lubbers (2008) also investigated student motivation for university sport attendance, and the results indicated football was the most widely attended sporting event among students. Further, these students attended for social reasons, interest in university football, and the game atmosphere.

Football has also been the setting for sport attendance model development. Trail et al. (2003) proposed and tested three models to understand the relationships between motives (i.e., the MSSC minus family and physical attraction) and points of attachment of attendees at intercollegiate football games. Also, the model was segmenting attendees

based on their segmentation as either a highly identified fan or lower vested spectator. Model testing aside, the results indicated motives of sport attendees can be segmented to motives that apply to fans of a winning team (i.e., achievement), to spectators or fans of a unsuccessful team (i.e., aesthetics, physical skill of the athletes, eustress/drama, and knowledge), or motives that apply to both fans and spectators (i.e., escape and social interaction). Robinson et al. (2005) also utilized football as their sport setting for attendance model development, but this was done at each division of NCAA college football, and is further expanded upon below. Woo et al. (2009) also conducted model development in a football context. Results indicated social interaction and vicarious achievement were more likely to be motives of fans, and the spectators were apt to like the sport and the skills, aesthetics, drama, and knowledge that go along with the sport. However, both groups attended to escape. Not only has football served as the sport for attendance model development, but Kahle et al. (1996) developed a student consumer attendance motivation model specifically for college football as well.

### **Lower Levels of Football**

Overwhelmingly, most of the research above was conducted at the Division I FBS level, or it does not indicate the level of football utilized in the research. Therefore, it appears the lower levels of football, in particular the Football Championship Subdivision (FCS), have not received the same attention as other settings. It could be argued that the FCS level is the least researched, or among the least researched next to Division III, as even Division II has been investigated on the factors that impact football game attendance (DeSchrive & Jensen, 2002; Wells et al., 2000).

In Division II, Wells et al. (2000) determined there were 12 variables (i.e., the time of the season the game was played, time of day the game was played, 1998 winning percentage, previous season winning percentage, homecoming promotion, other promotion, student ticket price, if the department estimated student attendance, general admission price, if there was a marketing position in the athletic department, student enrollment, and if the athletic department had a booster club) that predicted attendance. The most influential determinant was winning percentage of the current season, and previous season winning percentage, the homecoming promotion, and other promotions were also positively related to attendance. Other results indicated if the school had student-tickets being available for free, this significantly increased attendance.

DeSchriver and Jensen (2002) improved upon these findings and variables, and conducted several models to predict Division II football attendance through inclusion of weather and distance between competition institutions variables, as well as accounting for an interaction between winning percentage and time to determine the effect of how winning changes over the course of a season. Results indicated winning percentage and promotions were the most influential determinants of attendance, while the age of the facility and number of miles between two competing teams, rain, and snow negatively impacted attendance. However, good weather and student enrollment were positively related to attendance, as was free admission for students. Further, Division II schools appeared to have better attendance in the first half of the season when compared to second half, and the authors speculated this was a result of the cold weather in the second part of the season.

It appears very few studies have specifically noted the FCS in their research. As noted above, Robinson et al. (2005) included the FCS in their attendance study, which at that time was Division I-AA, but this study also included the FBS/Division I-A, Division II, and Division III teams. The FCS results indicated this level had both fans and spectators with varied representation based on the motives from the MSSC, and was similar to Division II. It should be noted, the main purpose of this article was concerning segmentation of attendees as fans or spectators, based upon playing division. There are very few football investigations that have focused solely on the Football Championship Subdivision level.

One article analyzed the FCS level in terms of why these athletic departments take part in the big money football games and play FBS opponents (Faure & Cranor, 2010). Robinson and Trail (2005) utilized the Football Championship Subdivision level for their spectator work, but the main component of this research was to determine difference in sport preferences (i.e., football, men's and women's basketball) and gender. Sport preference differences existed for aesthetics, physical skill, and knowledge, with women's basketball spectators more motivated by aesthetics and knowledge than football, and men's basketball spectators having rated knowledge and physical skill motives higher than football.

Studies that have been specific only to the Football Championship Subdivision level have not pertained specifically to the motivators or constraints to attendance. Shapiro, Ridinger, and Trail (2013) analyzed a new college football program which resided in the FCS, and the past spectator behavior was measured in terms of consumption and identification as it pertained to future behavioral intentions. While

attendance was a component of this behavior, it was not the main focus as it emphasized points of identification and attachment, as well as sponsor support and merchandise purchases.

Overall, while football attendance has received some attention in the academic literature, there appears to be a dearth in work specifically to the Football Championship Subdivision level. Based upon this lack of research the Football Championship Subdivision division appears to be in need of analysis. Therefore, the current investigation hoped to contribute to this research area that is lacking inquiry, and contribute to the area of sport consumer behavior in regards to both to motivators and constraints to attendance.

## CHAPTER III

### METHODOLOGY

The purpose of this sport consumer behavior study was to analyze the factors that help to explain football game attendance. In particular, the goal of this study was to contribute to the under-researched sport management area of jointly analyzing motivators and constraints to attendance, with a focus at the Football Championship Subdivision level and an interest of the attendance factors impacting currently enrolled students. To further explain the implementation for this study, this methodology chapter is organized into the following sections: Sample, Instrumentation and Variables, and Statistical Procedures and Data Analysis.

#### **Sample**

##### **Sample Design and Procedures**

The subjects in this study were currently enrolled students for the 2014-2015 academic year, aged 18 or more years, at a mid-sized mountain university. The university of interest competes at the Division I Football Championship Subdivision level in NCAA college football, and in the Division I classification for all other sport offerings. Given the above with the Football Championship Subdivision focus, this institution was selected based upon the football playing level status.

As student attendance behavior is another component of this work, only currently enrolled students were included in this research. Hence, the population of this study was defined as all students enrolled at the main campus for the 2014-2015 academic year, in a



traditional, full-time, student status. The surrounding community members and alumni were not of interest for the current study given the focus on student behavior in terms of attendance, and future behavior in the form of athletic support. Behavior was measured in the form of a completed survey (further explored below).

Customer retention is another element of this work, and therefore a participant must have attended a game in the current season, or past season. Those that have not attended a game, and hence not expressed an interest in the sport product, were not a focus of this inquiry. All those that had not attended a game were excluded from the analysis. Again, this study had an interest in the behavior of those that have been able to successfully negotiate all constraints at least once, and thus be considered a customer (e.g., customer retention, not customer acquisition).

Two techniques were utilized for the selection of participants in this study. In one, a stratified random sampling technique was instituted, with 350 individuals from each academic class status (i.e., freshman, sophomore, junior, senior, and graduate student). This technique was selected as it allowed for representation of each academic classification and random sampling of students in each of these groups, which increases external validity (Agresti & Finlay, 2009; Huck, 2012). A reminder email was sent after the initial request, in hopes of increasing the response rate to the on-line survey (Huck, 2012).

In the second technique, purposive and convenient sampling was utilized. Purposive selection allows for the potential participants to meet certain relevant screening criteria for inclusion in the sample, which can aid in the inference process if care is taken in the procedure (De Leeuw, Hox, & Dillman, 2008; Huck, 2012, p. 90-101). In this

portion, there was targeting of students that had expressed an interest in sport by enrolling in a sport-themed course for inclusion in the sample. While a non-probability sampling technique, this method of soliciting participants has been used effectively in other attendance studies (Fink & Parker, 2009; Greenwell, 2007; Havard & Dwyer, 2012; Trail et al., 2008). Further, this method was deemed adequate as past attendance research has conveyed that consumers with an interest in sport are likely to be the target market for attendance to university athletic contests, and inclined to attend sport events (Greenwell, 2007; Havard & Dwyer, 2012). Thus, those students enrolled in sport and exercise science courses were of particular interest in this research to complete the pen and paper survey, and were purposively selected for inclusion ( $N = 215$ ).

At this time, some concerns about the generalizability of this work should be touched upon. While only one Football Championship Subdivision institution was utilized for this inquiry, the generalizability of these results should be eased based upon the setting being considered is comparable to the attendance of other Football Championship Subdivision institutions. To determine the lack of differences, an Football Championship Subdivision attendance analysis was conducted.

First, a one-way analysis of variance (ANOVA) was conducted for the conference of the school where the data were collected. Average attendance figures were collected from the past five seasons (i.e., 2009 to 2013), which is the figure that includes student attendance. Nine schools had data for each year and were included in the initial analysis. The data provided evidence to conclude there are significant mean differences in the attendance numbers among the schools in this conference,  $F(8, 36) = 147.81, p < 0.001$ . Post hoc analyses, using Tukey's HSD test, indicated further significant mean score

differences among the groups. The post hoc analysis indicated the school of interest ( $M = 4223.40$ ,  $SD = 803.34$ ) was not significantly different from two of the other schools in the conference ( $M = 5614.8$ ,  $SD = 553.58$ ;  $M = 5910.40$ ,  $SD = 925.90$ ), while all others had statistically significant higher attendance figures. As such, one-third of the conference has similar attendance over the past five seasons, and each of these schools has averaged fewer than 6,000 spectators per home game.

To further aid generalizability, of the 124 schools that competed at the Football Championship Subdivision level, a list of each school that averaged fewer than 6,000 spectators for the 2013 season was created. This list had 51 schools on it. Next, the attendance figures of these schools were collected over the past five seasons (i.e., 2009 to 2013). Four schools did not have available attendance figures for all of these years, and as such were excluded from further analysis. Next, a one-way ANOVA was conducted for these schools and their attendance figures. The ANOVA indicated there were significant mean differences between these 47 schools and their attendance figures,  $F(46, 188) = 13.88$ ,  $p < 0.001$ . To decipher these differences, Tukey's HSD post hoc test was again utilized, and the school of interest was analyzed. When this school was compared to the 46 others there were only 5 schools that were significantly different, one of which plays in the same conference and was already established in the previous analysis.

Of the schools that were not significantly different from the one where data collection took place, there was representation of 26 different states from all regions of the country (i.e., California, Connecticut, the District of Columbia, Delaware, Florida, Georgia, Iowa, Idaho, Indiana, Kentucky, Louisiana, Maryland, Missouri, Mississippi, North Carolina, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode

Island, South Carolina, Tennessee, Utah, and Virginia). Also, of the five schools that significantly differed, three had another school in the state that did not significantly differ from the one where data were collected (i.e., Mississippi, Pennsylvania, and Utah; Illinois and Texas did not, though these states only had one school represented with attendance under 6,000 for the 2013 season).

### **Sample Size**

In determining the sample size of this study, multiple strategies were considered. For a regression analysis, Tabachnick and Fidell (2013) suggest several approaches. In terms of testing the regression and the individual predictors, the rule of thumb is  $N \geq 50 + 8m$  (where  $m$  is the number of independent variables) and  $N \geq 104 + m$ , respectively (Tabachnick & Fidell, 2013, p. 123). This approach assumes a medium-size relationship between the independent variables and the dependent variable. This would then determine the appropriate minimum sample size would be 258 for the regression and 130 for the predictors, with the larger number of cases being appropriate for testing both cases.

Another approach suggests, albeit more complex when considering effect size at the medium or large effects of 0.15 and 0.35, respectively, a sample size formula of  $N \geq (8/f^2) + (m - 1)$ , where  $f$  = the effect size (Tabachnick & Fidell, 2013, p. 124). This would produce a minimum sample size of 381 and 91, for medium and large effect sizes, respectively. Tabachnick and Fidell also suggest consulting an on-line program to determine minimum sample size. A publicly available on-line a-priori sample size calculator for multiple regression was utilized (Soper, 2014), and after inputting the 26 predictors at the  $\alpha = 0.05$ , effect size ( $f^2$ ) = 0.15, and power = 0.8, the appropriate

minimum sample size was determined to be 175. If similar motivation and constraint to attendance investigations are considered, this would provide sample sizes ranging from 115 for Kim and Trail (2010), to 236 for Funk et al. (2009), and 556 for Kim and Chalip (2004).

Based on the above options, it appeared achieving a minimum sample size in the range of 200 to 300 completed surveys would provide the appropriate sample size required of a stepwise regression analysis technique. In similar research, the usability rates of survey responses ranged from 25% to 88% (Kim & Chalip, 2004; Trail & Kim, 2011). However, the majority of these studies were in the 58% to 88% range when a pen and paper survey method was distributed (Havard & Dwyer, 2012; Kim & Trail, 2010; Trail et al., 2008), in comparison to the email/on-line response being from 2% to 25% (Kim & Chalip, 2004; Trail & Kim, 2011). For this study, both avenues for survey completion were attempted. Given the higher response rate of the pen and paper method, this was utilized for the sample requirement. The on-line survey completions were utilized when they were found to not be statistically different from the pen and paper survey responses. Therefore, it seemed a logical minimum target was around 275 to 412 pen and paper survey responses based upon a 73% usability rate as the midpoint between the above figures. This was projected to provide an adequate number (i.e., 200-300) of usable surveys to conduct this research inquiry (i.e., completed surveys with no missing data, incomplete/erroneous responses, or marks of the same response for all questions, and the student had attended at least one game).

## **Instrumentation and Variables**

### **Instrument**

A survey instrument was utilized to collect data from students concerning their attendance behavior. The survey that was utilized in this research is based upon and guided by the previously validated work of Kim and Trail (2010). There were a total of 99 items in the instrument, which contains 26 variables and their 80 items, as well as demographic information. In all the survey contained the dependent variable, the independent variables, and the demographic information. The independent variables were considered in four constructs: internal motivators, external motivators, internal constraints, and external constraints. The survey can be viewed in Appendix B. Each of the four constructs and its variables, as well as the dependent variable and demographic information in the survey, are further explored below.

It should also be noted that each variable had a minimum of three items, which is the desired minimum number as two or less can lead to issues of reliability and reaching an infeasible solution (Hair, Anderson, Tatham, & Black 1998, p. 598). Also, all independent variables were measured on a 7-point Likert-type scale, and were selected as the variables in previous work utilized such measures. Also, each survey was number-coded to ensure the appropriate survey response was matched to the appropriate responder and their contributed data.

The estimated completion time for the survey was 5 to 10 minutes. All participation was anonymous and voluntary, as no direct identifiers were required of the participants. An incentive was utilized for the on-line survey, as previous research

indicates lottery incentives increase web survey response rates over not having an incentive offering (Göriz, 2006). Voluntary email information was provided by the participant if he/she selected to be included in the lottery for one of the four \$25 gift cards. There were no inherent risks in participation, as the risks encountered were no greater than those normally encountered during a regular classroom participation or work setting. Also, each survey included the Institutional Review Board (IRB) consent form, as well as the four page survey. At the bottom of the IRB form was the 2014 football schedule of the team where data were collected. This was provided for the participant to reference in aid of recalling specific behavior this past season. All forms can be viewed in Appendix A and Appendix B.

### **Internal Motivator Variables**

This section of the survey contained 9 variables and 27 items (i.e., three items per variable). The variables in this section were aimed at measuring the internal psychological cognitions and reasoning that motivated attendance to a football contest (Kim & Trail, 2010). The variables in this section included: Achievement, Community Attachment, Coach Attachment, Level of Sport Attachment, Player Attachment, Sport Attachment, Team Attachment, Escape, and Social.

Word alterations were made only when it was necessary to accommodate the given setting (i.e., Community Attachment for the school/city, Coach Attachment for the coach's last name, Level of Sport Attachment for the FCS football level, Sport Attachment for football, and Team Attachment for switching the team name to that of the place of inquiry). All items were measured using the 7-point Likert-type scale from 1 (Strongly Disagree) to 7 (Strongly Agree). It should be noted, the internal motivator of

Women's Opportunity was not included in this work. The researcher deemed this variable to not be applicable to the given context of interest being a men's participant sport.

The Escape, Social, and Achievement variables were based upon the MSSC (Trail & James, 2001), and have shown adequate internal consistency in previous work ( $\alpha = 0.72$  to  $0.93$ ) and construct reliability with Average Variance Extracted (AVE) values ranging from  $0.51$  to  $0.82$  (James & Ridinger, 2002; Kim & Trail, 2010; Robinson & Trail, 2005; Trail, Fink, & Anderson, 2003; Trail & James, 2001; Trail, Robinson, et al., 2003). The Community, Coach Attachment, Level of Sport Attachment, Player Attachment, Sport Attachment, and Team Attachment variables were based upon the PAI (Robinson & Trail, 2005), and have shown good internal consistency ( $\alpha = 0.75$  to  $0.86$ ), and adequate construct reliability with AVE values ranging from  $0.48$  to  $0.73$  (Robinson & Trail, 2005; Kwon, Trail, & Anderson, 2005).

### **External Motivator Variables**

In the survey, there were 5 variables and 17 items (i.e., every variable had three items except Media, which has 5). This section had variables which intended to measure the social, environmental, and rewards that motivated one to attend a football game (Kim & Trail, 2010). The variables in this section included: Aesthetics, Drama, Promotion, Media, and Player Behavior.

A few word alterations were made to items in this construct to adapt the instrument to this setting (i.e., campus fliers were added to Newspaper ads, and social media was added to television commercials in the Media portion; in Player Behavior court was altered to field, and campus was added to community; in Promotion, half-time



was combined to pre-game events, as was before with during the game). All items were measured on a 7-point Likert-type scale. Aesthetics and Drama were measured on the 1 (Strongly Disagree) to 7 (Strongly Agree), while Promotion, Media, and Player Behavior were measured on the 1 (Negative Influence on My Attendance) to 7 (Positive Influence on My Attendance) for better variable understandability. It should be noted, the external motivator of Role Model was not included in this work. The researcher deemed this variable unsuitable to the given context of college-aged student responders, and that the players are also similar aged student-athletes.

The Aesthetics and Drama variables were from the MSSC (Trail & James, 2001), while Media and Promotion were based upon Fink et al. (2002b), and Player Behavior was created by Kim and Trail (2010). All have displayed good psychometric properties with AVE values ranging from 0.51 to 0.81, and internally consistent ( $\alpha = 0.75$  to 0.93).

### **Internal Constraint Variables**

For this section, there were 4 variables, and 12 items (i.e., each variable had three items which measured the inner psychological cognitions and reasoning that deter football game attendance (Kim & Trail, 2010)). This section included the following variables: Lack of Success, Lack of Knowledge, No Interest From Others, and Lack of Someone to Attend With.

Very few word alterations were made, and only to denote the appropriate sport or team (i.e., in No Interest the sport was altered, and Lack of Success the appropriate team name was inserted). These variables were measured on a 7-point Likert-type scale in three formats to better measure the area, with Lack of Success from 1 (No Impact) to 7 (A Large Negative Impact), Lack of Someone to Attend With from 1 (Negative Influence

on My Attendance) to 7 (Positive Influence on My Attendance), and Lack of Knowledge and No Interest From Others from 1 (Strongly Disagree) to 7 (Strongly Agree).

The Lack of Knowledge variable was based upon the MSSC (Trail & James, 2001), Lack of Success from Trail et al. (2008), and Lack of Someone to Attend With and No Interest From Others were created from Crawford et al. (1991). Lack of Knowledge and Lack of Success have displayed internal consistency ( $\alpha = 0.89$ ), as has Lack of Someone to Attend With ( $\alpha = 0.79$ ), while No Interest From Others was borderline ( $\alpha = 0.69$ ) being under the 0.70 cutoff (Fornell & Larcker, 1981; Hulland, 1999; Martinez-Ruiz & Aluja-Banet, 2009). Also, Lack of Someone to Attend With was above the AVE recommended value of 0.50 at 0.62, but No Interest From Others was borderline at 0.46 (Fornell & Larcker, 1981; Henseler, Ringle, & Sinkovics, 2009).

### **External Constraint Variables**

This section of the survey pertained to the 7 variables and 21 items that were deemed external constraints. These external constraints were factors that existed outside of a person that can limit, or decrease the likelihood of, an individual from attending a football game (Kim & Trail, 2010). The variables in this section included: Commitments, Leisure Alternatives, Sport Alternatives, Sport Entertainment, Parking, Stadium Location, and Cost.

Word alterations were minimal, and altered to match the appropriate context and match the age of the population (i.e., in Leisure Alternatives party was added to the word bar, as some participants may be under the legal drinking age; in Other Sport Entertainment the local college and professional teams were adjusted to this context, and an example of watching college football was added to watching other sports on TV, as it

is a direct competitor to attending a college football game; for Parking and Stadium Location the word arena was changed to stadium; and lastly, in Cost, season tickets was altered to tickets/concessions, and price was altered to cost). Each of these variables was measured on a 7-point Likert-type scale. Commitments, Leisure Alternatives, Sport Alternatives, and Sport Entertainment are on a 1 (No Impact) to 7 (A Large Negative Impact) Likert-type scale, while Parking, Stadium Location, and Cost are on a 1 (Negative Influence on My Attendance) to 7 (Positive Influence on My Attendance) Likert-type scale.

The Parking and Stadium Location variables were modified from the previously validated Venue Service Experience Survey (Trail et al., 2002) which showed good psychometric properties ( $\alpha = 0.73-0.94$ ; AVE = 0.65 – 0.90), while the remaining five variables (i.e., Commitments, Leisure Alternatives, Sport Alternatives, Sport Entertainment, and Cost) were from the work of Trail et al. (2008). This also indicated good internal consistency ( $\alpha = 0.73-0.84$ ). However, it should be noted that in Kim and Trail (2010) each of these variables was above the recommended Cronbach's Alpha threshold, but Commitment and Location were borderline on the AVE 0.50 limit at 0.46 and 0.49, respectively. The authors expressed limited concern from these borderline figures, as no squared correlation between two subscales was greater than the AVE score of either factor for those noted above, and deemed usable for analysis (Kim & Trail, 2010, p. 198).

### **Dependent Variable**

The dependent variable in this survey measured the attendance behavior of the respondent. This measure was one variable, and three items: the number of football

games attended for the current 2014 season, the number of football games attended the previous season in 2013, and the intended number of football games the person plans to attend in the 2015 season.

World alterations were only made to the team name and year, and the number of home games was added at the end of the item to aid in recall. Each respondent had to indicate the number of games attended by writing in this open-ended response. This behavioral measure was based upon Trail, Fink, and Anderson (2003). The variable has demonstrated good psychometric properties ( $\alpha = 0.82-0.85$ ; AVE = 0.58-0.74; Kim & Trail, 2010; Trail, Fink, & Anderson, 2003).

### **Demographics**

In order to gain a better understanding of the respondents making up this sample, demographic responses were asked of each participant. The demographic variables included were: age, gender, academic class standing (i.e., freshman, sophomore, junior, senior, graduate student), race/ethnicity, hometown/state, membership in a fraternity/sorority, academic major, and distance the respondent lived from the campus/stadium during the academic year. Except for age, academic major, and hometown/state, each response was close-ended, with a limited response spectrum.

### **Statistical Procedures and Data Analysis**

The data for this investigation was conducted using IBM Statistical Package for the Social Sciences (SPSS) 22.0. To answer the research questions in this study, the following statistical procedures were utilized: Descriptive Statistics, Correlations, and Regression.

## **Descriptive Statistics**

Prior to utilizing any statistical technique, an analysis of the descriptive statistics was conducted of each variable and the demographics. The use of descriptive statistics is typical in any research investigation, and aids in describing, characterizing, summarizing, and organizing the data set and variables (Huck, 2012; Privitera, 2012; Tabachnick & Fidell, 2013). Also, these descriptive statistics can aid the researcher to better understand the data. Descriptive statistics can also assist in validating necessary assumptions (e.g., normality, outliers, skewness, kurtosis, and response frequencies), and detecting assumption violations for data deletions or transformations. Measures of distribution and frequencies were observed including: mean, median, mode, range, and standard deviation.

## **Correlations**

The use of correlation analysis aids in describing the relationship between two variables, with Pearson's correlation coefficients being the most commonly implemented association measure for the strength and nature of the relationship for non-ranking quantitative statistics (Huck, 2012; Tabachnick & Fidell, 2013). As correlations are necessary components in regression analysis, their inclusion was essential for this investigation. These correlation coefficients need to be linear and independent of one another, and were examined to provide information on how the variables were related. These coefficients also gleaned information on multicollinearity for the multiple linear regressions, where highly correlated variables can cause errors to occur where inferences about predictor variables can become untrustworthy (Huck, 2012, p. 400).

## **Regression**

The main component of this analysis was a multiple linear regression, as this statistical technique allows assessment of the relationship, as well as prediction and explanation of these variables, between one dependent variable and several independent variables (Tabachnick & Fidell, 2013). Further, this technique allows for independent variables to be correlated with one another, and to a varying extent with the dependent variable as well. Regression is also beneficial in aiding survey research (i.e., non-experimental research) in regards to real-world problems and applications, and understanding behavior (Huck, 2012; Tabachnick & Fidell, 2013).

In this research, the relationship between the constraints and motivators, the independent variables, and attendance, the dependent variable, was examined using a stepwise regression analysis. A stepwise regression, also known as a statistical regression, allows for all variables to be examined simultaneously. The equation of a stepwise regression starts out empty, and independent variables are added one at a time if they meet statistical criteria, with the variable that explains the most variance entering first, but they may be deleted at any step when they no longer significantly contribute to the regression model. After the first variable is entered, the next variable enters which explains the most remaining variance, and this pattern continues until no further significant variance is contributed to the model (Huck, 2012; Kim & Trail, 2010; Tabachnick & Fidell, 2013).

This regression technique was selected as it allows the resulting model to provide the best prediction of the dependent variable from the independent variables. It also aids to investigate the relationship between the dependent variable and independent variables,

as well as the strength of the relationship and importance of each independent variable to the relationship (Huck, 2012; Tabachnick & Fidell, 2013). Additionally, as no other research has been conducted in this area of student attendance behavior at the Football Championship Subdivision level, there are no indications of appropriate order of variables, or influential variables, to conduct a hierarchy or sequential regression. Trail and Kim (2011) also indicated a hierarchy may not exist with these variables, and Kim and Trail (2010) also utilize the stepwise regression. Based upon the helpfulness of this technique in developing a subset of independent variables that is useful in predicting the dependent variable, while eliminating those variables that do not provide additional prediction to the model, the stepwise regression appeared suitable.

For a stepwise regression to be conducted, the assumptions of independence, normality, linearity, and homoscedasticity, must be met, with no evidence of multicollinearity (Huck, 2012; Tabachnick & Fidell, 2013). These were examined through the use of residual and scatter plots, descriptive statistics, as well as the use of correlations. Variance inflation factors (VIFs) and tolerance values were also produced and considered.

Next, a full stepwise regression model was created to predict attendance behavior (Tabachnick & Fidell, 2013). Separate regressions were also conducted for each motivation and constraint area, to explore each construct and compare results. In selecting the best model, the number of significant and non-significant variables was considered. Also, the explained variance by the model, or the proportion of variability in the dependent variable that has been accounted for by the independent variables (Huck, 2012; Tabachnick & Fidell, 2013) was explored in terms of  $R^2$  and adjusted  $R^2$ . These

two measures of explained variance were noted, as  $R^2$  presents the explained variance of the model, while adjusted  $R^2$  presents a more conservative explained variance of the model that accounts for the sample size and replication (Huck, 2012, p. 384-386). In the stepwise regression, the  $R^2$  of each step was noted, as well as the change in  $R^2$ , which is commonly denoted as  $\Delta R^2$ . After considering the explained variances and number of significant factors, the best overall model was then selected.

Overall, this research aimed to better understand the factors which negatively impacted behavior and constrained attendance to games at the Football Championship Subdivision level, as well as factors that positively impacted behavior and motivated attendance to games. The following research questions were examined in this study, along with the statistical procedure to answer each question:

1. What are the item(s)/factor(s) that impact students to attend Football Championship Subdivision football games?  
Descriptive Statistics
2. What are the items/factors that impact to students to not attend Football Championship Subdivision football games?  
Descriptive Statistics
3. In terms of student attendance to Football Championship Subdivision football games, are there internal constraints that negatively influence/predict attendance?  
Correlations and Regression
4. In terms of student attendance to Football Championship Subdivision football games, are there external constraints that negatively influence/predict attendance?  
Correlations and Regression



5. In terms of student attendance to Football Championship Subdivision football games, are there internal motivators that positively influence/predict attendance?

Correlations and Regression

6. In terms of student attendance to Football Championship Subdivision football games, are there external motivators that positively influence/predict attendance?

Correlations and Regression

## CHAPTER IV

### RESULTS

This chapter presents the analysis of the data collected from the attendance motivation and constraint surveys. To help in the presentation of findings, the organization of the chapter is presented with the description of the sample via collection techniques and demographics, followed by the answering of the research questions through descriptive statistics, correlations, and regression. Lastly, a summary of the results is presented.

#### **Description of the Sample**

##### **Collection Techniques**

Two data collection techniques were utilized with the survey, pen and paper responses and on-line responses. In total, 318 pen and paper survey responses were collected between Wednesday, December 3, 2014 and January 26, 2015 from 23 sport and exercise science classes. However, not all of the responses were completed and usable surveys. Only 215 surveys were deemed usable, as 103 surveys were considered unusable from the student having never attended a football game and/or containing incomplete or not available responses (e.g., missing survey responses, marking the same response for all questions, etc.). This resulted in a usability rate of 67.61%.

The on-line survey collection technique resulted in additional responses. On Monday, January 5, 2015 the survey was activated and an initial email was sent out with the survey link which asked for participation from the list of 1750 students. A reminder

email was sent two days later, on Wednesday, January 7, as research suggests a better response rate with a reminder in a shorter time frame (i.e., two days following the initial contact) for email communication and on-line responses (De Leeuw & Hox, 2008, p. 252). A final reminder was sent on Thursday, January 15, 2015, as three contact points is suggested for optimal response rates (Manfreda & Vehovar, 2008, p. 272). The on-line survey was closed at the end of Tuesday, January 20, 2015. In total, 349 on-line survey responses were recorded, for a response rate of 19.94%. However not all of those responses were completed usable surveys. Only 170 were usable surveys, for a usability rate of 48.71%, and a usable response rate of 9.71%. The 179 deleted surveys were deemed unusable from containing incomplete or missing response items, and/or marking the same response for all questions. Of the usable surveys, 90 of the respondents indicated having previously attended a game and were thus deemed fit for the study, or 52.94% of the completed surveys. There were 80 surveys where the respondent had not attended a football game as a student, and as such were also not usable for this investigation. The on-line survey usability response rate of those that attended a game was 5.14%, and the usability rate of the submitted surveys was 25.79%.

To determine if there were any significant differences in the responses between the two data collection techniques, the mean responses of each construct were compared based upon the data collection technique (i.e., pen and paper and on-line) in group mean independent sample t-tests. Results indicated there were significant mean score differences for 6 of the 26 variables based upon the data collection technique which included: Sport Attachment, pen and paper ( $M = 4.52$ ,  $SD = 1.74$ ) and on-line ( $M = 3.92$ ,  $SD = 1.95$ ),  $t(303) = 2.66$ ,  $p = 0.008$ ; Level of Sport Attachment, pen and paper ( $M =$

3.40,  $SD = 1.48$ ), and on-line ( $M = 2.85$ ,  $SD = 1.71$ ),  $t(303) = 2.80$ ,  $p = 0.005$ ; Aesthetics, pen and paper ( $M = 3.81$ ,  $SD = 1.29$ ), and on-line ( $M = 3.29$ ,  $SD = 1.56$ ),  $t(142.58) = 2.78$ ,  $p = 0.006$ ; Sport Entertainment, pen and paper ( $M = 3.51$ ,  $SD = 1.59$ ), and on-line ( $M = 3.11$ ,  $SD = 1.65$ ),  $t(303) = 1.97$ ,  $p = 0.050$ ; No Interest From Others, pen and paper ( $M = 4.65$ ,  $SD = 1.85$ ), and on-line ( $M = 4.54$ ,  $SD = 2.06$ ),  $t(303) = -3.49$ ,  $p = 0.001$ ; Lack of Knowledge, pen and paper ( $M = 3.10$ ,  $SD = 1.53$ ), and on-line ( $M = 3.77$ ,  $SD = 1.49$ ),  $t(136.69) = -2.91$ ,  $p = 0.004$ . The results of the t-tests can be viewed in Table 1. However, while there were significant differences, the effect sizes were also considered to determine if there was any practical significance (Huck, 2012, p. 221, 231).

Table 1

*Independent Sample t-Tests*

Construct	Variable	Source				<i>t</i>	<i>p</i> -value	Cronbach's <i>α</i>
		Pen and Paper		On- Line				
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Internal Motivator	Achievement	2.92	1.21	2.70	1.55	1.22	.180	0.76
	Player Attachment	3.61	1.63	3.41	1.79	0.92	.356	0.77
	Sport Attachment	4.52	1.74	3.92	1.95	2.66	.008*	0.77
	Coach Attachment	3.11	1.27	3.14	1.44	-0.22	.829	0.77
	Escape	4.07	1.45	3.89	1.82	0.81	.422	0.76
	Community Attachment	4.59	1.22	4.88	1.48	-1.78	.076	0.76
	Social	5.16	1.26	5.22	1.55	-0.30	.763	0.76
	Team Attachment	3.19	1.33	3.27	1.73	-0.37	.710	0.76
	Level of Sport Attachment	3.40	1.48	2.85	1.71	2.80	.005*	0.76
External Motivator	Aesthetics	3.81	1.29	3.29	1.56	2.78	.006*	0.76
	Drama	5.50	1.20	5.46	1.33	0.23	.816	0.77
	Media	4.31	0.85	4.31	0.74	-0.01	1.00	0.77
	Promotions	5.01	1.03	5.10	0.97	-0.76	.450	0.77
	Player Behavior	3.96	1.13	3.78	1.06	1.29	.198	0.77
External Constraint	Sport Alternatives	3.56	1.66	3.30	1.74	1.25	.214	0.77
	Commitments	4.84	1.45	5.11	1.50	-1.48	.139	0.77
	Sport Entertainment	3.51	1.59	3.11	1.65	1.97	.050*	0.77
	Leisure Alternatives	3.40	1.68	3.46	1.81	-0.28	.778	0.77
	Stadium Location	4.27	1.04	4.30	0.96	-0.25	.800	0.77
	Parking	4.19	1.03	4.31	0.86	-0.98	.326	0.77
	Cost	3.49	1.32	3.24	1.55	0.13	.898	0.77
Internal Constraint	Lack of Success	3.97	1.09	3.96	1.21	0.46	.647	0.79
	No Interest From Others	4.65	1.85	4.54	2.06	-3.49	.001*	0.79
	Lack of Knowledge	3.10	1.53	3.77	1.49	-2.91	.004*	0.80
	Lack of Someone to Attend With	1.96	1.47	2.60	1.88	1.36	.176	0.78
Attendance Behavior	Dependent Variable	1.99	1.37	2.28	1.52	-1.64	.101	0.78

Note. \* indicated significance at  $p \leq 0.05$

To determine effect sizes of the t-tests, an effect size calculator was utilized (Ellis, 2009) that accounted for unequal sample sizes which pooled the standard deviation for the produced Cohen's  $d$  value. It should also be noted, the analysis accounted for the equality of variance with Levene's test, and if needed the equality of variance not assumed statistic and t-value were utilized. The results indicated that of the significant results, none of the effect sizes surpassed the lowest necessary value of  $\pm 0.50$  Cohen's  $d$  for a medium effect size (Huck, 2012, p. 223). Effect sizes can be viewed in Table 2. As such, the results indicated a small effect size, and with the mean values being close as well, the two data sets were deemed to not be different and were combined for the analysis. Thus, there were 305 usable surveys that were considered in the investigation (i.e., 215 pen and paper, 90 on-line).

Table 2

*Effect Size of Significant t-Tests*

Construct	Variable	$d$
Internal Motivator	Sport Attachment	0.33
	Level of Sport Attachment	0.34
External Motivator	Aesthetics	0.36
External Constraint	Sport Entertainment	0.25
Internal Constraint	Lack of Knowledge	0.38
	No Interest From Others	0.44

Also, with combining the two survey groups, the variables demonstrated internal consistency reliability according to Cronbach's alpha. George and Mallory (2003, p. 231) recommend  $\alpha$  values  $\geq 0.90$  indicate excellent internal consistency,  $\geq 0.80$  good internal

consistency,  $\geq 0.70$  acceptable internal consistency,  $\geq 0.60$  questionable,  $\geq 0.50$  poor, and  $< 0.50$  unacceptable. Overall, the scales demonstrated acceptable internal consistency while approaching good internal consistency overall,  $\alpha = 0.78$ , and each variable registered a value at or above  $\alpha = 0.76$  (see Table 1).

### **Demographics**

Initially, the frequency and basic demographic information of the data were inspected. The sample of respondents to this survey were nearly evenly split on gender, with 56.1% ( $n = 171$ ) of respondents indicating their gender as female, and 43.9% ( $n = 134$ ) as male. The age of respondents ranged from 18 to 54, with the average being 21.12 years ( $SD = 3.48$ ). In terms of racial/ethnicity makeup, the sample was predominantly White/Caucasian at 70.5% ( $n = 215$ ), however each of the other categories were also represented (see Table 5). It should also be noted that if a respondent marked more than one race, this response was converted to represent the “other” category and was done for 15 surveys. In the sample, each class of student was represented (i.e., Freshmen, Sophomore, Junior, Senior, and Graduate Student), with Senior being the most prevalent academic class standing at 36.1% ( $n = 110$ ). Most of the students also lived on or near-campus within five miles during the academic year, with the most common living situation being a student living off-campus within one mile at 37.4% ( $n = 114$ ). Also, most students were not involved in Greek Life at 85.6% ( $n = 261$ ), and 71.8% considered Colorado their home state ( $n = 219$ ). There was representation of 22 other states, and one graduate student was from another country (i.e., China). The hometown portion of the demographic information was deleted due to incompletions and inconsistent completion,

as was the academic major. A further breakdown of frequency and percentages for all of the demographic information is displayed below in Tables 3-13.

Table 3

<i>Gender</i>		
Gender	<i>f</i>	%
Male	134	43.9
Female	171	56.1

Table 4

<i>Age</i>		
Age	<i>f</i>	%
18	15	4.9
19	53	17.4
20	81	26.6
21	79	25.9
22	37	12.1
23	11	3.6
24	12	3.9
25	6	2.0
26	3	1.0
27	2	0.7
29	1	0.3
37	1	0.3
40	1	0.3
44	2	0.7
54	1	0.3



Table 5

<i>Race/Ethnicity</i>		
Race/Ethnicity	<i>f</i>	%
Caucasian/White/Non-Hispanic	215	70.5
Black/African-American	14	4.6
Asian/Asian-American	10	3.3
Hawaiian/Pacific Islander	1	0.3
Hispanic/Latino/Non-White	18	5.9
White/Hispanic	25	8.2
American Indian/Alaska Native	1	0.3
None of the Above/Other	21	6.9

Table 6

<i>Academic Class</i>		
School Year Living Distance to Stadium	<i>f</i>	%
Freshman	23	7.5
Sophomore	82	26.9
Junior	81	26.6
Senior	110	36.1
Graduate Student	9	3.0

Table 7

*Living Distance in Relation to Stadium Location During the School Year*

School Year Living Distance to Stadium	<i>f</i>	%
On Campus	74	24.3
Off Campus Within 1 Mile	114	37.4
Off Campus Between 1 to 5 Miles	83	27.2
Off Campus Between 5 to 10 Miles	17	5.6
Off Campus More than 10 Miles	17	5.6

Table 8

*Greek Life Status*

Membership	<i>f</i>	%
Fraternity	21	6.9
Sorority	23	7.5
Not Involved in Greek Life	261	85.6

Table 9

<i>Home State</i>		
State	<i>f</i>	%
AK	1	0.3
AL	3	1.0
AZ	3	1.0
CA	8	2.6
CO	219	71.8
FL	2	0.7
GA	2	0.7
HI	8	2.6
ID	2	0.7
IL	7	2.3
KS	2	0.7
MD	2	0.7
MI	1	0.3
MO	2	0.7
NE	4	1.3
NM	1	0.3
NV	2	0.7
NY	1	0.3
OR	4	1.3
SD	1	0.3
TX	8	2.6
WA	3	1.0
WY	2	0.7
Outside of the Country/Not Available	17	5.5

Table 10

<i>Attendance</i>	Yes		No	
	<i>f</i>	%	<i>f</i>	%
Alone	16	5.2	289	94.8
With Others – Friends	255	83.6	50	16.4
With Others – Family	48	15.7	257	84.3

Table 11

*Level of Sport Fandom, 1-10 Scale*

Level	<i>f</i>	%
0 – Not a Sports Fan	8	2.6
1	3	1.0
2	9	3.0
3	5	1.6
4	9	3.0
5	11	3.6
6	21	6.9
7	44	14.4
8	45	14.8
9	40	13.1
10 – Big Fan	110	36.1

Table 12

*Level of Fandom for the Football Team of Interest, 1-10 Scale*

Level	<i>f</i>	%
0 – Not a Fan	24	7.9
1	15	4.9
2	35	11.5
3	31	10.2
4	42	13.8
5	57	18.7
6	41	13.4
7	33	10.8
8	17	5.6
9	6	2.0
10 – Big Fan	4	1.3

Table 13

*Years of Fandom for the Football Team of Interest*

Years	<i>f</i>	%
0	84	27.5
1	44	14.4
2	63	20.7
3	53	17.4
4	36	11.8
5	10	3.3
6	4	1.3
7	4	1.3
9	1	0.3
10	2	0.7
13	1	0.3
15	1	0.3
20	1	0.3
21	1	0.3

## Research Questions

To answer the six research questions presented above for this study, various statistical analyses were performed on the data. The analysis procedures undertaken in this study included frequency distributions and arithmetic averages/measures of central tendency, Pearson correlations, and multiple linear regressions. The results of these analyses are presented below to answer the six research questions. Questions one and two are based upon the descriptive statistics, while questions three through six are based upon the correlation and regression results.

- Q1     What are the item(s)/factor(s) that influence students to attend Football Championship Subdivision football games?
- Q2     What are the item(s)/factor(s) that influence students to not attend Football Championship Subdivision football games?

## Descriptive Statistics

The first step in analyzing the data for this investigation was to evaluate the central tendencies and range of the responses. This was done to determine the influence of certain factors and items on students to attend, as well as not attend, football games.

**Attendance.** In terms of Internal Motivators, there appeared to be a limited number of variables that had a positive impact on student attendance, given the scale measurement of 1 (Strongly Disagree) and 7 (Strongly Agree) that the item motivated attendance, where 4 was the mid-point (Neutral). However, respondents agreed with the notion that the Social ( $M = 5.18$ ,  $SD = 1.35$ ) and Community Attachment ( $M = 4.67$ ,  $SD = 1.30$ ) variables had slight positive impacts on their attendance. Inspection of the item values indicated that Socializing with Others ( $M = 5.37$ ,  $SD = 1.44$ ) had the most positive motivation influence on attendance for the Social variable, and was the most common response with a mode of 6.0. For the Community Attachment items, the Support of the

Campus Community item was the most prevalent response, however it had only a slight positive impact on attendance motivation ( $M = 5.10$ ,  $SD = 1.43$ ).

The variables of Escape ( $M = 4.02$ ,  $SD = 1.57$ ), Player Attachment ( $M = 3.55$ ,  $SD = 1.68$ ), and Sport Attachment ( $M = 4.34$ ,  $SD = 1.82$ ) appeared to have no impact on attendance motivation. Although, the mode response for the Sport Attachment variable indicated this area did strongly motivate attendance as the Football Fan item ( $M = 5.04$ ,  $SD = 1.91$ ) had a modal response of 7.0, which indicated a strong agreement of the positive impact on attendance in terms of motivation. The remaining Internal Motivator variables appeared to not positively impact the motivation to attend a game based upon mean figures (i.e., Achievement,  $M = 2.86$ ,  $SD = 1.32$ ; Coach Attachment,  $M = 3.12$ ,  $SD = 1.32$ ; Team Attachment,  $M = 3.21$ ,  $SD = 1.46$ ; and Level Attachment,  $M = 3.24$ ,  $SD = 1.57$ ). It should also be noted that of these four variables, over 16% of respondents indicated their strong disagreement of the notion that the Achievement (i.e., self-esteem, self-respect, and self-worth) and Level of Attachment (i.e., being a fan of FCS football) variables motivated their attendance. Table 14 contains the frequencies for the internal motivator variables and items.

Table 14

*Internal Motivator Frequencies*

Variable	Item	<i>M</i>	Median	Mode	<i>SD</i>
Achievement		2.86	3.00	1.00	1.32
	Increases Self-Esteem	2.90	3.00	4.00	1.53
	Enhances Self-Worth	2.75	3.00	1.00	1.48
	Improves Self-Respect	2.91	3.00	4.00	1.49
Player Attachment		3.55	3.67	1.00/4.00	1.68
	Individual Players Rather Than Team	3.56	4.00	4.00	1.82
	Fan of Specific Players	3.57	4.00	4.00	1.81
	Fan of Certain Players	3.52	4.00	4.00	1.81
Sport Attachment		4.34	4.33	7.00	1.82
	Football Fan	5.04	5.00	7.00	1.91
	Favorite Sport	4.10	4.00	1.00/7.00	2.10
	Prefer Football Over Other Sports	3.89	4.00	1.00	2.09
Coach Attachment		3.12	3.33	4.00	1.32
	Coach Fan	3.56	4.00	4.00	1.38
	Experience Loss if Coach Left	3.03	4.00	4.00	1.51
	Being Coach Fan is Important to Me	2.77	3.00	4.00	1.55
Escape		4.02	4.00	5.00	1.57
	Daily Life	4.02	4.00	5.00	1.82
	Get Away from Life Tension	4.00	4.00	4.00	1.66
	Life Distraction	4.03	4.00	5.00	1.69
Community Attachment		4.67	5.00	5.00	1.30
	Connected to Local/Campus Community	4.27	4.00	4.00	1.64
	Part of Campus Community	4.64	5.00	5.00	1.55
	Support Campus Community	5.10	5.00	5.00	1.43
Social		5.18	5.33	5.00	1.35
	Socialize With Others	5.37	6.00	6.00	1.44
	Interact With People	5.21	5.00	5.00	1.42
	Talk to Others	4.95	5.00	5.00	1.53
Team Attachment		3.21	3.00	3.00	1.46
	Experience Loss if Stop Being Team Fan	2.89	3.00	1.00	1.62
	Real Fan of Team	3.36	3.00	4.00	1.63
	Being Fan of Team is Important to Me	3.38	4.00	4.00	1.66
Level of Sport Attachment		3.24	3.33	1.00	1.57
	FCS Fan	3.37	4.00	4.00	1.74
	FCS Fan Not One Team	3.14	3.00	4.00	1.68
	FCS Football Fan	3.19	3.00	4.00	1.66

*Note.* All items measured on a 7-point Likert-type scale: 1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree

For the External Motivators, respondents noted agreement that the variables of Drama ( $M = 5.49$ ,  $SD = 1.24$ ) and Promotions ( $M = 5.04$ ,  $SD = 1.01$ ) motivated their

attendance behavior. In particular, there was student agreement in the items of Enjoyment of Close Games That Are Not One Sided ( $M = 5.60$ ,  $SD = 1.58$ ) or a Blowout ( $M = 5.69$ ,  $SD = 1.41$ ), in addition to mode responses for those two items being sevens. Further, students indicated the Promotions ( $M = 5.09$ ,  $SD = 1.26$ ) and Giveaways ( $M = 5.29$ ,  $SD = 1.32$ ) had a positive influence on their attendance. The other variables of Aesthetics ( $M = 3.68$ ,  $SD = 1.39$ ), Media ( $M = 4.3$ ,  $SD = 0.82$ ), and Player Behavior ( $M = 3.9$ ,  $SD = 1.11$ ) all had little to no impact on attendance decisions. Of note, the item of Newspaper Advertising/Campus Flier did have a slightly positive impact ( $M = 4.65$ ,  $SD = 1.18$ ) and was the highest rated Media item. Based upon central tendencies, none of the other items appeared to indicate disagreement or a negative impact on student decisions and motivation to attend. Frequencies for the external motivator variables and items can be viewed below in Table 15.



Table 15

*External Motivator Frequencies*

Variable	Item	<i>M</i>	Median	Mode	<i>SD</i>
Aesthetics <sup>a</sup>		3.66	4.00	4.67	1.39
	Beauty/Grace	4.31	4.00	4.00	1.81
	Artistic Value	3.13	3.00	4.00	1.54
	Form of Art	3.54	4.00	4.00	1.74
Drama <sup>a</sup>		5.49	5.67	7.00	1.24
	Close Games/Not One Sided	5.60	6.00	7.00	1.58
	Uncertain Outcomes	5.17	5.00	5.00	1.60
	Tight Games/Not Blowouts	5.69	6.00	7.00	1.41
Media		4.31	4.00	4.00	0.82
	Newspaper Ads/Campus Fliers	4.65	4.00	4.00	1.18
	TV Commercials/Social Media	4.21	4.00	4.00	1.10
	Billboard Ads	4.22	4.00	4.00	1.01
	Radio Ads	4.18	4.00	4.00	0.98
	Publicity	4.33	4.00	4.00	1.11
Promotions		5.04	5.00	4.00	1.01
	Pre-Game/Halftime Events	4.73	4.00	4.00	1.38
	Promotions	5.09	5.00	4.00	1.26
	Giveaways	5.29	5.00	6.00	1.32
Player Behavior		3.90	4.00	4.00	1.11
	Community/Campus	3.82	4.00	4.00	1.44
	Conduct on Field	4.01	4.00	4.00	1.12
	Personalities	3.89	4.00	4.00	1.29

<sup>a</sup> Measured on a 7-point Likert-type scale: 1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree

Note. All other items measured on a 7-point Likert-type scale: 1 = Negative Influence On My Attendance, 4 = No Influence, 7 = Positive Influence On My Attendance

**Non-Attendance.** The External Constraint variables included two different scale anchors to measure non-attendance, one with a scale from 1 (No Impact) to 7 (A Large Negative Impact) for the Sport Alternatives, Commitments, Sport Entertainment, and Leisure Alternatives variables. The Stadium Location, Parking, and Cost variables had a scale similar to the motivators above, with 1 (Negative Influence on My Attendance) to 7 (Positive Influence on My Attendance), and 4 as the mid-point (No Influence on My

Attendance). Of those negatively impacting attendance for the first four variables, the Commitments variable had the biggest influence for student non-attendance in terms of mean response ( $M = 4.92$ ,  $SD = 1.47$ ), followed by the remaining three all having similar scores below four (i.e., Sport Alternatives,  $M = 3.49$ ,  $SD = 1.68$ ; Leisure Alternatives,  $M = 3.42$ ,  $SD = 1.71$ ; and Sport Entertainment,  $M = 3.40$ ,  $SD = 1.61$ ). The three Commitment items each negatively impacted attendance, with School/Studying Commitments ( $M = 5.41$ ,  $SD = 1.74$ ) being greater than the other two in terms of mean value (i.e., Friend Commitments,  $M = 4.78$ ,  $SD = 1.72$ , and Work Commitments,  $M = 4.56$ ,  $SD = 2.11$ ), but the Work Commitment and School/Studying Commitments each had a mode of seven while the Friend Commitment had a mode of six. All other items had a mode of 1.0, and mean values were below the 3.5 value except for: two Sport Entertainment variable items (i.e., Watch Other Sports on TV,  $M = 3.80$ ,  $SD = 2.17$ ; and the Attend Professional Game item,  $M = 4.02$ ,  $SD = 2.27$ ), and one Leisure Alternative item (i.e., Eating at a Restaurant,  $M = 3.66$ ,  $SD = 2.00$ ). It should also be noted that of the above items around half or more of respondents indicated a scale response of four or more for the Watching Other Sports on TV, Attending a Professional Game, and Eating at a Restaurant, in addition to the Leisure Alternative item of a Bar/Party, and the Sport Alternatives items of Exercising, Working Out, and Playing Recreation Sports.

The remaining three External Constraint variables were measured with the other scale that had a mid-point of four, and each variable had little to no impact on attendance according to mean values (i.e., Stadium Location,  $M = 4.28$ ,  $SD = 1.01$ ; Parking,  $M = 4.22$ ,  $SD = 0.98$ ; and Cost,  $M = 3.97$ ,  $SD = 1.12$ ). Also, all of the modes for each variable

and its items were a mark of four. Table 16 further explores the frequencies for the external constraints.

Table 16

*External Constraint Frequencies*

Variable	Item	<i>M</i>	Median	Mode	<i>SD</i>
Sport Alternatives <sup>a</sup>		3.49	3.67	1.00	1.68
	Exercising	3.37	3.00	1.00	1.96
	Working Out	3.51	4.00	1.00	1.98
	Playing Recreational Sports	3.58	4.00	1.00	2.04
Commitments <sup>a</sup>		4.92	5.00	6.33	1.47
	Work	4.56	5.00	7.00	2.11
	Friends	4.78	5.00	6.00	1.72
	School/Studying	5.41	6.00	7.00	1.74
Sport Entertainment <sup>a</sup>		3.40	3.33	1.00	1.61
	Watch Other Sports on TV	3.79	4.00	1.00	2.17
	Attend Other College Game	2.37	1.00	1.00	1.90
	Attend Professional Game	4.02	4.00	1.00	2.27
Leisure Alternatives <sup>a</sup>		3.42	3.33	1.00	1.71
	Restaurant	3.66	4.00	1.00	2.00
	Movies	3.18	3.00	1.00	1.94
	Bar/Party	3.41	3.00	1.00	2.15
Stadium Location		4.28	4.00	4.00	1.01
	Traveling Distance	4.10	4.00	4.00	1.40
	Location	4.44	4.00	4.00	1.27
	Accessibility	4.30	4.00	4.00	1.15
Parking		4.22	4.00	4.00	0.98
	Accessibility	4.25	4.00	4.00	1.25
	Ease of Parking	4.21	4.00	4.00	1.18
	Closeness to the Stadium	4.19	4.00	4.00	1.14
Cost		3.97	4.00	4.00	1.12
	Financial	3.95	4.00	4.00	1.35
	Price of Tickets/Concessions	3.90	4.00	4.00	1.34
	Cost to Attend Games	4.06	4.00	4.00	1.16

<sup>a</sup> Measured on a 7-point Likert-type scale: 1 = No Impact 7 = A Large Negative Impact

Note. All other items measured on a 7-point Likert-type scale: 1 = Negative Influence On My Attendance, 4 = No Influence, 7 = Positive Influence On My Attendance

In the Internal Constraints that prevented attendance, there were four variables measured with three different scales. The Lack of Success variable was measured on the 1 (No Impact) to 7 (A Large Negative Impact) scale. The remaining three variables (Lack of Knowledge, No Interest From Others, and Lack of Someone to Attend With) utilized similar 7-point Likert-type scales, with 4.0 as the midpoint, where Lack of Knowledge and No Interest From Others had the Disagree-Agree anchors, and Lack of Someone to Attend With had Negative-Positive anchors.

Respondents indicated the Lack of Success variable ( $M = 4.62$ ,  $SD = 1.92$ ) had a negative impact on attendance, based upon the mean value. Further, the mode response was a 7.0 for not only the variable, but for each of the three items (i.e., Team Loses More than Wins, Standing in the Bottom of the Conference, and Team Never Wins). Also, over half of the respondents marked a 4.0 or above score for each item.

For the Internal Constraint variable of Lack of Someone to Attend With ( $M = 3.42$ ,  $SD = 1.39$ ) there appeared to be a slight negative impact on attendance based upon the mean response. However, a closer examination indicates that while the mode response was neutral with a 4.0, over half of or respondents marked a 3.0 or lower for the Lack of Someone to Go to the Game With Me and the Lack of Friends to Go to the Game With Me items, indicating a negative impact.

There appeared to be no negative impact on attendance for the last two Internal Constraint variables of Lack of Knowledge ( $M = 2.15$ ,  $SD = 1.62$ ) and No Interest From Others ( $M = 3.30$ ,  $SD = 1.55$ ), as each indicated disagreement with the sentiment of the items. However, while the No Interest items of Spouse and Roommate/Family items had mode responses of 1.0 for strong disagreement, the No Interest from Friends had a mode

of 4.0, which indicated a more neutral stance. This is expanded by nearly 40% of respondents agreeing with the No Interest from Friends item, and over 30% for the No Interest from Roommate/Family item for marks of 5.0 and above. As such, No Interest From Others does play a part in influencing attendance negatively. The Lack of Knowledge variable did not follow the same pattern, as each item had around 80% or respondents which marked a score of 3.0 or less. Thus, this variable appeared to indicate respondents understand the game of football. Table 17 contains the frequency scores for the internal constraints.

Table 17

*Internal Constraint Frequencies*

Variable	Item	<i>M</i>	Median	Mode	<i>SD</i>
Lack of Success <sup>a</sup>		4.62	5.00	7.00	1.92
	Team Loses More Than It Wins	4.86	5.00	7.00	2.00
	Team At Bottom of Conference	4.16	4.00	7.00	2.16
	Team Never Wins	4.84	5.00	7.00	2.23
No Interest From Others <sup>b</sup>		3.30	3.33	1.00	1.55
	Other Friends	3.74	4.00	4.00	1.86
	Spouse/Significant Other	2.74	2.00	1.00	1.78
	Roommate/Family	3.42	4.00	1.00	1.95
Lack of Knowledge <sup>b</sup>		2.15	1.00	1.00	1.62
	Not Understand Technical Aspects	2.15	1.00	1.00	1.70
	Not Understand Strategy	2.26	1.00	1.00	1.75
	Not Understand Rules	2.03	1.00	1.00	1.63
Lack of Someone to Attend With <sup>c</sup>		3.42	3.67	4.00	1.39
	Lack of Someone to Go to Game	3.37	3.00	4.00	1.77
	Lack Spouse/Significant Other to Go to Game	3.59	4.00	4.00	1.35
	Lack of Friends to Go to Game	3.30	4.00	4.00	1.69

<sup>a</sup> Measured on a 7-point Likert-type scale: 1 = No Impact 7 = A Large Negative Impact

<sup>b</sup> Measured on a 7-point Likert-type scale: 1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree

<sup>c</sup> Measured on a 7-point Likert-type scale: 1 = Negative Influence On My Attendance, 4 = No Influence, 7 = Positive Influence On My Attendance

**Dependent variable.** The dependent variable measured game attendance, and the mean response indicated attendance at 2.07 games ( $SD = 1.42$ ) for a student. In particular, the average attendance for the previous season was 2.14 games ( $SD = 1.91$ ), 1.72 ( $SD =$

1.49) for the current season, and a projection of attending 2.35 games for the next season ( $SD = 1.94$ ). Below, Table 18 contains the frequency scores for the dependent variable.

Table 18

*Dependent Variable Frequencies*

Variable	Item	<i>M</i>	Median	Mode	<i>SD</i>
Dependent Variable		2.07	1.67	0.67	1.42
	Past Season Attendance	2.14	2.0	1.00	1.91
	Current Season Attendance	1.72	1.00	1.00	1.49
	Next Season Attendance	2.35	2.00	0.00	1.94

- Q4 Are there internal constraints that negatively influence/predict student attendance to Football Championship Subdivision football games?
- Q5 Are there external constraints that negatively influence/predict student attendance to Football Championship Subdivision football games?
- Q6 Are there internal motivators that positively influence/predict student attendance to Football Championship Subdivision football games?
- Q7 Are there external motivators that positively influence/predict student attendance to Football Championship Subdivision football games?

### Correlations

To answer the remaining four questions noted above, correlations and regression were utilized. Before conducting a regression analysis to determine which variables influenced/predicted football game attendance both positively and negatively, a linear relationship must be present. To analyze the strength and nature of the relationships between the dependent variable and the independent variables, as well as between the independent variables, a correlation analysis was conducted and interpreted with Pearson product-moment correlation coefficients. A perfect correlation is represented by being

$\pm 1.0$  and a stronger correlation being closer to this value, while a 0.0 represents no correlation or linear relationship and being closer to this value a weaker correlation (Privitera, 2012, p. 473-477).

In the analysis of correlation coefficients, there were many significant correlations among the independent variables of each construct, as well as between the dependent variable and the independent variable at the  $p \leq 0.05$  and  $p \leq 0.01$  levels. Thus, a linear relationship appeared to be present which is essential in a regression analysis. However, the strength of these correlations between independent variables appeared to not be of any concern for multicollinearity, as the correlations were not strong in their relationships with most values not exceeding  $r = \pm 0.50$ . Further, there was no value which exceeded  $r = \pm 0.70$  to cause concern for multicollinearity at the  $r \geq \pm 0.90$  level (Tabachnick & Fidell, 2013, p. 90) As such, there appears to not be any highly correlated variables and the data were deemed trustworthy in this area. Additionally, scatterplots supported the linear relationship. The correlations of each construct are further explored below, as well as in Tables 19-22, and variable relationships are addressed once more below in the multicollinearity portion.

**Internal motivators.** For the correlations among internal motivators, there were 36 possible variable combinations. Of these correlations, all but one were significant (i.e., Sport Attachment and Community Attachment,  $p = 0.43$ ). However, only seven of these significant correlations was above the  $r = 0.50$  level, with  $r = 0.67$  being the highest correlation between Team Attachment and Level Attachment (see Table 19). There appeared to be no evidence of high intercorrelation.

The dependent variable also had several significant correlations with the internal motivator variables. Nine possible correlations existed, with eight of these correlations being significant and indicated linear relationships. Only the Coach Attachment variable did not have a significant positive correlation with the dependent variable. Again, these relationships were not very strong in their correlations.

Table 19

*Internal Motivator Construct and Dependent Variable Pearson Correlations*

Variable	1	2	3	4	5	6	7	8	9	10
1. Achievement	1.00									
2. Player Attachment	.25**	1.00								
3. Sport Attachment	.29**	.17**	1.00							
4. Coach Attachment	.38**	.16**	.12*	1.00						
5. Escape	.56**	.13*	.27**	.32**	1.00					
6. Community Attachment	.40**	.17**	.05	.38**	.54**	1.00				
7. Social	.31**	.21**	.12*	.27**	.50**	.63**	1.00			
8. Team Attachment	.67**	.32**	.35**	.40**	.49**	.51**	.39**	1.00		
9. Level Attachment	.53**	.27**	.41**	.31**	.40**	.27**	.23**	.51**	1.00	
10. Dependent Variable	.27**	.23**	.17**	.11	.19**	.23**	.21**	.50**	.13*	1.00

Note. \*\* indicates significance at the  $p \leq 0.01$

\* indicates significance at the  $p \leq 0.05$

**External motivators.** This construct contained five independent variables, with 10 possible bivariate combinations. There were six significant correlations among these variables at the  $p < 0.01$  level of significance, but only one was at the  $r = 0.50$  level, with none exceeding beyond this value (see Table 20). Hence, the external motivator variables appeared to not be highly correlated with one another.



Among the five external motivator variables, three had a significant correlation with the dependent variable (i.e., Aesthetics, Media, and Player Behavior) while two did not have significant correlation (i.e., Drama and Promotions). However, while there were positive significant correlations these values were not large in their relationships (i.e.,  $r \leq 0.21$ ), and thus seemed suitable for regression analysis.

Table 20

*External Motivator Construct and Dependent Variable Pearson Correlations*

Variable	1	2	3	4	5	6
1. Aesthetics	1.00					
2. Drama	.29**	1.00				
3. Media	.23**	.09	1.00			
4. Promotions	.08	-.01	.50**	1.00		
5. Player Behavior	.23**	-.02	.41**	.25**	1.00	
6. Dependent Variable	.21**	.10	.17**	.06	.19**	1.00

*Note.* \*\* indicates significance at the  $p \leq 0.01$

**External constraints.** The External Constraint construct had seven variables, hence 21 possible two-variable combinations between independent variables. Among these combinations, there were 11 significant correlations, with only one Pearson value exceeding  $r = \pm 0.50$ , with Commitments and Leisure Alternates having an  $r = 0.53$  mark (see Table 21). The data appeared to be correlated, but there were not strong relationships in these correlations.

There were also significant correlations between the dependent variable and the seven External Constraint variables. Of the seven possibilities, three variables were significantly correlated with the dependent variable (i.e., Sport Alternatives, Leisure

Alternatives, and Stadium), while four variables were not significantly correlated with the dependent variable (i.e., Parking, Cost, Sport Entertainment, and Commitments). None of the significant correlations were greater than  $r = 0.22$  (see Table 21). Of note, not all the relationships were negatively correlated, as Stadium had a positive significant correlation, albeit at a small level.

Table 21

*External Constraint Construct and Dependent Variable Pearson Correlations*

Variable	1	2	3	4	5	6	7	8
1. Sport Alternatives	1.00							
2. Commitments	.46**	1.00						
3. Sport Entertainment	.42**	.33**	1.00					
4. Leisure Alternatives	.40**	.53**	.44**	1.00				
5. Stadium	-.02	.05	.13*	-.03	1.00			
6. Parking	.03	.15**	.10	.05	.44**	1.00		
7. Cost	-.04	-.02	.05	.00	.39**	.20**	1.00	
8. Dependent Variable	-.12*	-.06	-.09	-.21**	.16**	.03	.08	1.00

*Note.* \*\* indicates significance at the  $p \leq 0.01$

\* indicates significance at the  $p \leq 0.05$

**Internal constraints.** There were six possible combinations between the four Internal Constraint variables, and of these half were significantly correlated. Although, these correlations were not strong in their relationships as the highest correlation was at the  $r = 0.37$ , and the other two falling under  $r = \pm 0.20$ .

The dependent variable was also significantly correlated with some of the Internal Constraint variables. Half of the four variables were significantly correlated with the

dependent variable (i.e., Lack of Success and No Interest from Others), but these two negative correlations were below the  $r = -0.26$  mark (See Table 22).

Table 22

*Internal Constraint Construct and Dependent Variable Pearson Correlations*

Variable	1	2	3	4	5
1. Lack of Success	1.00				
2. Lack of Knowledge	-.19**	1.00			
3. No Interest From Others	.06	.37**	1.00		
4. Lack of Someone to Attend With	-.01	.02	-.11*	1.00	
5. Dependent Variable	-.24**	-.01	-.25**	-.01	1.00

*Note.* \*\* indicates significance at the  $p \leq 0.01$

\* indicates significance at the  $p \leq 0.05$

### Regression Assumptions

Before the regression analysis was conducted, the data were checked to ensure it adhered to the assumptions required for this statistical technique to be conducted. As such, the data were checked for independence, normality, linearity, and homoscedasticity with no evidence of multicollinearity.

**Independence.** The independence assumption was assessed based upon the data collection procedures. As directions were given that instructed participants to only complete one survey, it appears that all responses are independent of one another. Further, pen and paper survey instructions included that if the individual had already completed the survey to not complete a second. Also, in the on-line responses after a survey was submitted, their response was noted so the person was not sent an email

reminder to complete another survey. Thus this assumption was met through the sampling technique.

**Normality.** The assumption of normality was assessed using multiple methods. While the commonly utilized Shapiro-Wilk and Kolmogorov-Smirnov tests of normality were significant, these tests tend to be unreliable with large samples (Field, 2009, p. 139) and should be disregarded. Instead, graph visuals, skewness values, and kurtosis values should be considered. Field also mentions that in very large samples because of the small standard errors, no criterion should be applied. Further, it should be noted that in statistical analyses with large sample sizes, skewness and kurtosis often does not deviate enough from normality to make a substantive difference (Tabachnick & Fidell, 2013, p. 80).

Therefore, to assess normality the first method utilized was the assessment of the Normal Q-Q plots of each variable. The graphs indicated that there were no great deviations from normality, with most data points falling along the straight line. Next, the skewness and kurtosis values were assessed.

Skewness values for most items were under  $\pm 1.00$ , and all items were under the  $\pm 1.65$  value, which indicated the data were approximately normally distributed in terms of skewness values according to Byrne (1998) and Garson (2012). Byrne suggested normally distributed data should have skewness values between  $\pm 1.00$ , moderately non-normal data between  $\pm 2.00$  to  $\pm 3.00$ , and extreme non-normality with skewness values being above 3.00. Garson noted  $\pm 2.00$  as the limit of an acceptable skewness range. For kurtosis values, Byrne suggested normal distribution around  $\pm 1.00$ , with moderately non-normal data  $\pm 5.00$  to  $\pm 21.00$ , and extreme non-normality greater than the  $\pm 21.00$  value.

Garson noted some use the  $\pm 2.00$  for kurtosis values, while others consider values outside of  $\pm 3.00$  representing a departure from normality. While most of the values were under the  $\pm 1.00$  kurtosis value, there were some items above this mark. However, only seven items were above the  $\pm 2.00$  mark with six of the items inclusive of  $\pm 2.77$  (i.e., Internal Motivator Social Socialize With Others, External Motivator Drama Tights Game Not Blowout, External Motivator Player Behavior Player Conduct On-Field, External Motivator Media TV Commercial Social Media, External Motivator Media Billboard Ads, External Constraint Cost Cost to Attend Games) with only the External Motivator Media Radio Ads item at the 3.94 value above that mark. Still, all of these values fell below the  $\pm 5.00$  value, which indicate approximately normal data in terms of kurtosis values according to Byrne. Therefore, the data were deemed appropriate for analysis in terms of normality.

If the constructs are considered for normality, most were under the  $\pm 1.00$  skewness mark, with the highest value approaching  $\pm 1.45$ , which also deemed the data should be considered approximately normal. For kurtosis, again most were below the  $\pm 1.00$  value, but several did go above this value. However, all were below the  $\pm 5.00$  value, with seven of the eight constructs not eclipsing  $\pm 2.10$ , as only the External Motivator of Media was at 4.14, which was still inclusive of the  $\pm 5.00$  mark. Again, the data can be deemed to not differ from a normal distribution.

**Linearity.** The linearity assumption was considered based upon the correlation values and scatterplots between the dependent variable and independent variables noted above. As there were significant correlations between the dependent variable and the independent variable, a linear relationship existed and this assumption was met.

**Homoscedasticity.** Homoscedasticity ensures there is a constant or fairly consistent variance of errors across all levels of the independent variable for each of the independent variables (Field, 2009, p. 220, 248; Huck, 2008, p. 200). To determine if this was the case, each independent variable was plotted with its standardized residuals/errors against its standardized predicted values (Field, 2009, p. 229). The plots appeared to indicate the data points being approximately evenly dispersed, not showing a funnel or curved shape, which indicated support for constant error variance in the predicted variable for each independent variable. Thus, it appeared the assumption of homoscedasticity had been satisfied.

**Multicollinearity.** When two or more independent variables are highly correlated, this indicates multicollinearity (Huck, 2008, p. 400), but as the above correlation analysis indicated none of the independent variables were highly correlated with another independent variable. As such, there is no evidence of multicollinearity and this assumption is satisfied. This sentiment was also supported by the collinearity statistics produced in Tolerance and VIF values from the regression analysis. All of the tolerance figures surpassed the recommended 0.20, and all of the VIFs were under the 10.0 cutoff (Field, 2009, p. 224, 242), further supporting that there were no multicollinearity issues.

## **Regression**

As the assumptions of regression were met, the regression analysis was conducted to determine which variables impacted attendance positively or negatively. The first model, Model A, considered all 25 variables. Subsequently, two additional models were produced for comparative purposes to the original model based upon the large number of

variables, to aid in the determination of the best combination of independent variables to predict attendance positively or negatively. The additional models considered the 14 motivation variables in Model B, and the 11 constraint variables in Model C. These models are further explored below, as well as selection of the final model. Also, given that these regression analyses were conducted on the same set of independent variables (i.e., both motivators and constraints, and then isolating by those categories), a Bonferroni adjustment was conducted. As such, the level of significance was altered from 0.05 to 0.025 a priori (i.e.,  $0.05/2 = 0.025$ ).

**Model A.** The first model considered all 25 variables, and a significant model resulted ( $p < 0.001$ ) with five variables. In step 1, the Internal Motivator of Team Attachment entered the equation,  $R^2 = 0.24$ ,  $\Delta F(1, 303) = 98.12$ ,  $p < 0.001$ , in the prediction of attendance. In step 2, the Internal Constraint of No Interest From Others entered the equation  $\Delta R^2 = 0.03$ ,  $\Delta F(1, 302) = 56.94$ ,  $p = 0.001$ . In step 3, the Internal Motivator of Level Attachment entered the equation in the prediction of attendance,  $\Delta R^2 = 0.03$ ,  $\Delta F(1, 301) = 43.55$ ,  $p < 0.001$ . Next, in step 4 the External Constraint of Leisure Alternatives entered the equation in the prediction of attendance,  $\Delta R^2 = 0.02$ ,  $\Delta F(1, 300) = 35.61$ ,  $p = 0.004$ . Lastly, in step 5 the Internal Motivator of Player Attachment entered the equation in the prediction of attendance,  $\Delta R^2 = 0.01$ ,  $\Delta F(1, 299) = 30.02$ ,  $p = 0.02$ . After this step, none of the other 20 variables entered the equation as significant in the prediction of attendance at the  $p \leq 0.025$  level of significance for entry, and  $p \geq 0.10$  for removal. At the conclusion of step 5, over 32% of the variance in Attendance ( $R^2 = 0.33$ , Adj.  $R^2 = 0.32$ ) was explained by the 5 variables of Team Attachment, No Interest From Others, Level Attachment, Leisure Alternatives, and Player Attachment. While there

were five significant predictors, two had positive impacts on Attendance in Team Attachment ( $\beta = 0.52$ ) and Player Attachment ( $\beta = 0.12$ ), while Attendance was negatively impacted by No Interest From Others ( $\beta = 0.18$ ), Level Attachment ( $\beta = -0.21$ ), and Leisure Alternatives ( $\beta = -0.15$ ). A breakdown of Model A's regression results can be viewed in Table 23 and 24.

Table 23

*Model A Stepwise Regression Significant Variable Results*

Independent Variable	B	SE	$\beta$	<i>t</i>	Sig.	Tolerance	VIF
Team Attachment	.51	.06	.52	9.14	.001	.687	1.455
No Interest From Others	-.16	.04	-.18	-3.61	.001	.945	1.059
Level Attachment	-.19	.05	-.21	-3.67	.001	.711	1.406
Leisure Alternatives	-.13	.04	-.15	-3.20	.002	.960	1.041
Player Attachment	.10	.04	.12	2.35	.020	.871	1.148

Table 24

*Model A Stepwise Regression Step Results*

Step	<i>R</i>	<i>R</i> <sup>2</sup>	Adj. <i>R</i> <sup>2</sup>	SE	$\Delta R^2$	$\Delta F$	$\Delta$ Sig <i>F</i>
1 <sup>a</sup>	.50	.25	.24	1.23	.25	98.12	.001
2 <sup>b</sup>	.52	.27	.27	1.21	.03	12.15	.001
3 <sup>c</sup>	.55	.30	.30	1.19	.03	12.46	.001
4 <sup>d</sup>	.57	.32	.31	1.18	.02	8.53	.004
5 <sup>e</sup>	.58	.33	.32	1.17	.01	5.50	.020

a. Predictor: Team Attachment

b. Predictors: Team Attachment, No Interest From Others

c. Predictors: Team Attachment, No Interest From Others, Level Attachment

d. Predictors: Team Attachment, No Interest From Others, Level Attachment, Leisure Alternatives

e. Predictors: Team Attachment, No Interest From Others, Level Attachment, Leisure Alternatives, Player Attachment



**Model B.** In the second model, only the 14 motivation variables were considered, which resulted in a significant model ( $p < 0.001$ ) with two variables in the final model. In step 1, the Internal Motivator of Team Attachment entered the equation,  $R^2 = 0.25$ ,  $\Delta F(1,303) = 98.12$ ,  $p < 0.001$ . In the second and final step, the Internal Motivator of Level Attachment entered the equation in the prediction of attendance,  $\Delta R^2 = 0.02$ ,  $\Delta F(1, 302) = 54.83$ ,  $p = 0.003$ . None of the other 12 variables entered the equation as a significant variable in the prediction of attendance at the  $p \leq 0.025$  level of significance for entry, and  $p \geq 0.10$  for removal. This model explained over 26% of the variance in Attendance ( $R^2 = 0.27$ , Adj.  $R^2 = 0.26$ ) from the two variables of Team Attachment and Level Attachment. Also, Team Attachment ( $\beta = 0.58$ ) impacted Attendance positively, and contrastingly Level Attachment ( $\beta = -0.17$ ) impacted Attendance negatively. Tables 25 and 26 further display the regression results.

Table 25

*Model B Stepwise Regression Significant Variable Results*

Independent Variable	B	SE	$\beta$	t	Sig.	Tolerance	VIF
Team Attachment	.57	.06	.58	10.15	.001	.736	1.359
Level Attachment	-.16	.05	-.17	-2.99	.003	.736	1.359

Table 26

*Model B Stepwise Regression Step Results*

Step	R	$R^2$	Adj. $R^2$	SE	$\Delta R^2$	$\Delta F$	$\Delta$ Sig F
1 <sup>a</sup>	.50	.25	.24	1.23	.25	98.12	.001
2 <sup>b</sup>	.52	.27	.26	1.22	.02	8.96	.003

a. Predictor: Team Attachment

b. Predictors: Level Attachment

**Model C.** The third model considered only the 11 constraint variables, and resulted in a significant model with three variables ( $p < 0.001$ ). The Internal Constraint variable of No Interest From Others entered the equation in the step 1,  $R^2 = 0.06$ ,  $\Delta F(1, 303) = 19.85$ ,  $p < 0.001$ . In Step 2, the Internal Constraint of Lack of Success entered the equation in the predication of attendance,  $\Delta R^2 = 0.05$ ,  $\Delta F(1, 302) = 17.60$ ,  $p < 0.001$ . Next, in Step 3 the External Constraint of the Stadium variable entered the equation in the prediction of attendance,  $\Delta R^2 = 0.02$ ,  $\Delta F(1, 301) = 8.55$ ,  $p = 0.004$ . The eight other variables did not enter the equation as significant in the prediction of attendance at the  $p \leq 0.025$  level of significance for entry, and  $p \geq 0.10$  for removal. The model explained 13% of the variance in Attendance ( $R^2 = 0.14$ , Adj.  $R^2 = 0.13$ ) from the three variables. Of the three significant variables, only Stadium had a positive impact on Attendance ( $\beta = 0.16$ ), while No Interest From Others ( $\beta = -0.23$ ) and Lack of Success ( $\beta = -0.23$ ) all negatively impacted Attendance. Tables 27 and 28 have more of the results pertaining to this regression.

Table 27

*Model C Stepwise Regression Significant Variable Results*

Independent Variable	B	SE	B	t	Sig.	Tolerance	VIF
No Interest From Others	-.21	.05	-.23	-4.28	.001	.995	1.005
Lack of Success	-.17	.04	-.23	-4.32	.001	.995	1.005
Stadium	.22	.08	.16	2.92	.004	.999	1.001

Table 28

*Model C Stepwise Regression Step Results*

Step	<i>R</i>	<i>R</i> <sup>2</sup>	Adj. <i>R</i> <sup>2</sup>	SE	$\Delta R^2$	$\Delta F$	$\Delta \text{Sig } F$
1 <sup>a</sup>	.25	.06	.06	1.38	.06	19.85	.001
2 <sup>b</sup>	.34	.11	.11	1.34	.05	17.60	.001
3 <sup>c</sup>	.37	.14	.13	1.32	.02	8.55	.004

*a. Predictor: No Interest From Others*

*b. Predictors: No Interest From Others, Lack of Success*

*c. Predictors: No Interest From Others, Lack of Success, Stadium*

**Model selection.** After comparing the three models, Model A was selected as the appropriate model for determining the prediction/influence of factors that impact attendance. This model was selected as it had the largest explained variance (Adj.  $R^2 = 0.32$ ), number of significant variables, and was more parsimonious of an option than analyzing two different regressions. Further support is lent to this decision when considering Model C explained on 13% of the variance in attendance (Adj.  $R^2 = 0.13$ ). While the External Constraint Stadium variable and the Internal Constraint Lack of Success variable were lost in not picking the alternate models over Model A, much of the same variables were included in the selected model (i.e., Internal Motivators of Team Attachment and Player Attachment, and the Internal Constraint of No Interest From Others). Further, the Internal Motivator of Player Attachment and the External Constraint of Leisure Alternatives was gained in the selection of this model. However, none of the models included an External Motivator variable, while the other three constructs are represented in the significant variables (i.e., Internal Motivators, Internal Constraints, and External Constraints). Also, while each of the constraints had a negative impact on attendance for No Interest From Others ( $\beta = -.18$ ) and Leisure Alternatives ( $\beta = -.15$ ),

only two of the three significant motivators had a positive impact on attendance. The Team attachment ( $\beta = .52$ ) and Player Attachment ( $\beta = .12$ ) variables had a positive relationship with attendance, and the Level Attachment ( $\beta = -.21$ ) variable had a negative relationship with attendance. It should also be noted that while there were five significant variables, they varied in the amount of explained variance accounted for by each variable. The Team Attachment variable accounted for 24% of the explained variance, (Adj.  $R^2 = 0.24$ ), while the remaining four variables contributed only 9% of additional explained variance from No Interest From Others (Adj.  $R^2 = 0.03$ ), Level Attachment (Adj.  $R^2 = 0.03$ ), Leisure Alternatives (Adj.  $R^2 = 0.02$ ), and Player Attachment (Adj.  $R^2 = 0.01$ ).

### **Results Summary**

Below is a summary of answers to each of the six research questions for this investigation. Research question one explored the influence of items to attend Football Championship Subdivision (FCS) games, which was interpreted through motivation variables. In all, based upon mean responses the Internal Motivators which positively impacted attendance were the Social and Community Attachment components, albeit only at slightly positive motivational levels. In particular, the opportunity to Socialize with Others and Support the Campus Community were the most prevalent responses. The External Motivators of Promotions/Giveaways and Drama also positively impacted attendance behavior, while the Newspaper Advertising/Campus Fliers appear to have also motivated attendance behavior.

The second research question pertained to students not attending FCS football contests, which was measured primarily through constraint variables. In terms of influence to not attend the games, the External Constraint of Commitments deterred

attendance the most, which consisted of School/Studying, Friends, and Work Commitments. However, Watching Others Sports on TV, Attending a Professional Game, the Leisure Alternatives of Eating at a Restaurant or going to a Bar/Party, and other Sport Alternatives also influenced student non-attendance. For the Internal Constraints, Lack of Success was an attendance deterrent, as was Lack of Someone to Attend With, and No Interest From Others. Additionally, some of the perceived Internal Motivators actually were not considered motivators with disagreement in the notion that their Coach Attachment, Level of Attachment, Team Attachment, and Achievement in conjunction to the football team did not have a positive impact on their attendance behavior.

Research questions three, four, five, and six were each concerned with the internal and external motivator and constraint variables that positively and negatively impacted attendance to FCS football games. The correlations indicated linear relationships were present between the dependent variable of attendance, and the independent variables. The regression analysis that was conducted then determined there were several variables which influenced/predicted attendance based upon the motivators and constraints. For research question three, it appeared the Internal Constraint of No Interest From Others predicted attendance, and has a negative impact on attendance ( $\beta = -0.18$ ). Research question four pertained to external constraints negatively impacting attendance, in which the regression indicated the External Constraint of Leisure Alternatives negatively impacted attendance ( $\beta = -0.15$ ). The lack of constraints impacting attendance is supported by only three of the seven External Constraint variables being correlated to the

dependent variable, and two of the four Internal Constraints being correlated to the dependent variable.

The last two research questions pertained to internal and external motivators that impacted attendance. With concern to research question five, there were three Internal Motivators which impacted attendance, but only two influenced student attendance positively. The answer to research question five is that the variables of Team Attachment ( $\beta = 0.52$ ) and Player Attachment ( $\beta = 0.12$ ) positively predicted attendance. However, the significant variable of Level Attachment ( $\beta = -0.21$ ) negatively impacted attendance. The result of three Internal Motivators impacting attendance was anticipated, as all but one of the nine variables was significantly correlated to the attendance dependent variable.

Lastly, the final research question was concerned with external motivators and attendance. The results indicated that none of the five external motivation variables impacted attendance. These results are a little unexpected after the correlation results indicated significant correlations with three of the five variables, but the regression did not include any of the external motivators. As such, it appears that student attendance was not impacted positively or negatively by external motivators, but each of the other three constructs (i.e., internal constraints, external constraints, and internal motivators) did impact attendance based upon the results.

## CHAPTER V

### DISCUSSION

This chapter is the fifth and final chapter which offers a summary of the analyzed data in the previous chapter. The content of this section makes conclusions from the results, relates it to the relevant literature, provides theoretical implications, practical implications, limitations of the work, as well as recommendations for future research.

#### **Discussion of Results**

##### **Collection Techniques**

This study utilized two collection techniques, pen and paper responses from purposive convenience sampling and on-line responses from stratified random sampling. These techniques resulted in a sample size of 305 usable surveys (i.e., 215 pen and paper, 90 on-line). When compared to similar studies, the sample in this investigation appears comparable, if not a little larger, based on the number of usable responses. Sample sizes of this range can be found in similar studies as Trail and Kim (2011) attained 416 usable surveys from on-line responses of a purposive sample for women's college basketball, and Kim and Trail (2010) had 115 usable pen and paper responses from attendees at a women's professional basketball game.

Further, the pen and paper usability rate for this study was 67.61% while the on-line usable response rate was 5.14%. This is also near the comparable rates of other studies, as Kim and Trail (2010) had a pen and paper rate of 57.50%, and Trail and Kim (2011) had a rate of 2.45% in their emailed booster club survey. Casper et al. (2009)

utilized a two collection technique approach, which resulted in 196 usable pen and papers surveys for a rate of 78% from two professional hockey games. Casper et al. also collected internet surveys which resulted in 1341 respondents, but usability and response rates were not noted. If student surveys samples are considered, Trail et al. (2008) collected 202 usable surveys at a rate of 87.83%, while Havard and Dwyer (2012) had 262 usable responses from their convenient and purposive student sample at a rate of 75% in their constraint work. All of which are very similar to the rate in this study. A contributing factor to these rates is likely from the length of the surveys, and due to the high number of variables in these investigations.

Also, all the variables were deemed acceptable in terms of their internal consistency, which is supported by the literature (Fink et al., 2002b; Kim and Trail, 2010; Trail & James, 2001; Trail et al., 2002; Trail, Fink, & Anderson, 2003; Trail, Robinson, et al., 2003; Trail et al., 2008). This study further reinforces the usefulness and reliability of these measures in aiding to understand sport consumer behavior.

### **Demographics**

The participants of this study had almost an even split on gender, as 56.1% ( $n = 171$ ) of respondents indicated their gender as female, and 43.9% ( $n = 134$ ) as male. Also, while average age was 21.12 years ( $SD = 3.48$ ), the range was from 18 to 54 years old. This gender and age breakdown varies in the existing literature. Kim and Trail (2010) utilized fans at a women's professional basketball game, so their sample yielded older at 30 years and above, as well as predominantly female at 83%. Contrastingly, Casper et al. (2009) had highly male representation at around 70% from men's professional hockey games. Trail and Kim (2011) had a closer gender split at 63% male, but only 20% of



respondents were between the ages of 20 and 29, with over 40% between 30 and 50 years of age. In considering the student samples the rates are very similar, Trail et al. (2008) had a roughly equal representation of gender, while Havard and Dwyer (2012) had males represented in 60% of the sample.

In inspecting the class year of the sample, each class was represented (i.e., freshmen, sophomore, junior, senior, and graduate student) and seniors were the most prevailing class standing at 36.1%, followed by sophomores and juniors at around 27% each. These figures are consistent with Trail et al. (2008) that had representation of 8% freshmen, 20% sophomores, 38% juniors, and 34% seniors, but conflicts with Havard and Dwyer which was highly freshmen (i.e., 55%) and sophomore (i.e., 21%) dominant. It appears the student sample was roughly similar to the related research, albeit with more of an even distribution in terms of class standing. These differences are likely from the location of the study, the sport of interest (i.e., football compared to men's and women's basketball), and the gender of the team playing. Also, while the representation of class years was fairly even, it should be noted that with this breakdown the upperclassmen had likely been on campus for more years, and thus had had more opportunities to attend games than the lowerclassmen that had had fewer opportunities to attend. However, this also likely gave a more accurate representation of the entire student body by class year.

### **Research Questions**

**Descriptive statistics.** The first two research questions dealt with the items and factors that influenced students to attend, or not attend, games at the Football Championship Subdivision level. These research questions were answered by evaluation of the responses in terms of central tendencies and range of responses. While similar

studies did not report response mean values in their findings (Kim & Trail, 2010; Trail & Kim, 2011), others have found these mean responses beneficial to understanding consumer behavior (Casper et al., 2009; Fink & Parker, 2009; Havard & Dwyer, 2012; James & Ross, 2002, 2004; Robinson et al., 2005; Trail et al., 2008).

The first area investigated for these research questions was the motivators. Mean responses indicated Social ( $M = 5.18$ ,  $SD = 1.35$ ) and Community Attachment ( $M = 4.67$ ,  $SD = 1.30$ ) components positively influenced attendance for Internal Motivators, but only at a small level. Also, the External Motivators of Drama ( $M = 5.49$ ,  $SD = 1.24$ ) and Promotions/Giveaways ( $M = 5.04$ ,  $SD = 1.01$ ) also positively impacted attendance behavior.

Other studies that have utilized the MSSC in their data collection have found the results on mean responses informative in understanding consumption behavior. In the analysis of intercollegiate football game attendees at the Division I FBS, FCS, II, and III levels by Robinson et al., 2005, the overall sample regarded the Spectator Motives (i.e., aesthetic, drama/eustress, acquisition of knowledge, and appreciation of physical skill variables) as the highest rated motive ( $M = 5.47$ ,  $SD = 0.90$ ), as did the FCS level ( $M = 5.37$ ,  $SD = 0.80$ ). This was followed by the Overarching Motive (i.e., socialization and escape variables) as the second highest rated motive ( $M = 5.34$ ,  $SD = 1.08$ ) overall and at the FCS level ( $M = 5.24$ ,  $SD = 1.09$ ). The Achievement motive was third ( $M = 5.25$ ,  $SD = 1.40$ ) in the sample and at the FCS level ( $M = 5.00$ ,  $SD = 1.43$ ). The results of this study appear to mirror the top two results of Robinson et al. in terms of mean values. However, the Achievement motive ( $M = 2.86$ ,  $SD = 1.32$ ) in this study did not reach the same level. The achievement result is likely based upon the lack of success the team in the

investigation has experienced over the past several years. Further, the Escape ( $M = 4.02$ ,  $SD = 1.57$ ) variable for this study was lower than the similar variable of Robinson et al. This difference is likely based on the age of the respondents and their immediate life concerns in regards to attendance being an escape or distraction. A student specific sample of younger aged individuals in college would likely have less need to feel this way about being present at a football game than an older individual with more life demands (e.g., family, career, children, etc.) and a busier schedule of demands for their time. Another view could deem the proximity of attending a football game on-campus does not provide the feeling or emotion intended by the Escape variable (i.e., getting away from daily life, life tension, or having a life distraction) of relieving stress and feeling relaxation for a student. Rather, there may be a broader understanding with the feeling of escape for a student, which may come from getting away from the campus location and exploring different locales that are not near the daily settings in the life of a college student.

The identification motivators also somewhat mirrored the Robinson et al. (2005) results. This study had Community Attachment ( $M = 4.67$ ,  $SD = 1.30$ ) and Sport Attachment ( $M = 4.34$ ,  $SD = 1.82$ ) as the highest identifiers, whereas Robinson et al. had Sport Identification (i.e., level and sport;  $M = 4.91$ ,  $SD = 1.18$ ) and Organizational Identification (i.e., Team, Coach, Community, University;  $M = 4.64$ ,  $SD = 1.17$ ) as their top two. Again, Robinson et al. did not differentiate the variables in the results. The third ranked component for Robinson et al. was Player Identification ( $M = 3.72$ ,  $SD = 1.68$ ), whereas this study had Player Attachment ( $M = 3.55$ ,  $SD = 1.68$ ) slightly higher than some other variables (i.e., Level of Sport Attachment,  $M = 3.24$ ,  $SD = 1.57$ , Team

Attachment,  $M = 3.21$ ,  $SD = 1.46$ , and Coach Attachment,  $M = 3.12$ ,  $SD = 1.32$ ). Also, Robinson et al. exhibited lower scores at the FCS level as well, with the Sport ( $M = 4.78$ ,  $SD = 1.17$ ) value closer to the one in this study, but Organizational ( $M = 4.49$ ,  $SD = 1.10$ ) and Player ( $M = 2.93$ ,  $SD = 1.47$ ) scores were higher in this study. These scores are likely a result of this study having a student sample and having opportunities to have relationships with the players in the campus setting (e.g., in classes, around the campus and local community, etc.). Also, being an on-campus student would likely result in a higher score for attachment to the campus community because of the proximity to, and the amount of time spent at, the university.

These mean scores both agree and conflict with other motivation research. In comparing scores to professional baseball attendance motivation, James and Ross (2002) had Drama ( $M = 5.39$ ,  $SD = 1.26$ ) ranked as the second highest motivator, and Social Interaction ( $M = 4.97$ ,  $SD = 1.25$ ) fifth. James and Ross (2004) had Drama ( $M = 5.34$ ,  $SD = 1.13$ ) third and Social Interaction ( $M = 4.88$ ,  $SD = 1.28$ ) sixth in the investigation of Olympic sports (i.e., baseball, softball, and wrestling) attendance from a mixed sample of students and older aged adults. Again, these differences may be from this study having a student specific sample, and perhaps a college revenue sport as the team of interest. Thus, it appears motivation factors for attendance can be sport and consumer dependent. College students appear to want a little more social interaction, perhaps from attending a game with their peers, while both consumers value close and entertaining sporting contests. Fink and Parker (2009) support the rationale of these scores with a younger sample, as their investigation of watching televised sports from a student sample

identified Drama as the top motivator and Social as the third highest score, similar to the results of this study.

It is widely supported in the extant literature that promotions/giveaways positively impact attendance (DeSchriver & Jensen, 2002; Lee & Bang, 2003; McDonald & Rascher, 2000; Zhang et al., 1995), which is supported with the mean value in this report. Not shockingly, attendance was motivated by giveaways at the contest for this investigation ( $M = 5.29$ ,  $SD = 1.32$ ), but not as high as some would anticipate given a student sample that likely did not have a steady income, or any income, which would make “free” a very appealing prospect.

The second research question focused on the variables which influenced students in not attending Football Championship Subdivision (FCS) games. Internal and External Constraints were utilized to measure this negative influence on attendance, where mean values indicated negative attendance from several variables. Given the varying scales utilized in their measurements, interpretation in this area was a bit more complex. In the External Constraints, the Commitments variable ( $M = 4.92$ ,  $SD = 1.47$ ) deterred attendance the most. None of the other similar variables passed the 4.00 mark, with Sport Alternatives ( $M = 3.49$ ,  $SD = 1.68$ ) as the next biggest attendance negator. This result was very similar to the student constraints to attend men’s basketball games, as Havard and Dwyer (2012) had Commitments ( $M = 3.85$ ) as their highest reported mean value. Casper et al. (2009) also had Commitments/Time ( $M = 3.34$ ) as the second biggest attendance constraint to their professional hockey study. Trail et al. (2008) also had a negative attendance impact from Social Commitments ( $M = 4.12$ ) and Work/School Commitments ( $M = 3.75$ ) on football games. Thus, other commitments appear to have a hold on a large

amount of the free times of students on the weekends, be it friends, work, or school. Contrastingly, the items for Sport Alternatives from Havard and Dwyer did not load to a factor. Perhaps the timing of the study may have impacted this result, as the fall semester is typically a warmer time of the year where exercising, working out, and playing recreational activities could be more easily feasible leisure options.

Further, Havard and Dwyer had Other Sport Options ( $M = 2.16$ ) much lower than that of the similar variable in this study of Other Sport Entertainment ( $M = 3.40$ ,  $SD = 1.61$ ). In particular, the items Attending a Professional Game ( $M = 4.02$ ,  $SD = 2.27$ ) and Watching Others Sports on TV ( $M = 3.79$ ,  $SD = 2.17$ ) negatively impacted attendance. This could be from the timing of the two seasons, with college football in the fall when there is sport entertainment competition from professional football, men's and women's college soccer, professional men's soccer, professional baseball, professional men's basketball, and college basketball of both genders starting near the end of the football season. Basketball only has competition from the other late fall/winter sport of ice hockey in the winter and the spring, and perhaps wrestling, which could account for the discrepancies in mean responses. The Other Sport Entertainment response in Trail et al. (2008) was much more akin to the values of this study ( $M = 3.11$ ), perhaps supporting this sentiment.

In this study, other specific items that impacted attendance negatively were the items of Eating at a Restaurant ( $M = 3.66$ ,  $SD = 2.00$ ) or Going to a Bar/Party ( $M = 3.41$ ,  $SD = 2.15$ ) in the Leisure Alternatives variable ( $M = 3.42$ ,  $SD = 1.71$ ). Again, Havard and Dwyer (2012) had a lower score in their similar Other Entertainment Options ( $M = 2.68$ ), and this gap grows when noting the above items. Again, the time of the year could be a

factor, as the winter weather and holidays may impact some of these entertainment decisions, as Trail et al. (2008) had similar results for their Leisure Activities ( $M = 3.37$ ).

As expected, the Cost variable was nearly neutral on attendance, as students were entitled to free admission for the contests, but concession costs and opportunity costs still exist for the students. The cost was similar to Trail et al. (2008) in that variable ( $M = 2.13$ ). For Casper et al. (2009), the Cost variable had the highest negative impact on attendance, perhaps from the large per ticket cost that is not expressed in the same value as “free” from the fees a student pays to attend a university. Havard and Dwyer (2012) also had the Arena/Cost ( $M = 2.36$ ) variable as having a low impact on attendance.

For the Internal Constraints, Lack of Success was an attendance deterrent ( $M = 4.62$ ,  $SD = 1.92$ ) similar in responses to the above Commitments, as was Lack of Someone to Attend With ( $M = 3.42$ ,  $SD = 1.39$ ). Also, the No Interest From Others ( $M = 3.30$ ,  $SD = 1.55$ ) variable impacted attendance negatively when the frequency of responses were analyzed, not the mean. Much of the research does not note the No Interest From Others and Lack of Someone to Attend With variables, as Kim and Trail (2010) recently included these in their investigation. So, comparisons are not able to be made and their mean responses were not noted. However, Trail et al. (2008) had Lack of Team Success ( $M = 3.32$ ), and Havard and Dwyer (2012) had Team Performance ( $M = 2.641$ ) as having less impact on attendance. Perhaps those teams performed better in their respective season(s), or the other game atmosphere elements helped to overcome their win-loss record which accounted for this area not being of importance in their studies. Extant research supports that a winning team does help attendance (DeSchriver & Jensen, 2002; Noll, 1974; Wells et al., 2000), but is not essential for attendance. Also, the team in

this investigation has lacked on-field success for multiple years, which may defer from the teams in the other studies which may have been more fortunate in their winning percentage.

Of note, the Stadium Location and Parking variables had a positive impact on attendance, albeit at a minimal level. Interestingly, some of the above perceived Internal Motivators were not considered motivators based upon respondents indicating disagreement in the sentiment that their Coach Attachment, Level of Attachment, Team Attachment, and Vicarious Achievement did not have a positive impact on their attendance behavior to football games. This concept is further expanded upon below.

**Correlations and regression.** Pearson's product correlation coefficients and regression analysis were utilized to answer the remaining research questions. These four research questions pertained to the constraints and motivators that influenced attendance negatively and positively, respectively. The correlations established the linear relationship existed, and along with the VIF values, that multicollinearity was not present in the model. The regression indicated that attendance can be predicted from the variables of Team Attachment, No Interest From Others, Level Attachment, Leisure Alternatives, and Player Attachment. In these results, there was representation from Internal Motivators (i.e., Team Attachment, Level Attachment, and Player Attachment), Internal Constraints (i.e., No Interest From Others), and External Constraints (i.e., Leisure Alternatives). There were no External Motivator variables that were significant in this investigation. As such, the Internal Constraint that negatively impacted attendance was No Interest From Others, and the External Constraint that negatively impacted attendance was Leisure Alternatives. Also, it appeared the Internal Motivator of Level Attachment



also negatively impacted attendance. The answer to the Internal Motivator research question was that Team Attachment and Player Attachment influenced attendance positively, while no External Motivator significantly predicted attendance for the remaining research questions. While there have been limited investigations simultaneously exploring motivators and constraints, there is some relevant research that is applicable to the context of this research.

The lack of External Motivation is consistent with previous research, as Kim and Trail (2010) also lacked this construct in their women's professional basketball investigation. Further, the model of Kim and Trail explained 32% of the variance ( $R^2 = 0.34$ ; Adj.  $R^2 = 0.32$ ) from three significant predictors. The model in this investigation also explained the same amount of variance ( $R^2 = 0.33$ ; Adj.  $R^2 = 0.32$ ), but from five significant predictors. These comparisons shed some light on this research area. Overall, while the instrument appears to account for nearly a third of consumer behavior decisions, there still appears to be a large amount of attendance behavior that remains unexplained. Trail and Kim (2011) also support this sentiment that simultaneously analyzing motivations and constraints helps explain consumer behavior, but there is still remaining unexplained variance that is unaccounted for by current measures. This is likely from the infancy of the research area which simultaneously investigates attendance motivators and constraints. Still, this amount of explained variance in social science research should not be disregarded.

The results also yield some more interesting research distinctions. In the current model and the Kim and Trail (2010) model, there were five and three significant predictors, respectively. Kim and Trail's three significant predictors were the Internal

Motivator of Team Attachment (Adj.  $R^2 = 0.21$ ), the Internal Constraint of Lack of Success (Adj.  $R^2 = 0.10$ ), and the External Constraint of Leisure Alternatives (Adj.  $R^2 = 0.03$ ). This investigation had five significant predictors, Team Attachment (Adj.  $R^2 = 0.24$ ), No Interest From Others (Adj.  $R^2 = 0.03$ ), Level Attachment (Adj.  $R^2 = 0.03$ ), Leisure Alternatives (Adj.  $R^2 = 0.01$ ), and Player Attachment (Adj.  $R^2 = 0.01$ ).

Team Attachment was the largest contributor in each model, and explained over 20% of the explained variance. The variable for Kim and Trail explained 21% (Adj.  $R^2 = 0.21$ ) and in this investigation 24% (Adj.  $R^2 = 0.24$ ). Thus, it appears Team Attachment is the largest predictor of attendance for consumer behavior. Further, the impact of this variable was positive and the largest of all the variables ( $\beta = 0.44$ ;  $\beta = 0.52$ ), but with more of an impact in the current investigation. Other research also cites the importance of this variable in consumer attendance behavior (Casper et al., 2009; Robinson et al., 2005). Also of note, in this investigation the other four significant variables accounted for only an additional 8% of the explained variance, while Kim and Trail's two accounted for 13%.

The Leisure Alternatives variable was also significant in both models, albeit that neither explained much variance at 3% and 1% in Kim and Trail (2010) and the current investigation, respectively. However, each did impact attendance negatively, and to similar impacts as Kim and Trail ( $\beta = -0.19$ ) was a little more than this study ( $\beta = -0.15$ ). Havard and Dwyer (2012) and Trail et al. (2008) also note that this area of Leisure Alternatives/Other Entertainment options negatively impacted attendance, but not to a level of meaningful significant differences.

Perhaps the most interesting finding, is that while there were two shared variables as significant results (i.e., Team Attachment and Leisure Alternatives), there are distinct differences. The Lack of Success variable was not significant in this investigation, even as the team of interest has lacked on-field success for multiple years. However, there were three other variables that were significant predictors, No Interest From Others, Level Attachment, and Player Attachment. Although the Lack of Success variable should not be downplayed, as it was significant in the constraint model that was ultimately not selected for the model that included all variables, the impact of the variable was around 5% ( $\text{Adj. } R^2 = 0.05$ ). The result seems to support extant research that while on-field performance impacts attendance, as it constrained attendance at college football (Trail et al., 2008), there are other essential components to attendance as well (Casper et al., 2009; Kim & Trail, 2010; Noll, 1974; Trail et al., 2008).

Interestingly, this investigation yielded three variables that were not noted in Kim and Trail (2010), No Interest From Others, Level Attachment, and Player Attachment. Again, each of these variables varied in their prediction of attendance, and accounted for only 1% to 3% of the explained variance of attendance. Perhaps the most interesting result was that the Internal Motivator of Level Attachment was not positively related to attendance ( $\beta = -0.21$ ), contrary to the theorized relationship of Kim and Trail and Trail and Kim (2011). The other two variables did impact attendance in the anticipated theorized direction (No Interest From Others,  $\beta = -0.18$ ; Player Attachment,  $\beta = 0.12$ ). Level Attachment also had the second biggest impact on attendance based on the standardized coefficient value. Kim and Chalip (2004) also had motivators that impacted attendance both positively and negatively, and this is touched upon below in the

theoretical implications portion. Also, the author expects that with this team competing at the FCS, other nearby institutions compete at the FBS level and these types of games are nationally televised, which makes the perceived lower level impact attendance negatively based upon status and perhaps talent level.

The Player Attachment variable is supported in positively impacting attendance (Robinson et al., 2005). The author expects this result had to do with students having personal relationships with some of the student-athletes, which appeared to positively influence their attendance. The No Interest From Others variable has been recently introduced in the sport literature by Kim and Trail (2010), so there is no relevant literature for comparison. However, its significance to negatively impact attendance lends credence to this variable being included in consumer behavior research. One would believe intuitively that most individuals would not want to attend a game alone, which supports the logic behind the significance of this variable.

Another interesting note is that a similar non-attendance investigation found the Other Sport Entertainment variable a deterrent for males to attend college football games (Trail et al., 2008), and this was not significant in the attendance model of this study. While there were two different purposes to these studies, and utilization of different analysis techniques, it is an interesting result. Especially when the mean values noted above are considered, they indicated this portion did impact attendance negatively but not to the level of significance in the regression model. Also, Havard and Dwyer (2012) noted the Stadium/Cost negatively impacted attendance, but that was not a significant result in this regression model. However, while Model A was selected over Model C, that model did have a result which indicated the Stadium was a positive attendance influence,

and not a negative attendance factor. Therefore, it appears attendance is driven by both overall factors that are consistent across sport platforms (i.e., attachment), as well as factors that uniquely impact each team/sport differently (i.e., stadium). As the above discussion indicates, the FCS level appears to have factors that impact attendance that are consistent with other levels, while also having its own unique characteristics that impact attendance behavior and will aid in retention of consumers.

## **Conclusions**

### **Theoretical Implications**

The intended purpose of this study was to contribute to the sport consumer behavior literature by simultaneously analyzing attendance motivators and constraints. As a guide to fulfill this purpose, a model on sport consumer behavior that was established by Kim and Trail (2010) was utilized. This framework consisted of two components, motivations and constraints. The model put forth that constraints negatively impacted attendance, while motivators positively impacted attendance, and that each paradigm had internal and external factors outside of one's self. This model was based upon previous research, with motivators being primarily from the MSSC (Trail & James, 2001), and constraints based upon LCT (Crawford & Godbey, 1987; Crawford et al., 1991; Jackson et al., 1993). The interpersonal and intrapersonal constraints were combined to form the internal constraints, and structural constraints were termed external constraints for easier understandability. The motivation titles were added and reworded to mirror these areas, to better operationalize and understand behavior. This study helps to support this model and its ease of use for understanding and reporting sport consumer behavior.

Also, given the results of this study which utilized the model of attendance motivators and constraints, while it is a useful model for interpreting behavior there are two thoughts that permeate about the theory and its universal use in sport attendance: the theory must be explored and adapted to be flexible and adaptable to each given context, or the model should be enhanced to try to encompass all sporting attendance behavior. These thoughts are further explored below.

While this research supports the usefulness of the model in being able to explain consumer behavior in a simple and easily understood manner (i.e., Team Attachment and Player Attachment being motivators that positively impacted attendance, and No Interest from Others and Leisure Alternatives being constraints that negatively impacted attendance), the model still needs some refinement. In particular, with the Level Attachment variable being conceptualized as a motivator to positively impact attendance, it actually negatively impacted attendance. Kim and Trail (2010, p. 205) discussed that some factors may actually belong to both motivators and constraints depending on the context, as this research supports with the Level Attachment variable. Further, it does not seem outside the realm of possibility for a constraint, while conceptualized to negatively impact attendance, to impact attendance positively and negatively (e.g., parking can be a motivator and a constraint depending on if parking is close/far-away to the stadium, or if parking is affordable/expensive). However, these issues may complicate the usability of model, where factors are shifted from a motivation to a constraint, or a constraint to a motivator. As such, the model should be further explored via the theorized constructs to determine which variables are only considered to be motivators that positively impact attendance, which variables are only constraints that negatively impact attendance, and

which variables are “Flex” variables which can impact attendance both positively or negatively. Perhaps a creation of this “Flex” category would make it easier to adapt the model to each sporting context given the sport that is being played, the gender of the teams playing, and the type of fans (Trail, Robinson, et al., 2003; Trail et al., 2008). The model would then have motivators that positively impact attendance (e.g., Team Attachment), constraints that negatively impact attendance (e.g., Leisure Alternatives), and flex options that could impact attendance both ways (e.g., Parking). This does not seem an arduous task, as it appears much of the established variables have impacted attendance in the theorized direction. As such, it appears further investigations are needed in conceptualizing factors that impact attendance, testing out their influence in a positive or negative direction, and further supporting the variables that have been established to impact attendance (i.e., Team Attachment is a motivator to attendance).

Another option to refine the consumer behavior model in terms of attendance would be to develop an instrument for each of the variables that have been established, where the context of it being conceptualized a motivator or a constraint is not relevant. Rather, to aid in the operationalization of the model, each variable should be measured on a continuum that accounts for each variable to impact attendance positively, negatively, or not at all. As such, a seven-point Likert-type scale would require anchors of positive and negative components, with the mid-point being a neutral stance. If this is realized, then the theorized direction of a variable is of no concern. The result will dictate if the variable impacts attendance positively or negatively, and the four constructs will aid in the interpretation of whether the variable is internal or external to the person and its

impact on their behavior. The model could then be utilized for its most salient purpose, according to the researcher, of aiding interpretation for consumer attendance behavior.

Continued investigations on sport attendance and non-attendance are the most essential component to one of the above possibilities, or both, becoming a likelihood in refining this theory. The area of motivations and constraints to attendance is an under-researched area in the sport management literature. The simultaneous investigation of motivations and constraints to attendance seems to be in its infancy as a sport research topic. While there are significant results, and the model aids in understanding behavior, there is still room for growth of the model to explain more variance in attendance. However, it appears there is a great body of work that has been established for this area to build upon.

It seems while the motivation portion of consumer behavior is relevant in the model results, it has also been studied for a longer period of time and seems to be further developed in its usefulness for research (Kim & Trail, 2010; Trail & James, 2001). The area of constraints to sport attendance does not seem to be as fully developed as its motivational counterpart, but this area has not been around as long and has not received the same amount of attention in the sport literature (Trail & Kim, 2011; Trail et al., 2008). So, this is to be expected. However, constraints are still significant in the results, and aid to better understanding consumer behavior decisions. Hopefully the sport attendance constraints area continues to be developed and refined, and can lead to a better understanding of the factors that negatively impact or impede attendance. As such, there needs to be continued investigations of constraints alone to refine those that impact attendance, so this area can be improved in its ability to predict behavior. Then, as



constraints are investigated more as its own topic as well as with motivators, attendance investigations of both motivations and constraints to attendance will result in models with higher levels of predictability.

### **Practical Implications**

One component of this research is being able to improve attendance to sporting contests, which in the given context are students to FCS football games, for increased revenues in the present (e.g., concessions, merchandise, sponsors, justification of student fees) and in the future (e.g., future donors and attendees). The main contributor to attendance was the Internal Motivator of Team Attachment. This is not a shocking result as those more attached to a team tend to support it in different ways, one of them being through attendance (Cialdini et al., 1976; Fink et al., 2002a; Robinson & Trail, 2005; Sloan, 1989; Wann & Branscombe, 1993). The difficult portion of this is that if a student does not feel attached to the team, they will not experience a loss without it and will not attend. Building team attachment may be difficult in a large number of students that are only around the campus/team for a short period of time (e.g., undergraduate students typically attend the university for only four years). So, one avenue is for marketers to focus their attention to servicing those that are already attached to the team, and increase this attachment for their continued support in years beyond graduation. This would likely be done by ensuring a fun event experience when they attend (e.g., pre-game tailgates, in-game video production and game atmospheres such as music and crowd interaction, providing individualized customer service, etc.). Another avenue would be for marketers to look to supplementary areas to spark the initial attendance which then could build attachment to the team and/or attendance at the event. While both avenues should be

utilized, to increase student attendance to larger numbers, the more fruitful method would be to pursue additional avenues to help build this attachment. Further, the correlation values indicated that team attachment was related to all of the internal motivation variables, so multiple methods could be used to appeal to students so a team attachment can be developed, and are explored below.

In utilizing these other motivational techniques, and being cognizant of constraints, a marketer should be able to increase the likelihood of a student to attend a game (Kim & Trail, 2010; Trail et al., 2008). Then, as a student attends, hopefully the experience is enjoyable and there is a portion of the event that initiates an interest which continues attendance at the event, and if a connection to the team forms then this attendance will be even more predictable.

Given that a student does not have much time at the campus, a premium should be put on attempting to get freshmen to attend the games. If a student starts attendance habits in their first year, then attachment to the team is likely to be present and grow in their time as a student. Results also indicate a successful team will aid in developing this team attachment. Other avenues to explore to gain team attachment would also include community and player attachment.

The players have a presence with their fellow students, and influence their attendance positively. As such, the marketing department should try to leverage the component of students supporting their fellow students. Further, it may be more beneficial for the players to initiate attendance by asking for support from their fellow students when there is an existing connection. Some tools where this can be used are through use of player names on campus fliers. Another possibility could be from the

social media of the football team/athletic department sharing requests from players for their friends to come and support them at the game. Audio and video of players asking for student support would also be beneficial, and perhaps playing these at student centers such as the union and library would be great locations for high student contact. The players and athletic department could also emphasize support of not only the team, but that the team is a symbol by which their attendance indicates their support of the campus community, university community, and local community. In an essence, the team belongs to the community. Also, this community attachment can be further expanded by featuring local organizations and vendors at the stadium (e.g., a popular restaurant having a concession stand), and forming sponsorships with the local business entities. These partnerships could also be featured in the pre-game/in-game spots, where the communal aspect is emphasized in support of the team.

There are also elements to not utilize in marketing endeavors. At the FCS division, marketers would be wise to not emphasize their connection to their “FCS” level title, which negatively impacted attendance. Rather, as most individuals were fans of the sport, it would be wise to emphasize being able to watch live and local football entertainment as a way to leverage more attendance. Also, unless the coach is a well-known or beloved figure, this individual should not be utilized in marketing endeavors for student attendance. The coach did not have a positive impact on attendance, so again the players and school/community would be better components to focus marketing efforts.

Another strategy marketers can utilize is to eliminate some of the constraints present to students which impacted their attendance negatively (Casper et al., 2009;

Havard & Dwyer, 2012; Trail et al., 2008). Results indicated Leisure Alternatives and No Interest From Others negatively impacted attendance. As such, the athletic department should be aware of the alternatives of going to a game on a Saturday (i.e., going to the movies, a restaurant, or party). Rather, the athletic department should aim to make those elements part of their event experience. Attending the game should feel like an event, it should be like going to a party or a special occasion. As such, the in-game elements should be fun and exciting, for instance the playing of modern music. An emphasis on the variety and quality of concessions, and the use of special student deals, should also entice student attendance over the other options. Pre-game tailgates could also help with the food, as well as provide that party element some students prefer to experience. The tailgate experience could also be a way for students avoid not having another person to attend the game with them. If these offerings provide a community of friends that also attend the games, then these individuals do not have to worry about convincing their friends/family/significant other to attend the game with them. These offerings relieve the pressure of attending a game alone, as there is a built in network of students that also enjoy attending the game. The athletic department could facilitate this through a student support fan club. The club could be a platform where students are able to see there will be an event, and that others are invited or have committed to going to the game. Having a club tailgate would contribute to creating these relationships and bonding with others through the team. Also, Facebook seems to be a great medium for this idea to be implemented and commitments for attendance to be viewed.

Overall, there are several strategies an athletic department can easily implement to increase student attendance. Attendance can be increased through utilizing motivational

techniques, eliminating or reducing constraints, or through both. However, the main component to attendance should be to try to initiate opportunities for team attachment, as this is the most significant component for positive student attendance through retention of past attendees. Then, athletic entities will put their organizations in a better position to retain and increase attendance, and leverage this for financial success via athletic donations, merchandise purchases, parking and concession sales from game attendance, sponsorship deals, and overall support of athletics.

### **Limitations**

The current investigation has some limitations as a research project that should be recognized. While the work is based upon established theory, there are minimal investigations that simultaneously examine motivations and constraints to attendance, as well as research specific to the FCS level. Based upon the lack of empirical research, this work should be considered exploratory in nature. This is a model building pursuit of an FCS football attendance model for the best set of student attendance predictors, not a model testing procedure (Tabachnick & Fidell, 2013). Further, with minimal research in this area, there could be certain factors important to attendance motivations and constraints that were not included in this research. However, as there have been a limited number of studies in this area, these results add value to the interpretations in the area and future research projects of this focus.

Another limitation included with this study is that survey responses were utilized, and as is the essence of survey research the provided information may not be entirely accurate. It is assumed the data is composed of responses that are truthful and accurate, but based upon the self-reporting nature of surveys, some may not be considered as such.

Nonetheless, the measure taken for the elimination of incomplete responses, and the large sample size, should help to ease some concerns in this area.

This research also only considered the responses of currently enrolled students at a single FCS institution. Responses may not be considered to be representative of the local community, alumni, other levels of college athletics (i.e., Division I, II, and III), different sports, and other/all FCS institutions. While care was taken in the characterization of the attendance figures for this institution comparatively to others, it may not be representative of all institutions and particularly to those with much higher attendance figures. There was still only one institution that was selected as the location of interest, and inclusion of more institutions would likely aid to even more applicable results.

Lastly, time is a concern. Data were collected over a span of only several months. Collecting data at a different portion of the year may have an impact on results. Also, the reason for motivations and constraints to attendance could change over time, and alter the findings of the current investigation.

### **Recommendations for Future Research**

Given the lack of research in the area of simultaneous analysis in motivations and constraints to attendance, this investigation offers valuable information for avenues of future research. Continued investigations could offer more perspectives on further developing or improving the motivation and constraints model in different sport attendance contexts perhaps from the “flex” option that was touched on above. This research could also lead to a new model that is applicable to all sport attendance such as the one noted earlier, or perhaps a model or framework that has not been established or

conceptualized yet. This research could also help lead to the creation of an instrument, or refinement/adaption of the current instrument, that measures attendance motivators and constraints so that all necessary variables are included and unnecessary variables are removed. This would be quite desirable given the length of the current survey. The stepwise regression from this work can contribute to this, as the procedure aids in eliminating unnecessary variables that are superfluous and may not be currently contributing to predicting consumer behavior (Tabachnick & Fidell, 2013). The stepwise regression adds value to the interpretation of variables that contribute to understanding attendance decisions, and helps to tighten up future research in this area by giving perspective on possible variables that may not be necessary. Determining the exact number of contributing variables would be quite a research feat with practical applications for many sporting organizations.

Some recommendations on future research would be to replicate this study to aid in determining if these variables are the only contributors to student attendance. Other research should also be conducted in collegiate athletics. One venture could be done at all levels of college football. Also, the Olympic or non-revenue college sports could be another venture that has not currently been explored. Examples could be soccer, wrestling, lacrosse, baseball, softball, field hockey, and ice hockey to name a few. Investigations of sports that are played by both genders (e.g., basketball, soccer, etc.) could also reveal some attendance insights. The gender of the fans may also be another piece to be considered. In particular for fans and consumer behavior research with a focus for support of collegiate athletics, as there are more female college students and graduates (Borzelleca, 2012; Lopez & Gonzales-Barrera, 2014; Meyer, 2014) as well as female

sports fans (Angus, 2013; Dosh, 2012; McBride, 2011), which is also supported by the gender breakdown in this investigation, this area of understanding the female fan could be of great importance in the nearby future.

Joint analysis of motivations and constraints to attendance could also be conducted at the professional levels, be it major leagues or minor leagues. Also, this could be in a North American setting, different regions of the United States, or perhaps an international stage. Comparisons of international and North American sport behavior could be another avenue.

An additional route that could be investigated would consider teams and sports that are typically highly attended, and contrastingly those that struggle at the turnstiles. An extension of this could be studying attendance behavior of a newly established sport organization, a relocated team, and a well-established organization that has a longstanding tradition in its location. Longitudinal data on a franchise could also be valuable in understanding the attendance of sport consumer behavior. Lastly, the analysis technique may be another piece to consider, with structural equation modeling being a procedure that may reveal some interesting results (Huck, 2012; Trail & Kim, 2011).

Clearly, there are many avenues that can be considered in the realm of simultaneous analysis of motivations and constraints to attendance. It is the author's hope that this work can be a piece to the puzzle that aids in better understanding this complex area of sport consumer behavior, and helps to generate future research investigation in the area of attendance and non-attendance.



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APPENDIX A  
INSTITUTIONAL REVIEW BOARD DOCUMENTS

## Institutional Review Board Approval



DATE: October 13, 2014

TO: Kurt C. Mayer Jr.

FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [667429-2] Attendance Motivators and Constraints: An Investigation of Students at the Football Championship Series Division

SUBMISSION TYPE: Amendment/Modification

ACTION: APPROVAL/VERIFICATION OF EXEMPT STATUS

DECISION DATE: October 13, 2014

Thank you for your submission of Amendment/Modification materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

**Mr. Mayer -**

**Hello and thank you for swiftly submitting the requested modification and additional information. There are no additional modifications necessary.**

**Please be sure to use all revised and added protocols developed through the review process in your participant recruitment and data collection.**

**Best wishes with this research. Don't hesitate to contact me with any IRB-related questions or concerns.**

**Sincerely,**

**Dr. Megan Stellino, UNC IRB Co-Chair**

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Sherry May at 970-351-1910 or [Sherry.May@unco.edu](mailto:Sherry.May@unco.edu). Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.

## Consent Form

UNIVERSITY of  
NORTHERN COLORADO



**CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH  
UNIVERSITY OF NORTHERN COLORADO**

**Project Title:** Motivators and Constraints to Sport Attendance

**Primary Researcher:** Kurt C. Mayer Jr., 570-259-4606, [kurt.mayer@unco.edu](mailto:kurt.mayer@unco.edu)

**Research Advisor:** Dr. David K. Stotlar, 970-351-1722, [David.Stotlar@unco.edu](mailto:David.Stotlar@unco.edu)

**Purpose and Description:** The purpose of this research is to investigate attendance and non-attendance, specifically in terms of what motivates and constrains or prevents attendance to football contests here at the University of Northern Colorado (UNC). As a participant in this research, you will be asked to answer survey questions to rate the significance of the reasons you chose attend or not to attend a game during the previous season, which should take approximately 5 to 10 minutes to complete.

The risks inherent in this study are no greater than those normally encountered during regular classroom participation or work setting. Your decision will be respected and will not affect you in any fashion. You will not need to provide your name or any other identifiable information. Participation is voluntary and anonymous. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Completed surveys and research data will be stored in the locked UNC office of the primary research and on a password protected computer, and only the researcher and his advisors will have access to the data. The findings of this research will be disseminated to sport scholars and practitioners at a sport research conference, and published in a sport research academic journal. Research outcomes may also be shared with athletic department officials to help improve the future sport event experience.

Having read the above and having had an opportunity to ask any questions please complete the questionnaire if you would like to participate in this research. By completing the questionnaire, you will give us permission for your participation. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the Office of Sponsored Programs, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-2161.

2014 Season UNC Home Football Schedule

Saturday, September 13 vs. Houston Baptist

Saturday, October 4 vs. Northern Arizona

Saturday, October 11 vs. Sacramento State

Saturday October 25 vs. Idaho State

Saturday November 22 vs. North Dakota

*This is the 2014 home schedule for you to reference in recalling when the games have taken place this past season.*

APPENDIX B  
STUDENT ATTENDANCE SURVEY

## Survey Page 1

We are interested in what motivates you to attend UNC Football games. The following statements are indicative of specific motives. Please rate the extent to which you DISAGREE or AGREE with each relative to attending UNC Football games by circling the appropriate number in the scale beside each statement.

	Strongly Disagree		Neutral			Strongly Agree	
	1	2	3	4	5	6	7
1. It increases my self-esteem.	1	2	3	4	5	6	7
2. I am more a fan of the individual players on the team than of the team.	1	2	3	4	5	6	7
3. The artistic value.	1	2	3	4	5	6	7
4. First and foremost I consider myself a football fan.	1	2	3	4	5	6	7
5. I prefer close games rather than one-sided games.	1	2	3	4	5	6	7
6. I am a big fan of Coach Collins.	1	2	3	4	5	6	7
7. It provides me an opportunity to escape the reality of my daily life for a while.	1	2	3	4	5	6	7
8. I feel connected to numerous aspects of the UNC (Greeley) community.	1	2	3	4	5	6	7
9. The chance to socialize with others.	1	2	3	4	5	6	7
10. I would experience a loss if I had to stop being a fan of the UNC Football.	1	2	3	4	5	6	7
11. I am a fan of FCS football regardless of who is playing.	1	2	3	4	5	6	7
12. It enhances my sense of self-worth.	1	2	3	4	5	6	7
13. I am a big fan of specific players more than I am a fan of the team.	1	2	3	4	5	6	7
14. The beauty and grace of the sport.	1	2	3	4	5	6	7
15. Football is my favorite sport.	1	2	3	4	5	6	7
16. I like games where the outcome is uncertain.	1	2	3	4	5	6	7
17. I would experience a loss if Coach Collins was no longer the coach.	1	2	3	4	5	6	7
18. I can get away from the tension in my life.	1	2	3	4	5	6	7
19. I feel a part of the UNC community.	1	2	3	4	5	6	7
20. The opportunity to interact with other people.	1	2	3	4	5	6	7
21. I consider myself to be a "real" fan of UNC Football.	1	2	3	4	5	6	7
22. I consider myself a fan of FCS football, and not just one specific team.	1	2	3	4	5	6	7
23. It improves my self-respect.	1	2	3	4	5	6	7
24. I consider myself a fan of certain players rather than a fan of the team.	1	2	3	4	5	6	7
25. It is a form of art.	1	2	3	4	5	6	7
26. Of all sports, I prefer football.	1	2	3	4	5	6	7
27. A tight game between two teams is more enjoyable than a blowout.	1	2	3	4	5	6	7
28. Being a fan of Coach Collins is very important to me.	1	2	3	4	5	6	7
29. It provides me with a distraction from my daily life for a while.	1	2	3	4	5	6	7
30. I support the UNC community as a whole.	1	2	3	4	5	6	7
31. The possibility of talking to other people.	1	2	3	4	5	6	7
32. Being a fan of UNC Football is very important to me.	1	2	3	4	5	6	7
33. I am a big fan of the FCS football.	1	2	3	4	5	6	7

## Survey Page 2

We are looking at things that might prevent you from going to a UNC Football game. Please indicate the extent to which each of the following would have an impact (from no impact to a large negative impact) on your attendance at a UNC Football game.

What kind of impact will the following items have on your attendance at a UNC Football game:

	No Impact						A Large Negative Impact
	1	2	3	4	5	6	7
90. Commitments to my church/religion	1	2	3	4	5	6	7
91. Exercising	1	2	3	4	5	6	7
92. If UNC Football loses more games than they win	1	2	3	4	5	6	7
93. Work commitments	1	2	3	4	5	6	7
94. Working out	1	2	3	4	5	6	7
95. Watching other sports on TV (e.g. college football)	1	2	3	4	5	6	7
96. Family commitments	1	2	3	4	5	6	7
97. Playing recreational sports	1	2	3	4	5	6	7
98. Attending a CSU or CU game	1	2	3	4	5	6	7
99. Commitments to friends	1	2	3	4	5	6	7
100. Attending a Nugget, Avalanche, Rockies, Broncos, or Rapid's game	1	2	3	4	5	6	7
101. Watching TV (non-sports)	1	2	3	4	5	6	7
102. If UNC Football is in the bottom half of the conference	1	2	3	4	5	6	7
103. School/studying commitments	1	2	3	4	5	6	7
104. Attending movies	1	2	3	4	5	6	7
105. Romantic/dating commitments	1	2	3	4	5	6	7
106. Attending a concert	1	2	3	4	5	6	7
107. Going to a restaurant	1	2	3	4	5	6	7
108. Traveling	1	2	3	4	5	6	7
109. If UNC Football never wins any games	1	2	3	4	5	6	7
110. Going camping	1	2	3	4	5	6	7
111. Going to a bar/party	1	2	3	4	5	6	7

**Please enter the appropriate number for each item below.**

The number of UNC Football game(s) you attended in 2013 (there were 7 home games) \_\_\_\_\_

The number of UNC Football game(s) you attended **this season** (2014: there were 5 home games) \_\_\_\_\_

The number of UNC Football game(s) that you **intend** to attend in 2015 (there will be 5-7 home games) \_\_\_\_\_

## Survey Page 3

Please rate the extent to which you **DISAGREE** or **AGREE** with each item by circling the appropriate number in the scale beside each statement.

	Strongly Disagree		Neutral			Strongly Agree	
34. I <b>don't</b> understand the technical aspects of football	1	2	3	4	5	6	7
35. My friends are <b>not</b> interested in going to the game	1	2	3	4	5	6	7
36. I <b>don't</b> understand football strategy	1	2	3	4	5	6	7
37. My spouse/significant other is <b>not</b> interested in going to the game	1	2	3	4	5	6	7
38. I <b>don't</b> understand the rules of the game	1	2	3	4	5	6	7
39. My roommate/housemates/family are <b>not</b> interested in going to the game	1	2	3	4	5	6	7

There are several things that may have an impact on your attendance at UNC Football games. Please rate how much the following items **IMPACT** your decision to attend by circling the appropriate number in the scale beside each statement.

Has...	Negative influence on my attendance		No influence on my attendance			Positive influence on my attendance		N/A
59. Newspaper ads/Campus Fliers for UNC Football games	1	2	3	4	5	6	7	NA
60. Distance I need to travel to get to the stadium	1	2	3	4	5	6	7	NA
61. Special promotions	1	2	3	4	5	6	7	NA
62. Accessibility of parking for the stadium	1	2	3	4	5	6	7	NA
63. Lack of someone to go to the game with me	1	2	3	4	5	6	7	NA
64. The financial cost of going to a game	1	2	3	4	5	6	7	NA
65. The conduct on the field of individual players	1	2	3	4	5	6	7	NA
66. UNC Football television commercials/social media	1	2	3	4	5	6	7	NA
67. Giveaways before/during the game	1	2	3	4	5	6	7	NA
68. Lack of friends to go to the game with me	1	2	3	4	5	6	7	NA
69. The price of tickets/concessions	1	2	3	4	5	6	7	NA
70. The behavior of individual players in the community/campus	1	2	3	4	5	6	7	NA
71. UNC Football billboard ads	1	2	3	4	5	6	7	NA
72. Stadium location	1	2	3	4	5	6	7	NA
73. Pre-game and/or half-time events	1	2	3	4	5	6	7	NA
74. Ease of parking at the stadium	1	2	3	4	5	6	7	NA
75. Lack of spouse/significant other to go to the game with me	1	2	3	4	5	6	7	NA
76. The cost of attending the games	1	2	3	4	5	6	7	NA
77. The personality of individual players	1	2	3	4	5	6	7	NA
78. Time it takes to get to the stadium	1	2	3	4	5	6	7	NA
79. Radio ads for UNC Football games	1	2	3	4	5	6	7	NA
80. Accessibility of stadium	1	2	3	4	5	6	7	NA
81. Closeness of parking to the stadium	1	2	3	4	5	6	7	NA
82. Media publicity about UNC Football games	1	2	3	4	5	6	7	NA



## Survey Page 4

**Demographic Information:**

Please answer the following about yourself by placing an X on the line that best describes you, or writing in the underlined area.

Class: Freshman \_\_\_\_\_ Sophomore \_\_\_\_\_ Junior \_\_\_\_\_ Senior \_\_\_\_\_ Graduate Student \_\_\_\_\_

Age: \_\_\_\_\_

Gender: Male \_\_\_\_\_ Female \_\_\_\_\_

Race: Caucasian/White/Non-Hispanic _____	Hispanic/Latino/Non-White _____
Black/African-American _____	White/Hispanic _____
Asian/Asian-American _____	American Indian/Alaska Native _____
Hawaiian/Pacific Islander _____	None of the Above/Other _____

Hometown, State: \_\_\_\_\_ , \_\_\_\_\_

Member of a Fraternity or Sorority: Yes \_\_\_\_\_ No \_\_\_\_\_

During the School Year, where do you live (local distance traveled to the game):

On Campus	_____
Off Campus - within 1 mile of Stadium/Campus	_____
Off Campus - between 1 to 5 miles of Stadium/Campus	_____
Off Campus - between 5 to 10 miles of Stadium/Campus	_____
Off Campus - more than 10 miles from Stadium/Campus	_____

Do you typically attend the game alone or with others? Alone \_\_\_\_\_  
Others (family) \_\_\_\_\_ Others (non-family) \_\_\_\_\_

Academic Major: \_\_\_\_\_

On a scale from 0-10, how big of a sport fan are you?

Not a fan 0 1 2 3 4 5 6 7 8 9 10 Big fan

On a scale from 0-10, how big of a UNC football fan are you?

Not a fan 0 1 2 3 4 5 6 7 8 9 10 Big fan

How many years have you been a UNC football fan? \_\_\_\_\_