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# Factors Contributing to Spectators' Perceptions of a College Football Stadium During Its First Year

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FACTORS CONTRIBUTING TO SPECTATORS' PERCEPTIONS OF A  
COLLEGE FOOTBALL STADIUM DURING ITS FIRST YEAR

by

Lyle Yoder

B.S., The Ohio State University, 2007

A Research Paper

Submitted in Partial Fulfillment of the Requirements for the  
Master of Science in Education Degree.

Department of Kinesiology  
Graduate School  
Southern Illinois University Carbondale  
May 2011

RESEARCH PAPER APPROVAL

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Approved by:

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April 12, 2011

AN ABSTRACT OF THE RESEARCH PAPER OF

Lyle Yoder, for the Master of Science degree in EDUCATION, presented on APRIL 12, 2011, at Southern Illinois University Carbondale.

TITLE: FACTORS CONTRIBUTING TO SPECTATORS' PERCEPTIONS OF A COLLEGE FOOTBALL STADIUM DURING ITS FIRST YEAR

MAJOR PROFESSOR: Dr. Julie A. Partridge Ph.D.

The objective of the current study was to determine how predetermined factors contribute to a spectator's overall perceptions of a new college football stadium. It was predicted that fans who were highly identified with the SIU football team would have a more positive perception of the new stadium than low identified fans. Second, individuals' considering themselves to be sports fans would perceive the stadium more positively compared to those not considering themselves to be sport fans. Third, females' perceptions would be more positive than males. Lastly, the greater the number of games an individual attends would result in a more positive overall perception of the stadium. Participants ( $n = 124$ ) completed surveys to assess demographic characteristics, perception of facilities, level of sport fandom, and level of identification with the team. A multiple linear regression determined that none of the individual variables significantly predicted the perception of the facilities. The combined effect of the four variables did significantly predict variability in perceptions of the facility. The results of the study suggest that when marketing a new facility, one must take into account as many variables as possible when devising a marketing strategy. Doing so will likely lead to more positive perceptions of the new facility and increase the likelihood of a repeat purchase.

## TABLE OF CONTENTS

	<u>PAGE</u>
ABSTRACT.....	i
LIST OF TABLES .....	iii
Introduction.....	1
Method .....	18
Results.....	20
Discussion.....	25
REFERENCES .....	31
APPENDICIES	
Appendix A.....	35
Appendix B .....	36
Appendix C .....	37
Appendix D .....	38
VITA .....	39

## LIST OF TABLES

<u>TABLE</u>	<u>PAGE</u>
Table 1 .....	19
Table 2 .....	22
Table 3 .....	23
Table 4 .....	23

## INTRODUCTION

Sport differs from other sources of entertainment by evoking high levels of emotional attachment and identification (Sutton, McDonald, Milne, & Cimperman, 1997). Individuals, particularly those strongly identifying with a particular sport organization, are often central to marketing plans of sport organizations. Because level of fan identification and emotional attachment is considered as a significant predictor of attendance (Hall, O'Mahony, & Vieceli, 2010), developing a greater level of each may result in greater attendance at events.

The facility itself may also be important in determining whether or not an individual determines to attend a sporting event. Each stadium aspect that spectators encounter during a sporting event shapes their overall image of the organization and could affect whether or not they choose to attend an event at the facility in the future. A positive experience will often predict future purchase intentions whereas a negative experience may inhibit the likelihood of attending a future event at the facility and portray a negative image of the organization as a whole (Hightower, Brady, & Baker, 2002).

Much of the research on new sports facilities has focused on professional sports at both major and minor league levels. Few opportunities exist at the college level due to the lack of new facilities being constructed, especially in football. Many stadiums are simply renovated due to cost and/or historical significance of the venue. Studying newly built facilities in college sports allows for a greater understanding of how people view these facilities and how to enhance perceptions. Positive experiences may increase the likelihood of future financial contributions to the

university and the athletic department whereas a negative experience could cause hesitancy towards future involvement and affiliation with the university.

This study focuses on a college football stadium during its first year in use. It looks at how different characteristics of attendees affect their overall perceptions of the new facility. The four characteristics utilized in the study are level of identification with the team, level of sport fandom, gender, and how many games the person attends. By determining the extent these factors predict how a spectator perceives the stadium, we can determine how to develop future marketing strategies in order to both enhance attendance and improve overall experience in order to promote future financial gain.

#### *Fan Behavior and Fan Identification*

Individuals who follow sports and have an interest in them can be classified into two different groups based on their behavior: fans and spectators. Spectators in the strictest sense are those who merely watch and observe, but fans are enthusiastic devotees of a given diversion (Sloan, 1989). Fan identification is defined as the personal commitment and emotional involvement an individual has with a sport organization (Sutton et al., 1997). Many individuals who are no longer involved with sport at the amateur level as participants become primarily involved with sport as fans and spectators as a means of continuing a form of involvement with sport. Much of this shift from direct sport participation to sport consumption can be attributed to how sport is portrayed. By focusing the attention of millions of viewers on a handful of major sports, heroic teams, and individual stars, we have converted ourselves to a

nation of spectators meaning that for most of us sports are something to be watched, not played (Devereux, 1971).

There are many differences between the level of identification of fans and spectators and their motives. Vicarious achievement is the need for social prestige, self-esteem, and sense of empowerment for an individual through his or her association with a successful team (Fink, Trail, & Anderson, 2002). Vicarious achievement can be an indicator of the strength with which an individual identifies with a particular team. It is typical for vicarious achievement to be highly correlated with attachment to a team, coach, community, or university (Trail, Robinson, Gillentine, & Dick, 2003). Individuals with a high level of vicarious achievement tend to attend games in order to support a favorite team, coach, or university. Robinson, Trail, Dick, and Gillentine (2005) found that college football fans at the NCAA Division I-A (FBS) level had the highest level of vicarious achievement compared to Division I-AA (FCS), Division II, and Division III. Level of identification with individual players at the Division I-A level is low, meaning that there is often little to no personal attachment to the players. Only Division I-AA had a lower level of player identification. Organizational identification refers to the attachment an individual has with the university or team in general and is highest at Division I-A, declining with each level down to Division II. Sport identification refers to the personal feelings a fan may have towards the sport, in this case football. Division III fans displayed the highest level of sport identification as well as the highest level of player identification. Robinson et al. (2005) suggested that one possible reason for this is that persons attending games at the Division III level are

often doing so in order to either support a personal friend or family member that plays on the team (i.e., player identification), or the individual attends because of the fan's passion for the sport itself (i.e., sport identification). An individual describing themselves as "loving football" would fit into this category. Rather than identifying with a specific team that is playing in the game, they identify with the sport itself and attend for the purpose of watching the game.

One of the primary reasons for an individual to identify with a sports team is self-esteem. Fans, like all individuals, seek ways to maintain and assist their self-esteem. Two processes dedicated to this aspect are basking-in-reflected-glory (BIRGing) and cutting-off-reflected-failure (Cialdini & Roberts, 1987). Fans will often BIRG after the team with which they identify experiences success. A person who engages in BIRGing will do so as a method of feeling like a member of the team and increase association with successful others. An individual that is BIRGing will likely use words that identify themselves as a part of a team when describing that team such as "us", "our", or "we". When a fan's team is unsuccessful, that fan looks to distance themselves from others that are unsuccessful (i.e., CORFing). A fan that is CORFing may use words such as "they" or "them" when describing the team they identify with (Cialdini & Roberts, 1987).

Sports fans often display unique tendencies to emotionally relate themselves to their teams. The amount of identification with a team moderates the degree to which individuals display BIRGing and CORFing tendencies (Wann & Branscombe, 1990). Persons that are high in identification tend to show an increase in the tendency to bask in victory compared to those that are only of moderate or low identification.

The opposite is true in terms of CORFing. Highly identified fans are less likely to cut off the team's failures compared to fans that have low and moderate identification. Fans that are highly identified have invested enough into being a fan that even failure does not threaten their association. They feel as though they are being loyal fans by remaining through a team's struggles. Low identified fans have not invested as much and therefore do not find it as important to remain a fan and look to distance themselves from failure.

A unique perspective provides us with an idea of fan behavior that is opposite of traditional views of BIRGing and CORFing. Campbell, Aiken, and Kent (2004) discuss the ideas of basking-in-reflective-failure (BIRFing) and cutting-off-reflective-success (CORSing). A fan would BIRF as it provides a fan a means to gain a feeling of loyalty. The group of fans takes pride in their team's failure and uses it to show that they are good fans (e.g., Chicago Cubs fans). Fans tend to look to the future to when their team is successful and view this moment as being even more special because they stood by their team even when they were unsuccessful and unpopular. Similarly, fans of teams that become successful may CORS. An individual may do so for different reasons. They may still want their team to win but only in certain situations, for example, when the fan holds an unfavorable view towards management or coaching. Fans may also not want to be associated with the bandwagon fans that begin to cheer for a successful team as soon as they become successful. A fan in this situation often feels resentment because they have been loyal while so many others are only now becoming fans and reaping the benefits. This would lessen the level a

fan identifies with a team but it may only last until the success of that team diminishes.

Individuals of both losing and winning teams are often strongly identified with their team. Fisher and Wakefield (1998) examined the different factors that may lead to group identification based on the success of a team. Two professional hockey teams in the same league were selected for the study. One team had a record well above .500 and was likely to make the playoffs while the other team was out of the playoff race and in last place in the division. The teams were located in the same metropolitan area and attracted fans of similar characteristics. One page surveys were distributed at the conclusion of late season home games. The surveys measured group identification, domain involvement, perceived group performance, group member attractiveness, and group-supportive behaviors. The hypothesis that an individual would identify based on group characteristics promoting a positive self-image was supported. Fans identifying with the losing team focused more on aspects of the group that were beneficial to the view of their self such as group member attractiveness or domain involvement as opposed to the poor performance of the team. The performance of the group was the most distinctive factor for those identifying with the successful team. Fans of winning teams prided themselves in the actual performance of their team while fans of losing teams tended to focus more on factors of the team that allow them to see themselves in a positive light.

Identification with a specific sports team can lead to greater levels of self-esteem and allow individuals to have a sense of belongingness. Branscombe and Wann (1991) examined how the act of identifying with sports teams has replaced

traditional family and community attachments. One aspect that may contribute to why sports team identification may lead to elevated self-esteem and a lower probability of depression is a sense of being a part of something grander. A positive outlook on life is positively related to sports team identification. There is a negative relationship between team identification, feelings of alienation, and negative affective experiences among college students. While these relationships may be due to the level of success of a team, it has been shown to not be related to the level of fan identification with that team. This is more evident in fans of teams that are geographically close to as opposed to fans living at a distance from the team they support. Team success is less of a factor for fans of local teams as there are more individuals supporting the team that can be found easily. Fans of distant teams rely on team success as a means of enhancing self-esteem. Because there are fewer fellow supporters to create a sense of camaraderie, the individuals instead use basking processes to promote positive esteem. However, distance does not have a specific meaning. It could refer to the number of miles an individual is away from a team or it could refer to the amount of media coverage a certain team has. According to Wann (2006), distant teams may become salient in a situation when one is surrounded by other fans of that distant team. The local team may not be salient during certain times of the year, particularly during an offseason or when an individual is surrounded by fans of the distant team. In these cases, fans identifying with distant teams may see a positive relation to psychological health and well-being while fans identified with local teams may not see this positive relationship. This highlights the fact that

individuals become fans of teams in order to provide a sense of belonging and to be a part of a group which enhances psychological health.

Different personality traits can also have an impact on how a sports fan identifies with a team. A person's need to affiliate with others or the disposition to need warm relationships and friendships with others in group settings is predicted by basic personality traits (Donovan, Carlson, & Zimmerman, 2005). The traits of extraversion, agreeability, need for arousal, and materialism are shown to positively relate to a person's level of identification. The personality traits of an individual can factor into how a person chooses to be a member of a group, in this case the group they are being affiliated with is fans of a particular sports team.

Fans of different sports may have different motivational profiles particularly in the motives of escape, economical, eustress, self-esteem, group affiliation, entertainment, family, and aesthetics. The motivations of sport fans differ based on the different types of sport. Individual sport fans differ from team sport fans, aggressive fans from nonaggressive fans, and stylistic from nonstylistic sport fans (Wann, Grieve, Zapalac, & Pease, 2008). In order to determine these traits, college students were tested by completing a questionnaire packet. The first questionnaire asked participants to report their interest level in 13 different sports. After completing this portion, the researchers determined which sport the individual appeared to have the most interest in. The individual was then asked to target this sport while completing the rest of the packet which consisted of a sport fandom questionnaire as well as a questionnaire focusing on sport fan motivation. Sports being of an individualistic nature (i.e., boxing, golf) have been found to be more

motivated by aesthetics while team sport fans had higher motivational levels of eustress, self-esteem, group affiliation, entertainment, and family. Escape and economics have not been found to display a significant difference between the different sport types. In terms of aggressive versus nonaggressive sports, fans did not display significant differences regarding escape, self-esteem, and family motivation. Economic, eustress, group affiliation, and entertainment were shown more as being motives for aggressive sports while aesthetics favored nonaggressive sport fans. Lastly, stylistic compared to non-stylistic sports resulted in differences in each category except for escape. Aesthetic motivation was the only motive that was greater for stylistic sport. Non-stylistic sports received higher scores in each of the other six motives. Individual sports are often less violent and focus on the artistic value of movement. Examples such as gymnastics, golf, and figure skating are examples of individual sports that provide these features. Team sports (e.g., football) can often be violent, and are the sports on which people most often gamble. Due to the level of group affiliation fans have in identifying with a team, they often provide the greatest positive feelings after success. Being a fan of a certain team or franchise often is a family institution that is learned from mirroring the actions of parents. Fans are typically the most visible within team sports due to the large followings and each team hosting competitions, allowing their own fans to be more visible and attached (Wann et al., 2008).

While sports fans may have different motives, one similar aspect that is visible among many fans is the idea that they are searching for certainty. The subjective uncertainty reduction theory states that people possess a fundamental drive

for certainty about their perceptions, attitudes, and behaviors (Grieve & Hogg, 1999). People are constantly searching for meaning in their lives and want to know that what they are doing or thinking is acceptable. According to the theory, a person that is uncertain in a particular domain is motivated to identify themselves with social groups. By identifying with these groups, the level of uncertainty is reduced as the person gains a sense of belonging. The desire for subjective certainty might influence the development of team identification (Dimmock & Grove, 2006). By identifying with sports teams, individuals may be able to reduce their level of uncertainty. A person identifying with a team is able to feel as though they are a part of a group. Being a group member allows for an individual to categorize themselves and structure their identity which in turn can provide a certainty about how to act, think, and feel (Dimmock & Grove, 2006). Since the actions of the group are considered acceptable, a member may alter their own actions in order to feel as though they belong.

Fans that consider themselves as fans of a particular team and part of a group often evaluate fellow members of that same group in a biased manner. A study conducted by Wann and Grieve (2005) examines how fans of a team are biased in their evaluations of fellow in-group fans and rival out-group fans. Participants were asked to complete two surveys at the conclusion of a basketball game they were attending. One survey assessed their identification to the team while the second questionnaire determined their evaluations of the spectators in attendance at the game. Individuals showed a favorable view of in-group fans, and the higher the level of team identification, the more favorable the bias the individual reported. Fans of rival teams, or out-group fans, are viewed in a more negative manner. A person therefore

sees fans of the team they identify themselves with in a more positive bias than fans of other teams or other people in general. This can be viewed as being part of a group and because of the similar and shared values of fellow members; the individual believes those members and their behaviors are, in a sense, appropriate.

Gender differences are evident in regards to reasons why an individual considers themselves as a sport fan and the level of importance they place on being a fan. While females do consider themselves to be sport fans, they are not as likely to view being a sport fan as being as important as it is to males, since being a sport fan is often an important part of masculine identity (Dietz-Uhler & Harrick, 2000). Males view being a sport fan as playing sports and acquiring sporting information whereas females view being a sport fan as attending, watching, and cheering at sporting events. Males also tend to experience greater emotional fluctuations from these actions in comparison to females (Bahk, 2000). Because each gender has different views as to what being a sport fan is, it is likely that each would have different levels of loyalty and team identification. It is likely that males are more likely to display a higher level of identification with a specific team.

#### *Fan Identification and Game Attendance*

There are many factors that influence game attendance. The most significant predictors of attendance at sporting events are shown to be affected by the level of emotion attached to the sports event as well as the perceived quality and availability of the facilities (Hall, O'Mahony, & Vieceli, 2010). Reasons for attending also vary according to sport type as well as level (i.e., professional, NCAA Division I, NCAA Division II, etc.). NCAA Division I-A college football relies on the past success of a

team on the field as the largest game specific factor for attendance followed by quality of opponent, playing a traditional rival (Price & Sen, 2003). Those attending NCAA Division II football games are primarily interested in the actual game of football and not necessarily going because they are fans of the team but rather fans of the game of football (Brokaw, 2000). This further confirms the findings of Robinson et al. (2005) who found that the lower the division of NCAA football, the greater the attendees identified as being fans of the game of football while displaying a lower level of identification with the team or university.

Differences in emotional attachment to a team are an important aspect in determining an individual's intentions regarding event attendance. According to Koo and Hardin (2008), individuals classified as fans have higher values on emotional attachment toward team, university, coach, and player than those of spectators. Fans experience higher levels of vicarious achievement while spectators are more interested in seeing a well-played game. A spectator's intentions are often more influenced by team performance than the intentions of fans. In other words, when a team is successful, a spectator is more likely to attend as opposed to when a team is not performing well. Performance does not have the same impact on fans as their level of attachment provides them with feelings of being a part of that team.

Individuals classified as fans who view association with a team as an important facet of their self-identity tend to experience greater personal joy and seek greater association with a team when it experiences successful outcomes (Madrigal, 1995). A fan is more likely to BIRG in these situations. Because they consider

themselves as part of a successful group, the individual(s) display greater levels of self-esteem through vicarious achievement.

Murrell and Dietz (1992) found that positive evaluations of sport teams are associated with higher levels of collective self-esteem and group differentiation which can affect the actual attendance at a game. This is evidenced by an individual's feelings of worth to the group being more predicative among those in attendance. These individuals see themselves as integral to the game and feel as though they are in part responsible for the outcome which enhances feelings of worth in identification to the team (Murrell & Dietz, 1992). Fans at games also report lower levels of state loneliness and higher levels of state satisfaction while attending a sporting event compared to when they are at their residence (Wann, Martin, Grieve, & Gardner, 2008). This could be attributed to being a member of a social group and being around others with the same feelings whereas much of the time spent at an individual's residence is spent alone.

Game attendance can also be affected by social influence. Wakefield (1995) found that if members of a primary reference group (i.e., family) views going to the game as a positive experience, that individual will have the same viewpoint. The same relationship occurs if the experience is viewed as being negative. The same is true in terms of one's reference group, or community social group. It is likely an individual will have negative views of attending a game if other individuals in a similar market segment consider going to a game as unpopular.

Ticket demand and an individual's level of team identification factor into how likely a person is in attending a sporting event. According to Wann, Bayens, and

Driver (2004), both high and low identified fans reported an increased interest in attending a sporting event when tickets were deemed to be scarce and difficult to obtain as opposed to tickets with easy obtainability. When tickets are not scarce, individuals with a higher level of identification still have an interest in attending and are often more enticed by different promotional events as ticket scarcity is not as strong of a factor in terms of their decision to attend. Lower identified individuals are more likely to attend if they believe the game will be sold out and tickets are in high demand. This may be explained by the differences in being a fan and a spectator. A fan attends because they are associated with the team and their level of identification with that team is their primary reason for attending. A spectator attends because they enjoy watching the sport and being part of an atmosphere. A game that is sold out often promotes a more enjoyable atmosphere than one that is not and is therefore more attractive to a spectator.

#### *Facilities and Game Attendance*

Stadium surroundings and the experience of attending home games can also play an important role in the tendency a spectator has in attending games. The sportscape model refers to the idea that spectators who enjoy spending time at the stadium are expected to be more likely to want to return to spend time at the stadium while a negative experience is expected to reduce the desire to stay at the stadium (Wakefield & Sloan, 1995). The sportscape consists of the following stadium factors: stadium parking, cleanliness, crowding, fan control, and food service. The factors at a sporting event are important due to the uniqueness of the event. At a sporting event, the consumer remains in the same location for several hours at a time. This limits the

choices they have regarding each of the aforementioned stadium factors. Therefore it is important to understand the role that a stadium has in either increasing or decreasing an individual's level of identification with that team or organization. According to Wakefield and Sloan (1995), spectators who enjoy spending time at the stadium were found to be inclined to return to the stadium in the future. Lee, Ryder, and Shin (2003) studied minor league stadia and found the three most important environmental factors to be cleanliness, parking, and convenience of facilities. Satisfaction with these factors affects the spectators' likelihood of returning. These results aid in clarifying that attendance is not limited to team performance or team loyalty but is also related to the experience spectators have at the stadium. A spectator having a positive experience is more likely to attend another game at that stadium and is likely to have a more positive view of that team/organization. This positive view may lead to a greater amount of identification and loyalty with that team or organization (Wakefield & Sloan, 1995). The opposite may occur if a spectator has a negative experience while attending a sporting event at a given stadium. The poor experience reflects negative feelings towards that team and thus may curb any possibility of an increase in team loyalty. While stadium experience is an important aspect, it is not the only physical factor that can effect team identification and attendance at a sporting event.

The location of an event also factors into the willingness of a fan to attend. According to Leonard (2005), the further away geographically a road game is, the less likely an individual is to attend. This is known as distance decay. Highly identified fans are more likely to travel compared to those not identifying as strongly.

There are exceptions to this idea, such as when a road game is being held in a popular vacation locale that provides the game as a reason for visiting the location.

Teams playing games at home enjoy a distinct advantage versus playing on the road. Courneya and Carron (1992) determined this advantage exists and has remained consistent and stable over time, however, the magnitude does vary among different sports. Absolute crowd size is not a factor to the advantage however crowd density is a factor. This home advantage is apparent at both collegiate and professional levels of team sports and therefore emphasizes the importance of attracting customers to a sporting event.

As the literature suggests, much of the previous research in regards to new facilities has focused on professional stadia. There is a much greater opportunity at this level due to the frequent desire to build new stadiums and for franchises to move locations. By determining how a new facility is perceived at the college level, sports marketers are able to develop better strategies to target a greater number of potential customers and spectators. This enhances the overall image of the university which could lead to greater enrollment as well as a greater amount of donations from alumni and athletic boosters.

The purpose of this study was to determine what factors can be used to predict perceptions of a newly built, Division I-AA (i.e., FCS) football facility. The specific aim was to determine understand the extent that an attendee's level of identification with the home team, sport fandom, gender, and game attendance affects and predicts these perceptions. Based on previous research (Kelley & Turley, 2001; Lee et. al., 2003; Wakefield & Sloan, 1995), it was hypothesized level of identification to a

sports team will predict an increase in an individual's positive perceptions of that team's facilities. It was also hypothesized that level of sport fandom will predict an overall positive perception of the facility. Females were hypothesized to have a more positive perception than males based on aesthetics and environment being a major contributing motivational factor to attendance at sporting events (Dietz-Uhler et. al., 2000; Hall & O'Mahony, 2006). Lastly, the number of games an individual attends is hypothesized to predict a positive perception of the facility.

## METHODS

### *Participants*

The sample for the current study consisted of 124 individuals ( $M$  age = 25.2 years,  $SD = 12.0$ ) who attended home football games at Southern Illinois University Carbondale in October of 2010 as well as undergraduate students enrolled in classes within the Department of Kinesiology. Questionnaires were distributed between the time tailgating began (i.e., three hours prior to kickoff) until the start of the game (i.e., kickoff). Participants recruited from classes were asked at the start of class if they attended any home football games during the season and were then asked to voluntarily complete the survey. Sixty individuals were from the football games while 64 completed the questionnaire in undergraduate classes within the Department of Kinesiology. Of the 124 participants, 64.5% were male ( $n = 80$ ) and 35.5% were female ( $n = 44$ ). The majority of the participants were Caucasian (87.9%,  $n = 91$ ), followed by African American (14.5%,  $n = 18$ ), multiracial (6.5%,  $n = 8$ ), and Hispanic (4.8%,  $n = 6$ ). University affiliation was divided into 6 different categories: student (78.2%,  $n = 97$ ), alumni (14%,  $n = 14$ ), faculty/staff (0.8%,  $n = 1$ ), no affiliation (1.6%,  $n = 2$ ), faculty and alumni (0.8%,  $n = 1$ ), and other (7.3%,  $n = 9$ ). 23.4% ( $n = 29$ ) of the participants completed the survey during a home game against the University of Northern Iowa, 25% ( $n = 31$ ) from the game against South Dakota State University, and 52.6% ( $n = 64$ ) were from class after the conclusion of the season. The demographic characteristics of the sample can be found in Table 1.

Table 1  
*Sample Characteristics*

<b>Variables</b>	<b>N</b>	<b>% of the Sample</b>
<b>Game</b>		
Northern Iowa	29	23.4
South Dakota State	31	25
In Class	64	51.6
<b>Gender</b>		
Male	80	64.5
Female	44	35.5
<b>Race</b>		
Black/African American	18	14.5
White/Caucasian	91	73.4
Hispanic/Latino	6	4.8
Asian/Pacific Islander	1	0.8
Multiracial	8	6.5
<b>Affiliation</b>		
Student	97	78.2
Alumni	14	11.3
Faculty/Staff	1	0.8
No Affiliation	2	1.6
Faculty and Alumni	1	0.8
Other	9	7.3
<b>Season Ticket Holder</b>		
Yes	9	7.3
No	115	92.7

### *Instruments*

The questionnaire packet was comprised of four distinct parts. The first section assessed demographic information (see Appendix A). The remaining three sections were comprised of three separate questionnaires described below.

*Sport Fandom Questionnaire.* The Sport Fandom Questionnaire (SFQ; Wann, 2002) consists of five questions regarding fan loyalty and the importance of sport in the participant's life. A sample question from the SFQ is, "I consider myself to be a sports fan." Likert responses range from 1 (*strongly disagree*) to 8 (*strongly agree*). The SFQ has been found to be valid and reliable in previous research.

*Sport Spectator Identification Scale.* The Sport Spectator Identification Scale (SSIS; Wann & Branscombe, 1993) is comprised of seven questions that measure the degree to which an individual identifies with a specific team or athlete. For the purpose of the current study, the SSIS was used to measure identification with the Southern Illinois University football team. A sample item for the SSIS is, “How important is it to you that the team listed above wins?” Responses range from 1 (*low identification*) to 8 (*high identification*). Therefore, higher numbers on the SSIS indicate higher levels of spectator identification. The SSIS has been found to be a highly valid and reliable measure (see Wann, Melnick, Russell, & Pease, 2001 for a review).

*Stadium Environment Scale.* The SES (SES; Kahle, 2003) is an eight-item scale that examines environmental components of a sport stadium, in this case Saluki Stadium. A component is “Atmosphere of stadium.” Responses range from 1 (not at all good) to 9 (very good). The Stadium Environment Scale has been found to be a valid and reliable measure (Kahle, Aiken, Dalakas, & Duncan, 2003).

### *Procedures*

Approval for the study was obtained from the Human Subjects Committee at Southern Illinois University Carbondale prior to the start of data collection. Participants were individuals who attended home football games at Saluki Stadium during its inaugural 2010 season. Individuals were recruited during the allotted tailgating time (three hours prior to kickoff) at two home football games in October. Individuals were approached and asked if they attended a home football game during the present season. If they indicated they had they were asked to volunteer in the

study. Those agreeing to participate were handed a clipboard and pencil along with the consent form and questionnaire. Other participants were undergraduates enrolled in KIN 101 Concepts of Physical Fitness class. Students were asked if they attended a home football game during the season. Students who responded affirmatively were then asked to participate in the study. There was no extra incentive provided for students (i.e., extra credit) for participating in the study. The measures were given to participants in a random sequence to avoid any ordering effects. Upon completion of the questionnaire packet (approximately 15 minutes), participants were thanked for their cooperation, debriefed, and released from the testing session.

## RESULTS

A total of 127 individuals participated in this study. Three participants did not complete the entire questionnaire packet and their data were removed from subsequent analyses.

### *Descriptive Statistics*

Descriptive statistics are shown in Table 2. The SSIS has a possible range of scores of 7 to 56, and a midpoint of 24.5. This sample reported a mean of 40.56 (SD = 10.03). The SFQ has a possible range of scores of 5 to 40, with a midpoint of 17.5. This sample had a mean of 31.24 (SD = 9.31). The SE has a possible range of scores of 9 to 72, with a midpoint of 31.5. The sample had a mean of 55.04 (SD = 8.93).

Table 2  
*Descriptive Statistics*

<b>Variable</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>SD</b>
Age	124	18	76	25.15	11.96
Years Employed	2	2	6	4	2.83
Years As Season Ticket Holder	9	1	40	6.78	12.55
SSIS	124	8	56	40.56	10.03
SFQ	124	5	40	31.24	9.31
SES	123	24	72	55.04	8.93

### *Reliability*

Internal consistency of the questionnaires was found using Cronbach's alpha and is shown in table 3. The reliability of the SES was  $\alpha = 0.80$ , the reliability of the SFQ was  $\alpha = 0.93$ , and the reliability for the SSIS was  $\alpha = 0.90$ . Each of these were found to be above the value ( $\alpha = 0.70$ ) recommended to ensure reliability of results (Nunnally, 1978), and were therefore deemed appropriate to use in subsequent analyses.

Table 3  
*Results of Reliability Analysis*

	SES	SFQ	SSIS
Variance Extracted Cronbach's $\alpha$	0.805	0.931	0.905
Mean	55.04	31.24	40.56
SD	8.93	9.31	10.03

*Correlations among the Variables of the Study*

Correlations were calculated using a Pearson product moment correlation and are shown in Table 4. Gender (coded as male = 1, female = 2) was negatively correlated with being a sports fan ( $r = -.192$ ,  $p < 0.05$ ), meaning that males were more likely than females to identify themselves as fans of SIU football. Season tickets (coded as yes = 1, no = 2) were negatively correlated with age ( $r = -.628$ ,  $p < 0.01$ ), which indicated that older participants were more likely to be season ticket holders of the football team. Level of identification (coded as low = 1, high = 2) was positively correlated with being a sports fan ( $r = .258$ ,  $p < 0.01$ ) and perception of the stadium environment ( $r = .244$ ,  $p < 0.01$ ). None of the other correlations were found to be statistically significant.

Table 4  
*Correlation among Variables*

Variables	1	2	3	4	5	6
1 Age	1.00					
2 Gender	0.070	1.00				
3 Season Tickets	-.628**	-.117	1.00			
4 SFQ	-.041	-.192*	.017	1.00		
5 SE	.000	.081	-.065	.147	1.00	
6 SSIS	.160	-.012	-.151	.358**	.244**	1.00

\* $p < 0.05$ , \*\* $p < 0.01$

### *Multiple Linear Regression*

In order to test the hypothesis for the study that fan identification, sport fandom, gender, and game attendance would predict perceptions of the new stadium, a multiple linear regression was performed with SSIS, SFQ, gender, and number of games attended identified as the predictor variables, and stadium environment (SE) as the target variable. The combined effect of the four variables was significant  $F(4, 118) = 3.11$   $p < .05$ . However, in regard to independent contributions to SE scores, none of the individual target variables was found to account for a significant amount of unique variance (SSIS,  $\beta = .146$ ,  $t = 1.428$ ,  $p > .05$ ; SFQ,  $\beta = .067$ ,  $t = .687$ ,  $p > .05$ ; gender,  $\beta = .083$ ,  $t = .922$ ,  $p > .05$ ; game attendance,  $\beta = .167$ ,  $t = , p > .05$ .

## DISCUSSION

The purpose of this study was to determine if certain factors contribute to an individual's perceptions of a newly built sport facility. The specific aim was to understand the extent that an attendee's level of identification with the home team and sport fandom affected these perceptions. Based on previous research (Kelley & Turley, 2001; Lee et. al., 2003; Wakefield & Sloan, 1995), it was hypothesized that level of identification with a sports team would predict an increase in an individual's positive perceptions of that team's facilities. It was also hypothesized that the level of sport fandom would predict an overall positive perception of the facility. Females were hypothesized to have a more positive perception than males based on aesthetics and environment being a major contributing motivational factor to attendance at sporting events (Dietz-Uhler et. al., 2000; Hall & O'Mahony, 2006). Lastly, the number of games attended was hypothesized to have a positive influence on how the stadium was perceived.

The results of the experiment determined that the combined effect of the predictor variables (i.e., fan identification, fandom, gender, number of games attended) had a significantly positive relationship on the perceptions of the facility and could be used as a predictor in determining how a consumer will perceive the facility at which the team plays its home contests. This is similar to the findings of Wakefield and Sloan (1995) which determines that attendance at major college football games is a function of the entire experience spectators have at a stadium and not based only on the team's performance.

The hypothesis that the level of identification an individual has with a team would predict a positive relationship of their overall perceptions of the facility was

not supported. While there appeared to be a positive relationship between the two variables, it did not account for a significant amount of variance in the stadium perception scores. This result differs from previous results that suggest that team loyalty plays the biggest role in determining spectators' desire to be at a stadium, (Wakefield & Sloan, 1995). The level of competition of the team being studied in this case could explain this finding. Robinson et al. (2005) determined that NCAA Division I-AA (FCS) football had the third lowest level of fans attending a game because of their level of identification to the team. Individuals in this study may have reported positive perceptions of the facility however scored low in terms of identification with the team.

The relationship between level of overall sport fandom and perceptions of the stadium was not statistically significant and did not support the hypothesis. This may be explained by the motivational profiles of sport fans and how they differ based on the type of sport. According to Wann et al. (2008), fans of team sports are not as motivated by the of the sport as those of individual sports. Likewise, fans of aggressive sports do not place an emphasis on the aesthetics of the sport with a negative correlation between enjoyment of violent sports and aesthetic motivation. Football is both a team sport and an aggressive sport. Participants in the current study may not have placed a great level of emphasis in the physical environment of the new stadium when determining their perceptions of it, thereby influencing their stadium environment scores.

The hypothesis that females would have a more positive perception of the stadium than males was also not supported. Again, the relationship did not prove to

be statistically significant between the two variables. The lack of a linear relationship aids in providing evidence that both male and female attendees find the physical environment at a sporting event to be important. Hall and O'Mahony (2006) found that females do find importance in certain stadium characteristics such as entertainment and social issues; however, incorporating features to attract female spectators does not deter males from attending. Therefore although the physical environment of Saluki Stadium may have been a greater motive for a female fan to attend the game as opposed to a male fan, the actual perceptions of the stadium once at the facility do not differ based on gender.

The hypothesis that number of games attended would result positively influence the overall perception of the facility was not supported. This may be a result of the simple fact that the majority of the sample (%) consisted primarily of students. Students are able to attend games for free and often do so in order to be with their friends. This could be attributed to the uncertainty reduction theory which states that people strive for certainty about their perceptions, attitudes, and behaviors and therefore identifies with a particular group to reduce their level of uncertainty and to feel as though they belong (Grieve & Hogg, 1999). Wakefield (1995) found that the way an individual perceives their experiences is based on the approval of their family and friends. Therefore individuals may attend the games only to be with their social group or to be a part of the campus community.

#### *Theoretical and Practical Implications*

The results of this study suggest that in order to determine how individuals perceive the physical aspects of a new facility, there must be a combination of factors

taken into account. One specific characteristic of a consumer will not predict how that person will react to the environment of a stadium. In order to predict the perceptions, research should focus on multiple traits of current and potential customers. Sport marketers, specifically those involved with NCAA D-I FCS football programs, must research their target markets by analyzing multiple aspects of a population. An example would be to focus on as many of the characteristics as possible in order to provide the most successful marketing plan for the team instead of creating marketing strategies targeting only the female demographic and no other characteristics. Doing so will allow for the best possible results in increasing revenue from increased attendance at events.

The study had several limitations. The on-field performance of the team could have an effect on how an individual responds to the questions being asked. Over the past several years, the Southern Illinois University football team has been very successful, qualifying for the NCAA Division I FCS Playoffs seven consecutive seasons and were predicted to win the conference again. During the 2010 season, the team began with a high national ranking but the team finished with a 5-6 record. Individuals may have responded with lower levels of identification, particularly later in the season. This could be conceived as an example of CORFing (Cialdini & Roberts, 1987). Fans that are highly identified often are unaffected by the lowered performance of the team they identify with as they consider their being a fan as part of their identity whereas fans that are classified as low identification tend to distance themselves from when threatened by a loss (Wann & Branscombe, 1990). The team's performance also affected the attendance at the final two home games which

were originally intended to be used for data collection, however the small number of individuals participating in pregame tailgating made it difficult to do so. The sample for the current study consisted primarily of college students. The results could differ if a larger percentage of the sample consisted of persons purchasing season tickets. Furthermore, the new facility replaced a football stadium that had been built in the 1920s and was in severe decay. It is possible that college students who had only been on campus and exposed to the old facility for a short period of time may not have had the same positive perception of the new stadium as individuals who had spent more time in the community and on campus.

There are several areas for future research. The study focused on a NCAA FCS football program. Examining how new stadiums are perceived at FBS programs, specifically major BCS schools, would be important. However there would be few opportunities as it is rare for many of these universities to build new stadia. Therefore research in this area could focus on renovations to facilities. Furthermore, studies on professional sports facilities may be of particular importance. Because many facilities are publicly financed, the ability to use fan support and their perceptions towards it could provide justifications for the construction of a new stadium or arena.

It is important to note that the current study only assessed football fans' perceptions of a new stadium. Attendees of new facilities of other sports could produce different results. This could also be affected by the level of the competition of the team occupying the facility (i.e., Minor League vs. Major League, NCAA D-I vs. NCAA D-II, etc.). Research could also focus on individual aspects of a stadium

experience as opposed to the general experience as a whole. This would be beneficial to sport managers as they would be able to understand the specific areas needing improvement to meet the demands of consumers.

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## APPENDICES

## APPENDIX A

**Demographic Information**  
**(Please do not write your name on this sheet)**

*Note: These questions are only serving to help us gain a better understanding of the participants in this study. Please answer the questions in the spaces provided.*

1. What is your age? \_\_\_\_\_
2. In what town do you currently live? \_\_\_\_\_
3. What is your gender? Male \_\_\_\_\_ Female \_\_\_\_\_
4. What do you consider your race/ethnicity to be? (Check all that apply)
  - Black/African-American
  - White/Caucasian
  - Hispanic/Latino
  - Native American
  - Asian/Pacific Islander
  - Other (please specify) \_\_\_\_\_
5. What is your affiliation with Southern Illinois University-Carbondale?
  - Student
  - Alumni (graduation year \_\_\_\_\_)
  - Faculty/Staff (how long have you been employed by the university?)
  - Other (please specify) \_\_\_\_\_
  - No affiliation
6. Are you a season ticket holder?
  - Yes (how many years?) \_\_\_\_\_
  - No
7. On average, how many football games do you attend each year

## APPENDIX B

## Stadium Environment Scale

The following is a list of environmental components of a sport stadium. Keeping in mind Saluki Stadium, respond to each question (using the scale given), on the basis of how true that response is for your perception of this stadium.

- |  |            |   |   |   |   |   |   |   |           |
|--|------------|---|---|---|---|---|---|---|-----------|
|  | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9         |
|  | not at all |   |   |   |   |   |   |   | very good |
|  | good       |   |   |   |   |   |   |   |           |
- \_\_\_ 1. Public address announcer
- \_\_\_ 2. Half-time entertainment
- \_\_\_ 3. Band
- \_\_\_ 4. Food and beverage concessions
- \_\_\_ 5. Comfort of seating.
- \_\_\_ 6. Location of seating.
- \_\_\_ 7. Atmosphere at stadium.
- \_\_\_ 8. Courteousness of staff.

## APPENDIX C

Please answer each of the following questions being completely honest in your responses. There are no "right" or "wrong" answers -- we simply want you to indicate the most accurate response by writing the appropriate answer in the space next to each item.

STRONGLY  
DISAGREE

STRONGLY  
AGREE

1      2      3      4      5      6      7      8

- \_\_\_\_1.      I consider myself to be a sport fan.
- \_\_\_\_2.      My friends see me as a sport fan.
- \_\_\_\_3.      I believe that following sport is the most enjoyable form of entertainment.
- \_\_\_\_4.      My life would be less enjoyable if I were not able to follow sports.
- \_\_\_\_5.      Being a sport fan is very important to me.

## APPENDIX D

SOUTHERN ILLINOIS UNIVERSITY FOOTBALL

Please answer the following questions based on your feelings for the team listed above. There are no "right" or "wrong" answers, simply be honest in your responses.

1. How important to YOU is it that the team listed above wins?

Not important      1      2      3      4      5      6      7      8 Very important

2. How strongly do YOU see YOURSELF as a fan of the team listed above?

Not at all a fan      1      2      3      4      5      6      7      8 Very much a fan

3. How strongly do your FRIENDS see YOU as a fan of the team listed above?

Not at all a fan      1      2      3      4      5      6      7      8 Very much a fan

4. During the season, how closely do you follow the team listed above via ANY of the following: a) in person or on television, b) on the radio, c) television news or a newspaper, or d) the Internet?

Never      1      2      3      4      5      6      7      8      Almost everyday

5. How important is being a fan of the team listed above to YOU?

Not important 1      2      3      4      5      6      7      8      Very important

6. How much do you dislike the greatest rivals of the team listed above?

Do not dislike 1      2      3      4      5      6      7      8      Dislike very much

7. How often do YOU display the team's name or insignia at your place of work, where you live, or on your clothing?

Never      1      2      3      4      5      6      7      8      Always

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COLLEGE FOOTBALL STADIUM DURING ITS FIRST YEAR

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