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Motivational Differences in Why Sports Fans Attend Minor League Baseball and Roller Derby Events

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MOTIVATIONAL DIFFERENCES IN WHY SPORTS FANS ATTEND MINOR
LEAGUE BASEBALL AND ROLLER DERBY EVENTS

A Thesis
Presented to
The Faculty of the Department of Psychology
Western Kentucky University
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In Partial Fulfillment
Of the Requirements for the Degree
Master of Arts

By
Anissa S. Pugh

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MOTIVATIONAL DIFFERENCES IN WHY SPORTS FANS ATTEND MINOR
LEAGUE BASEBALL AND ROLLER DERBY EVENTS

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The aim of the current study was to examine the differences in sport fan motivation factors between mainstream (Minor League baseball) and atypical (roller derby) fans. Eighty-one fans (40 Minor League baseball and 41 roller derby) completed an 8 question demographic survey, a 26-item Sport Fan Motivation Scale, a 7-item Sport Spectator Identification Scale, and a 10-item Sport Fan Exploratory Curiosity Scale. It was believed that fans of Minor League baseball would be more motivated by the entertainment factor than roller derby fans. While roller derby fans would be more motivated by eustress, group affiliation and family factors at the event than Minor League baseball fans. It was also predicted that roller derby fans would be more curious about new sports than Minor League baseball fans. Results showed that Minor League baseball fans were more motivated by the family aspects of the game than roller derby fans. Additionally, it was found that baseball fans were more curious about new sports in general than roller derby fans. Finally, the study found that roller derby fans were more motivated by the aesthetics of the game than Minor League baseball fans.

Introduction

Over the years, attendance at sporting events has become an increasingly popular form of entertainment in society. In response to the increased interest in sports, researchers have studied the motivational factors and team identification factors that are associated with being a sport fan. Research on fan motivation and team identification allows sport franchises to better promote sporting events and increase consumer consumption of team merchandise. Through research on sport fan motivational factors and team identification, researchers have learned about the specific factors that influence fans at different sporting events. There is, however, a lack of research that looks at the motivational factor differences between mainstream and atypical sport events.

Sport Fandom

A sport fan is someone who is an enthusiastic follower of a particular organized sport (Hunt, Bristol, & Bashaw, 1999). A fan can follow a specific player, a specific team or a specific sport. Researchers acknowledge that there are different classification levels of sport fans. One method by which researchers have classified sport fans is based on the motivational distinctions between the individuals (Hunt et al., 1999).

Hunt et al. (1999) proposed that there are five distinct types of sports fans, including temporary fans, local fans, the devoted fan, the fanatical fan, and the dysfunctional fan. The local and temporary fans have boundaries placed on their motivations to attend sporting events based on time and location. A temporary fan is interested in the sport due to a phenomenon such as winning a big game like the world cup or making the playoffs; once the curiosity in the sport is over, the individual returns

to normal behaviors. A local fan is bound by geographic restraints, including where the individual was born or currently lives. Similar to the temporary fan, the local fan will have diminished interest if he or she ever leaves the geographic region of the particular team. In contrast, the devoted and fanatical fans have no boundaries placed on their identification with their teams. A devoted fan is one who broke through the time and geographic boundaries set upon the local and temporary fans. This individual has an increased attachment to the sport due to the sport being important to the fan's concept of self (Wann, Melnick, Russell, & Pease, 2001). For the fanatical fan, the idea of being a fan is a very important part of the individual's self-identification, but this fan understands that other parts of his or her life (family or work) create his or her identity. The final type of fan is the dysfunctional fan, who uses the sport as his or her primary method of self-identity. The dysfunctional fan engages in behaviors that are disruptive and sometimes violent. Due to the sport being the dysfunctional fan's primary source of identity, he or she can lose the ability to perform roles outside of the sporting event, such as relationships with family and friends (Hunt et al., 1999).

Funk and James (2001) developed the Psychological Continuum Model (PCM) to differentiate sport spectators from sport fans. The PCM is different from other models in that it focuses on the psychological relationship that an individual forms with a team rather than the behavior changes that the individual experiences. The PCM has four broad areas, which are known as floors. Each floor of the model represents a different level of psychological connection to a team (Funk & James, 2001). The initial floor of the model is known as the Awareness floor. Individuals associated with this floor are first learning that different sports and sport teams exist. These individuals understand

how the sport is played but have no interest in the sport (i.e., investing time or money on the sport team). An individual enters the second floor, or the Awareness factor, as he or she begins to make conscious decisions regarding a specific team or sport. This phase is thought to be a result of social situations such as a parent or peer liking a specific team. In this floor, the connection to the team is not stable. The third floor is the Attachment phase, defined by the stable psychological connection a fan has formed with a team. The individual now has an emotional connection to the team and this connection is protected and begins to become linked to the self-interest of the fan. The final floor of the PCM is the Allegiance phase. In this floor, fans have formed a loyalty to a specific team or sport. This floor is characterized by the resistance to counter-persuasion of other fans and is persistent over time (Funk & James, 2001). Sport fans do not have to proceed through every floor for all sports or sport teams. Each individual connection to a team or sport can develop through different floors.

Team Identification

Research on sport fan attendance has found that an individual's identification with a sport team is an important motivating factor. Team identification is defined as the psychological connection a fan has to a particular team (Wann, et al., 2001). An individual who reports being highly identified with the team is more involved and invested in the team. This individual is more invested in the team's overall performance and feels a special bond with other fans of the team, as compared to those who report a low level of identification with the team (Wann & Branscombe, 1993). Those highly identified with a team spend more on team merchandise, and perceive the services at sporting events as better than those who do identify with the team (Gau, James, & Kim,

2009). Those who score low in terms of team identification report attending sporting events for the entertainment and social aspects of the event rather than the self-definitional motives such as team affiliation (Gau et al., 2009).

Previous research on the factors influencing team identification found that the strongest motivational factors are parental influence, personality and players, peer influence, talent level, and geographic influence (Wann, Schrader, & Wilson, 1999). When looking at mid-level professional sport teams, the factor most associated with team identification was the players and coaches currently on the team (Greenwood, Kanters, & Casper, 2006). Other factors associated with the initial identification with the team are being a resident of the area and the atmosphere for tailgating and partying at the event. Greenwood and colleagues (2006) found that having friends who were fans was a negative predictor of the initial identification when the team franchise was new to the area. Once an individual identifies with a team, it is the success of the team, in terms of wins and losses, and the geographic factors that influence the continuation of team identification (Jones, 1997; Wann, Tucker & Schrader, 1996).

Wann (2006) proposed the Team Identification-Social Psychological Health Model to describe the positive relationship between sport fans and local teams. This identification with a team provides a positive impact on an individual's social psychological health due to the connections formed with others. The model suggests that identifying with a team includes both enduring social connections and temporary social connections. The enduring social connections result from living in an environment where other fans are easily identifiable as such because they support the hometown team (Wann, 2006). Temporary social connections occur in situations where the fan is currently

supporting the team from a distance in terms of environment. Another aspect of the Team Identification-Social Psychological Health Model is state and trait well-being. State well-being becomes enhanced when temporary social connections are made prominent, while trait well-being is enhanced with enduring social connections (Wann, 2006).

Team identification is positively correlated with social well-being in the areas of trust, stress, and loneliness. Sport fans report the highest level of trust for fans believed to be part of the ingroup and the lowest level of trust for fans of the rival outgroup (Wann, Grieve, Zapalac, Visek, Partridge & Lanter, 2012). A fan is considered to be part of the ingroup when he or she is a fan of the same team with which the other person is identified, while the outgroup fan is defined as any individual who does not identify with the same team. This belief in the outgroup being less trustworthy works as a coping mechanism for highly identified fans by allowing them to believe that they support the right team (Wann et al., 2012).

Being highly identified with a team has the potential for threats to an individual's identity through the experience of negative emotional consequences. Wann (2006) proposed that coping strategies moderate the relationship between the threats to identity and the social well-being of the individual. Coping strategies include manipulating one's association with a team, out-group derogation, pessimism, magical and mystical strategies, group cohesion, and displays of team knowledge.

Many fans manipulate their association with the team depending on how the team is performing. For instance, fans may become highly identified with a successful team and become less identified with an unsuccessful team, thus reducing the threats to self-

identity. When a highly identified fan's team begins to perform badly, the individual begins to experience a loss of self-esteem. During these times, individuals may begin belittling people who they see as being part of the outgroup or not fans of their team. Wann and Grieve (2005) found that highly identified individuals use in-group bias as a coping mechanism for maintaining a positive self-identity. When sport fans display in-group favoritism they give more positive evaluations of those considered to be part of their group rather than fans considered to be part of the out-group. For instance, a fan sees an in-group fan's behaviors as less negative than the same behavior exhibited by an out-group fan. Wann and Grieve (2005) found that in-group favoritism was used to weaken threats to social identity (i.e., game outcome or game location).

Another way fans lessen threats to identity is to use pessimism as a coping strategy. The two commonly used forms of pessimism are retroactive pessimism, which is the belief that the team never had a chance to win the game in the first place, and proactive pessimism, which involves the idea that the team's chance of winning decreases as the event draws closer. Wann and Grieve (2007) found that highly identified Major League Baseball (MLB) fans lowered their expectations of the chances of a successful season for their team as the season approached. The same study found that the fans did not lower their association with the team; they only lowered the expectations for success. Highly identified sport fans may use the belief that they can influence the outcome of a game by practicing superstitious rituals (Wann, Schrader & Wilson, 1999). The final coping strategy used to reduce threats to an individual's identity is showing one's knowledge of the team. This threat to identity revolves around the individual's desire to show that he or she is part of the in-group (Wann, 2006).

The Team Identification-Social Psychological Health Model has been shown to work for fans in a variety of sports and in sports of different levels. An examination of high school football fans found that those highly identified with the team as compared to those lower in identification, felt more connected to the community, had higher levels of extraversion, and a higher level of collective self-esteem (Reding, Grieve, Derryberry & Paquin, 2011). A study on fans' reactions to the National Hockey League (NHL) lockout found that highly identified fans experienced more emotional reactions towards the lockout, and thus used more coping mechanisms, during this time than low identified fans (Grieve, Shoenfelt, Wann & Zapalac, 2009). The need for more coping mechanisms was due to highly identified fans experiencing threats to their social identity. The most common coping mechanism was increasing association with other hockey activities (Grieve et al., 2009).

Sport Fan Motivational Factors

Wann (1995) developed the Sport Fan Motivation Scale (SFMS) to assess sport fan motives. The SFMS includes eight different motivational factors, which, with additional research, have been broken down into three different categories (Smith & Stewart, 2007). The categories are psychological motivators (entertainment, eustress, aesthetic pleasure, economics, and escape), socio-cultural motivators (family), and social belonging (group affiliation and self-esteem).

Smith and Stewart (2007) found that individuals seek emotional and intellectual fulfillment through sports. The first psychological motivator is entertainment, which can be entertainment before (i.e., tailgating) and during (i.e., involvement) the game. This factor is influential in motivating individuals to attend games and remain loyal fans. The

next motivational factor is eustress, which is the positive stress and psychological arousal that is deemed beneficial for the individual. Individuals who are highly motivated by eustress enjoy the anxiety and excitement that surround the sporting event (Wann et al., 1999). Those motivated by escapism are driven by the ability to temporarily leave daily problems or an unhappy life behind. By attending sporting events, individuals create lasting memories about the event itself, the players in the game, and the atmosphere surrounding the game (Smith & Stewart, 2007). These fans are motivated by the aesthetic pleasure of the sport. Economics refers to individuals who enjoy the betting and gambling aspects of sporting events.

The socio-cultural motivator states that sport provides a social dimension for fans (Smith & Stewart, 2007). Sport fans are motivated to be surrounded by other individuals who share a similar appreciation for a specific team (Wann, Grieve, Zapalac & Pease, 2008). The similar beliefs in teams allow fans to feel a sense of belonging. Sport allows family members to bond over a shared experience and shared appreciation of a team, while spending time together.

The social belonging motivators are the function of the fans' interaction with the sport object (Smith & Stewart, 2007). The self-esteem motivator allows the individual to create a positive self-image through reflecting the wins of the team. When an individual's team wins, the individual shares in the feelings of achievement and accomplishment due to seeing the team as an extension of him or herself (Wann et al., 1999). The Sport Fan Motivation Scale – Revised (SFMS-R) includes three additional motives (Bilyeu & Wann, 2002). The first additional motive is similarity. The next motive is representation. The final motive is support/perceived greater equality.

Wann, Schrader, and Wilson (1999) looked at the motivational differences between fans of team sports and fans of individual sports. They found that fans who preferred individual sports had higher levels of motivation related to the aesthetics of the event, while fans who preferred team sports were motivated by the eustress of attending the event. This is believed to be due to individual sports allowing fans to appreciate the beauty and artistic expression of a single athlete (Wann et al., 1999).

Wann and colleagues (2008) studied the motivational factors of 13 different sports that were divided into three dichotomies. The first dichotomy was individual (i.e., golf, figure skating, gymnastics and tennis) versus team (i.e., professional baseball, professional football and college football) sports. The study results indicated that individuals attending individual sporting events were more motivated by the aesthetics of the sport than those attending team sporting events. Similar to other works, the study found that self-esteem, eustress, group affiliation, family and entertainment were motivational factors more likely to be associated with attending team-sporting events. The next dichotomy was aggressive (i.e., professional wrestling and professional football) versus nonaggressive (i.e., professional baseball and figure skating) sports. Fans of aggressive sports were more likely to be motivated by economic, eustress, group affiliation and entertainment factors associated with the sport than fans of nonaggressive sports. There were no differences between the two groups of fans found in the escape, self-esteem and family motivation factors. The final dichotomy studied was stylistic (i.e., figure skating and gymnastics) versus nonstylistic (i.e., professional hockey and tennis) sports. The highest mean score for any motivational factor was for aesthetic motivation in stylistic sports. Six motivational factors (economics, eustress, self-esteem, group

affiliation, entertainment, and family) were higher in the nonstylistic sports rather than the stylistic sports. The study results indicated that the escape motive was not a difference in any of the three dichotomies. The most widely selected motivational factor was entertainment, while economic motives were low across all sport types.

Park, Mahony, and Greenwell (2010) created the Sport Fan Exploratory Curiosity Scale (SFECS) to give an accurate assessment as to why sport fans are curious about sports. Sport fan exploratory curiosity is defined as the curiosity that is aroused by new experiences, sensation and excitement surrounding sports (Park, Mahony, & Kim, 2011). The first factor examined in the scale is Excitement and seeks to understand which sport fans seek excitement from a variety of sporting events (Park et al., 2010). The next factor is the New Facility factor, which assesses a fan's interest to explore and visit new sporting facilities. The final factor looks at which type of fans desire to attend or watch new sporting events for the first time (Park et al., 2010).

Motivational Factors for Baseball and Roller Derby

Like many sports, in baseball, there are games with varying levels of ability that one can attend, ranging from young children playing T-ball to professional athletes playing in the Major League Baseball (MLB) organization. Baseball is considered one of America's pastimes and during the 2014 season approximately 74 million tickets were sold for MLB baseball games, resulting in over \$7.1 billion in revenue for the organization (Brown, 2014). There are 240 Minor League baseball teams, which allowed over 42 million tickets to be used during the 2014 season (Official Site of Minor League Baseball, 2014).

Due to the popularity of baseball, researchers have looked at the motivational factors for fans that attend the event. Rickard, Grieve, and Derryberry (2008) studied the motivational factors of individuals attending varying levels of baseball games. The study looked at fans who attended five different levels of baseball, including T-ball, Little League, High School, College and Minor League games. Motivational factors were assessed using the Sports Fan Motivation Scale-Revised (SFMS-R; Bilyeu & Wann, 2002). The SFMS-R includes 11 different motivations, including aesthetics, group affiliation, economic, representation, escape, similarity, self-esteem, entertainment, support/equality, family and eustress. The study found that individuals in attendance at the T-ball games scored lower on all motives than any of the other levels of baseball. Motivational factors of those attending T-Ball and Minor League games were comparable, while those attending Little League, High School and College games had similar motivational factors. For all levels of baseball, entertainment was the highest rated motivational factor and economics was rated the lowest. It was determined that those attending T-Ball and Minor league games did not identify highly with either team in the game.

Other studies have looked at how the setting can influence fan motivation in the same sport. Bernthal and Graham (2003) examined the atmospheric motivational factors of fans attending either a Minor League or college baseball game. The study found that those attending college games were more motivated to attend for the game itself than those in attendance at the Minor League game. This finding is believed to be due to college games having more rivalries between teams than Minor League games (Bernthal & Graham, 2003). Minor League fans reported that the value of the game (ticket prices

and overall cost of attendance) was the highest motivating factor. Those attending the Minor League game were also highly motivated by the entertainment that came in the form of promotions and giveaways along with in-game contests. A common motivator in both settings was the community, which is described as ability to socialize with others.

Roller Derby re-emerged as a legitimate yet atypical sport in the United States in the early 2000s and has since gained popularity among female fans (Madsen & Hun, 2012). There are currently 820 Roller Derby teams in the United States (Roller Derby Worldwide, 2014). Die-hard roller derby fans are defined as those who attend three or more events a year (Women's Flat Track Derby Association, 2012). Most roller derby fans learn about the sporting event by word of mouth from individuals associated with the sport. Roller derby is described as an aesthetically pleasing sport due to the high level of skating ability of those participating and the aggressive collisions that occur during the events (Madsen & Huh, 2012). Due to roller derby being a team sport, it would be expected that fans of the sport would be motivated by the group affiliations, eustress, and entertainment of the event (Wann et al., 2008). Roller derby would be considered an aggressive sport due to the nature of the hits that occur during the bouts. Wann et al. (2008) found that fans of aggressive sports were highly motivated by the eustress, group affiliation, and entertainment surrounding the sporting event. The final dimension of the Wann et al. (2008) study is stylistic versus non-stylistic sports. Roller derby would be considered a non-stylistic sport and thus fans would be motivated by the eustress and entertainment of the bouts. However, no research has yet been conducted to create a profile of roller derby fans.

Limitations of Previous Research

While there is extensive literature of sports fan motivation in various sports, there is a lack of research that identifies how the motivational factors differ from mainstream to atypical sports. Furthermore, although there is considerable research on the fan motivations of those attending baseball games, there is little research on the motivational factors of those attending roller derby events.

Current Study

The purpose of this study is to investigate the differences in sport fan motivation for those attending mainstream sports (Minor League baseball) and atypical sports (roller derby). The present study will look at which factors are most influential in each type of sporting event. This study aims to replicate the results from the Rickard et al. (2008) study and extend the literature by assessing three hypotheses. Hypothesis 1 is that those attending the Minor League baseball event will be more motivated by the entertainment factors associated with the sporting event than roller derby fans. Hypothesis 2 is those in attendance of the roller derby event will be more motivated by the eustress, family, and group affiliation surrounding the event than Minor League baseball fans. Hypothesis 3 is that roller derby fans will have higher levels of curiosity about a new sport than Minor League baseball fans.

Method

Participants and Design

The sample consisted of 81 fans (41 roller derby and 40 Minor League baseball) who were in attendance at either a Southern roller derby game or a Southern Minor League baseball game. The sample consisted of 32 men and 49 women. Participants ranged in age from 18 years to 73 years with a mean age of 40.00 ($SD=13.33$). The sample consisted of 73 Caucasian participants, 4 African American participants, 1 Hispanic participant, 1 Native American participant, and 1 Asian/Pacific Islander participant. The modal frequency of education level was 16 years. The sample was composed of 6 participants who graduated from high school, 9 participants who indicated they had some college experience, 6 participants who had an associate's degree, 37 participants who had a bachelor's degree, 18 participants who indicated that they had a master's degree or professional degree, and 5 participants who indicated they had a doctoral degree. The modal response for annual household income was \$100,000. Additionally, there were 26 participants who reported being single, 50 participants who indicated they were married, and 5 participants who indicated they were divorced. The minimum event attendance was 1 event and the maximum attendance was 70 events. The mean number of event attendance was 13.93 ($SD = 13.38$) events. The mean sport fandom level was 5.52 ($SD = 1.87$). The demographics characteristics of each sport are presented in Table 1.

An independent sample *t*-test of the demographic questionnaire items pertaining to age and education level of participants revealed no significant differences between the two sport groups.

Table 1. Demographics by Sport

Sport	Minor League Baseball	Roller Derby
Gender (% Male)	42.50%	36.59%
Ethnicity (% Caucasian)	87.50%	92.69%
Marital Status (% Married)	57.50%	63.41%
	<i>M (SD)</i>	<i>M (SD)</i>
Age	39.88 (15.60)	40.12 (10.88)
Annual Income	7.35 (5.99)	7.05 (3.07)
Level of Education (years)	16.05 (1.97)	15.80 (2.24)
Event Attendance	15.73 (14.72)	12.17 (11.86)
Sport Fandom	5.75 (1.45)	5.46 (2.23)

Notes: For age, highest level of education, and event attendance the mean is reported with standard deviation in parenthesis. Annual Income ranged from 1 (*Less than 10,000*) to 11 (*150,000 or more*). For Gender the percent male is reported. For Marital Status the percent married is reported. For Ethnicity the percent that were Caucasian is reported. Sport Fandom ranged from 1 (*Not a sport fan at all*) to 8 (*Extreme sport fan*).

Measures

Demographics. A demographic questionnaire consisting of eight questions was given to participants. The first six questions assessed age, gender, marital status, ethnicity, annual income, and highest level of education. These questions were formatted as multiple-choice items. The seventh item was an open-ended question that asked about

the participant's attendance level at a particular sport facility. The eighth question asked about the degree to which the participant considers him or herself a sports fan. The question was based on an eight-point Likert scale ranging from 1 (*I would not consider myself a sport fan*) to 8 (*I would consider myself an extreme sport fan*; See Appendix A).

Sport Fan Motivation Scale. The Sports Fan Motivation Scale (SFMS) developed by Wann (1995) measures nine different motives of sports fans, including eustress, self-esteem, escape, entertainment, economic, aggression, aesthetic, group affiliation, and family. The questionnaire consists of 26 questions using an eight-point Likert scale ranging from 1 (*This is not at all descriptive of me*) to 8 (*This is very descriptive of me*). An example question from the SFMS is "One of the main reasons that I watch, read, and/or discuss sports is for their artistic value." A high score means that an individual is highly motivated to attend a particular sporting event for this reason. In contrast, a low score indicates that particular reason does not motivate the participant. The SFMS has been found to have internal consistency of $\alpha = .96$ (Wann et al., 1999; See Appendix B).

Sports Spectator Identification Scale. The Sports Spectator Identification Scale (SSIS) is a seven-item questionnaire developed by Wann and Branscombe (1993). Participants rate each statement on an eight-point Likert scale ranging from 1 (*Not important*) to 8 (*Very important*). The SSIS indicates the level of identification a participant has with a specific sport team. An example from the SSIS is, "How strongly do YOU see YOURSELF as a fan of the team listed above?" Item scores are summed to create the total score, in which a higher score indicates a higher level of identification

with the team. The SSIS has been found to be a reliable and valid instrument with an internal consistency of $\alpha = .91$ (Wann & Branscombe, 1993; See Appendix C).

Sport Fan Exploratory Curiosity Scale. The Sport Fan Exploratory Curiosity Scale (SFECS) is a 10-item questionnaire with three factors (Excitement, New Sport Events, and Sport Facility) that was developed by Park, Mahony, and Greenwell (2010) to assess an individual's curiosity in regards to novel sports. Participants rate each statement on a seven-point Likert scale ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*). An example from the SFECS is, "I enjoy watching a major sport event for the first time." Higher scores on the SFECS indicate that the individual has higher levels of curiosity about new sports. The SFECS has been found to be a reliable and valid instrument with an internal consistency of $\alpha = .83$ for the Excitement factor, $\alpha = .81$ for the New Sport Events factor and $\alpha = .85$ for the Sport Facility factor (Park, Mahony, & Greenwell, 2010; See Appendix D).

Procedure

Before attending the sporting events, the management of each organization was contacted to discuss the purpose of the present study. After obtaining permission from each organization, a date to conduct the research was determined.

When fans attending the sporting event approached the researcher an explanation about the nature of the study was given. Participants were asked if they were willing to complete the demographic and sports fan questionnaires. Those willing to complete the survey were given an informed consent and continuation meant that their consent was given for the project (See Appendix E). Participants were given the demographic portion of the questionnaire to assess their age, gender, annual income and the level for which

they consider themselves a sport fan. After completing the demographic portion, participants were asked to complete the 26-item Sports Fan Motivation Questionnaire, the 10-item Sport Fan Exploratory Curiosity Scale and the eight-item Sports Spectator Identification Scale in regards to the specific sporting event.

When all portions of the questionnaire were completed the researcher provided the participants with a debriefing statement and thanked them for their involvement (See Appendix F). The study materials took approximately 15 minutes for the participants to complete.

Results

Preliminary Analysis

Prior to examining the different sport fan motivational factors of the two sports studied, a set of preliminary analyses was completed. First, the seven items of the SSIS were averaged to create a single index score of the level of identification with one of the two chosen sport teams. Next, items from each of the three factors of the SFECS were averaged to create indices of curiosity. The Excitement factor index score was created using the four items that make up the factor and the New Facility and New Sporting Event factors each had three items averaged together to create the single index scores. Then, items from each of the subscales of the SFMS were averaged to create indices of sport fan motivation. All of the subscales had three items averaged together except for the family subscale, which had two items averaged together to create the single index score. Cronbach's alpha was computed for each of the three measures. Table 2 illustrates how all scales had acceptable internal consistency and Cronbach's alphas ranged from .64 to .94.

Table 2. Cronbach's alpha by Factor

Factor	Cronbach's alpha
SSIS	.94
Aesthetics	.86
Aggression	.84
Economics	.75
Entertainment	.83
Escape	.91
Eustress	.72
Family	.75
Group Affiliation	.64
Self-esteem	.64
Excitement	.81
New Sport Facility	.91
New Sporting Event	.86

Note: Cronbach's alpha by factor.

All motivations were examined by gender to see if differences existed between males and females for each sporting event. An independent samples *t*-test showed no significant differences in gender for roller derby fans, with all *p* values between .103 and .983 as presented in Appendix H. Additionally, an independent samples *t*-test showed no

differences in gender for Minor League baseball fans and all p values fell within the range of .098 to .991 as illustrated in Appendix I. These results indicate that the gender of the participant had no effect on motivation or level of curiosity.

Another independent samples t -test was conducted using the level of team identification factor as the dependent variable. As shown in Table 3, no significant differences were found between the two sport fan categories in terms of level of team identification.

Table 3. Mean Scores and Standard Deviations for the Level of Team Identification by Sport

Factor	Minor League Baseball	Roller Derby	t	p
	$M (SD)$	$M (SD)$		
SSIS	4.08 (1.94)	4.08 (2.08)	-1.600	.113

Note: Standard deviations appear in parenthesis next to each mean. SSIS scores ranged from 1 (*Not important*) to 8 (*Very important*).

Hypothesis Testing

To evaluate the hypotheses, 12 independent samples t -tests were conducted using the motivational and curiosity factors as the dependent variable. A Bonferroni Correction (Pedhazur, 1982) was used to control for Type 1 error. Thus, $p \leq .004$ was used as the criterion for statistical significance. Means and standard deviations for SFMS subscales and SFECS factors appear in Tables 4 and 5.

Table 4. Mean Scores and Standard Deviations for the Motivation Subscales by Sport

Motive	Minor League Baseball	Roller Derby	<i>t</i>	<i>p</i>
	M (SD)	M (SD)		
Aesthetics	2.99 (1.93)	4.46 (2.13)	3.26	.002
Aggression	3.31 (2.00)	3.26 (1.87)	1.85	.316
Economics	1.29 (.78)	1.15 (.33)	-1.04	.303
Entertainment	6.51 (1.27)	5.67 (1.97)	-2.55	.013
Escape	3.47 (1.69)	3.46 (2.13)	-.008	.994
Eustress	4.32 (1.68)	4.61 (1.83)	.751	.455
Family	5.23 (2.06)	3.62 (2.40)	3.22	.002
Group Affiliation	5.24 (1.84)	4.5 (1.71)	-2.28	.749
Self-Esteem	4.32 (1.41)	3.67 (1.90)	-1.75	.084

Note: Standard deviations appear in parenthesis next to each mean. SFMS subscale scores ranged from 1 (*low motivation*) to 8 (*high motivation*). Bolded *p* values show significance at $p \leq .004$.

As shown in Table 4, nine independent samples *t*-tests were conducted for the subscales of the SFMS. Statistical significance was found in the family subscale and the aesthetics subscale. Additionally, three independent samples *t*-tests were conducted for the factors of the SFECS and showed statistical significance in the Excitement and New Facility factors. See Table 5. The remaining eight independent samples *t*-tests revealed no significance for the SFMS subscales of eustress, group affiliation, aggression,

economics, self-esteem, or escape. There were no significant differences for the SF ECS New Event factor.

Table 5. Mean Scores and Standard Deviations for the Curiosity Factors by Sport

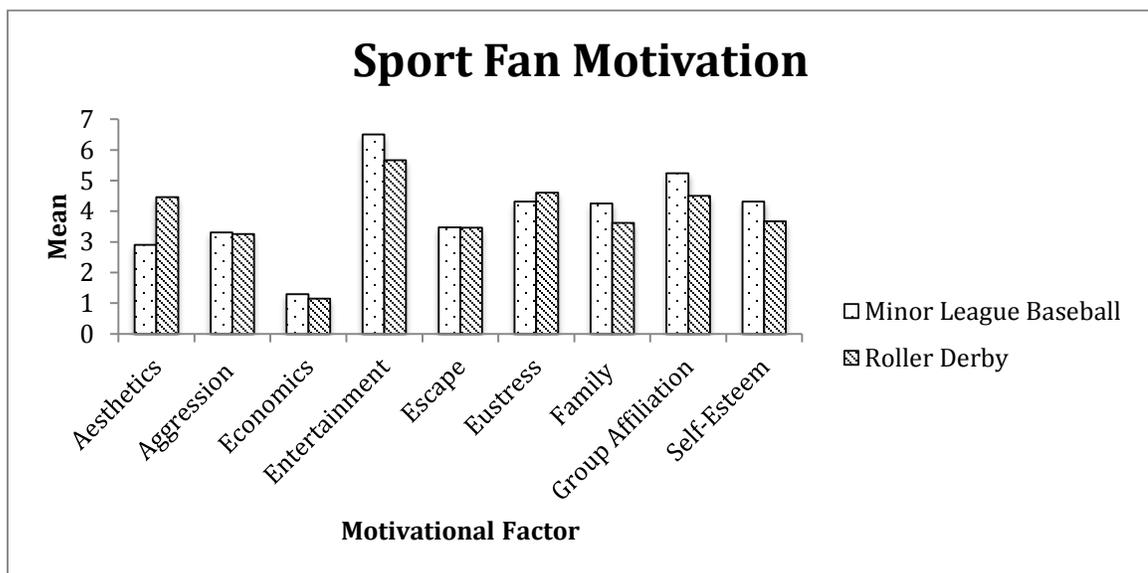
Factor	Minor League Baseball	Roller Derby	<i>t</i>	<i>p</i>
	M (SD)	M (SD)		
Excitement	4.00 (1.72)	2.91 (1.53)	3.00	.004
New Facility	3.98 (2.14)	2.57 (1.77)	3.23	.002
New Event	4.43 (1.80)	3.61 (1.77)	-1.99	.050

Note: Standard deviations appear in parenthesis next to each mean. SF ECS factor scores ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). Bolded *p* values show significance at $p \leq .004$.

As shown in Figure 1, separate repeated measures ANOVA's were conducted in order to better understand the pattern of motivation within each sporting group. For the Minor League baseball group (40 participants), significant differences in motivation were observed ($F(8) = 37.836, p = .000, \eta^2 = .492$). Bonferroni pairwise comparisons indicated that entertainment ($p < .001$) was significantly higher than all other motives and economics ($p = .000$) was significantly lower than all other motives. The group affiliation ($p = .002$) and family ($p = .003$) motives were significantly higher than all other motives except for entertainment. The eustress motive ($p = .005$) was significantly higher than the aesthetics motive ($p = .005$). The self-esteem motive ($p = .023$) was

higher than the aesthetics motive. The repeated measure within-subject ANOVA for roller derby (41 participants) resulted in significant within-subject effects, ($F(8) = 23.19$, $p = .000$, $\eta^2 = .874$). Bonferroni pairwise comparisons indicated that entertainment ($p = .002$) was significantly higher than all other motives and economics ($p = .000$) was significantly lower than all other motives. The eustress ($p = .001$) motive was significantly higher than the aggression ($p = .001$) and the escape ($p = .021$) motives.

Figure 1. Mean Score for Motivational Factors by Sporting Event

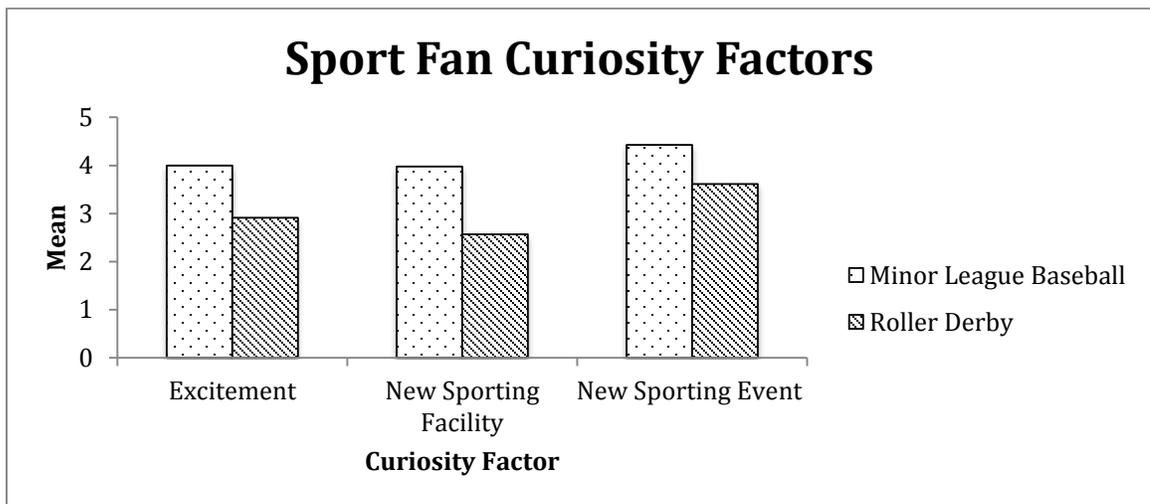


Note: Visual Representation of means for sport fan motivational factors by sporting event.

Separate repeated measures ANOVA's were conducted in order to better understand the pattern of curiosity within each sporting group. Figure 2 illustrates that the Minor League baseball group (40 participants), significant differences in motivation were observed ($F(2) = 3.857$, $p = .005$, $\eta^2 = .090$). Bonferroni pairwise comparisons indicated that New Event ($p = .008$) was significantly higher Excitement ($p = .008$). The

repeated measure within-subject ANOVA for roller derby (41 participants) resulted in significant within-subject effects, ($F(2) = 13.038, p = .001, \eta^2 = .246$). Bonferroni pairwise comparisons indicated that New Event ($p = .000$) was significantly higher than both New Facility ($p = .000$) and Excitement ($p = .003$).

Figure 2. Mean Score for Curiosity Factors by Sporting Event



Note: Visual representation of means of sport fan curiosity by sporting event.

Discussion

The current study was designed to examine the differences in sport fan motivation factors between mainstream sport (Minor League baseball) fans and atypical sport (roller derby) fans. Past research has found that baseball fans are highly motivated by the entertainment of the game (Rickard et al., 2008), but no research has yet been conducted on the motivational factors of roller derby fans. The study also aimed to understand which sport fans were the most curious about novel sport events.

The current study had three hypotheses. It was predicted that Minor League baseball fans would be more motivated by the entertainment factor than roller derby fans. It was also anticipated that roller derby fans would be more motivated by the eustress, family and group affiliation factors surrounding the event than Minor League baseball fans. Finally, it was expected that roller derby fans would be more curious about factors surrounding new sporting events than Minor League baseball fans due to roller derby being considered an atypical and new sport.

It was found that roller derby fans and Minor League baseball fans have similar levels of team identification when attending the sporting events. The mean level of team identification was 4.44, showing that they both have moderate levels of team identification. These results show that level of team identification was not a factor in why fans attend the different sport events or why fans are curious about new sports. This finding is similar to the findings of Rickard, Grieve and Derryberry (2008), who found that Minor League baseball fans have lower levels of team identification than other levels of baseball. An explanation for these findings is that fans of non-major league sports attend the events because of the close proximity to where they live rather than attending

due to being a highly identified fan with the team (Wann, Schrader, & Wilson, 1999). Similarly no differences existed between genders in terms of fan motivation. This is different than previous research, which found that female fans are more motivated by aesthetics, entertainment, eustress, and escape than male fans at varying levels of baseball games (Rickard, Grieve, & Derryberry, 2008). Furthermore, because no differences existed gender and level of team identification do not explain motivation differences.

The first hypothesis was not supported in that Minor League baseball fans were not more motivated by the entertainment factors surrounding the baseball game than roller derby fans. The current study had a new finding in that the baseball fans were more motivated by the family factor of the sporting event than roller derby fans. This suggests that the baseball fans are more motivated to attend the games due to the family factor than roller derby fans because it allows them connect with other family members. Rickard, Grieve, and Derryberry (2008) found similar results in that the baseball fans across all levels were highly motivated to attend the game for the family aspect. These events specifically targeted families and possibly influenced why fans attended the game. Even though Minor League baseball fans were not more motivated to attend the event due to the entertainment found at the event than roller derby fans, it was still a factor that highly motivated fans. As shown in Figure 1, the entertainment factor was the highest motive of sport fan motivation for fans in attendance at the game. This is similar to previous research in that Minor League baseball fans are highly motivated by the entertainment of the event (Berthnal & Graham, 2003; Rickard, Grieve, & Derryberry, 2008).

Interestingly, the second hypothesis was not supported in that the eustress, family, and group affiliation factors did not motivate roller derby fans to attend the games more than baseball fans. One reason for this is that the roller derby event may not be as family friendly event as believed by the organization or as family friendly as Minor League baseball games. Results of the current study showed that roller derby fans were more highly motivated by the aesthetics of the event than Minor League baseball fans. This is a contradiction to results in the Wann et al. (2008) study, which found that team sport fans are highly motivated by the group affiliation, eustress, and family factors of the event. It is possible that roller derby could be categorized as a dichotomy that was not included in the Wann et al. (2008) study, which would explain why roller derby fans are more motivated by the aesthetics of the game than Minor League baseball fans. A possible explanation for these findings is that roller derby fans find the bouts to be artistic in nature because of the high speed skating and passing that occurs throughout the event. Another possible explanation for these results is that women play roller derby and get dressed up for the event, giving the events an artistic feel. It is possible that when the skaters dress up in costumes for the event, they create lasting memories for the fans. The last possible explanation for these results is that the fans view the skaters as having a graceful quality due to being able to skate while other skaters try to pass them and hit them.

The third hypothesis was not supported due to Minor League baseball fans having higher levels of curiosity surrounding new sporting events than roller derby fans. The Minor League baseball fans were more highly motivated by the Excitement and New Facility factors surrounding sports than roller derby fans. It is possible that these findings

are because the sample population of Minor League baseball fans enjoyed a wide range of sporting events while the sample population of roller derby fans were only interested in one particular sport (roller derby). This would suggest that the more interest a person has in a variety of sports, the higher the level of curiosity that individual will have regarding sports as a whole. It would also suggest that Minor League baseball fans are more likely to attend games away from the facility where the research was conducted due to having a high level of curiosity about sporting facilities.

As shown in Figure 1, Minor League baseball fans are most motivated by the entertainment surrounding the baseball game. Minor League baseball fans are also highly motivated by the family and group affiliation that occurs at the event. They are moderately motivated by the eustress, escape, self-esteem, and aggression factors surrounding the game. Minor League baseball fans are not motivated to attend the games for the economics or aesthetics of the event. These results are similar to previous research in that baseball fans are most motivated to attend games for the entertainment, group affiliation, and family factors surrounding the game (Ricker, Grieve, & Derryberry, 2008; Wann et al., 2008).

Similar to baseball fans, roller derby fans are also most motivated by the entertainment of the bouts, which is shown in Figure 2. The next highest ranked motivational factors for roller derby fans are group affiliation, eustress, and the aesthetics of the event. They are moderately motivated to attend the bouts for the self-esteem, family, and aggression that are found at the event. Like Minor League baseball fans, roller derby fans are not motivated to attend the bouts for the economic factors, which suggests they do not go to the game for the betting that might occur.

Understanding the motivational factors that attract fans to a particular sporting event allows sport franchises and facilities to increase fan attendance by promoting the motivational factors that highly motivate their target fans. The Minor League baseball organization should continue to promote family friendly events, which was shown to be a more influential motivation factor for Minor League baseball fans than roller derby fans. They can continue to attract families to the games by having events before and during the game that allow all members of a family to be engaged in fun together. Minor League baseball organizations should also market both in game entertainment (promotions and sound effects) and out of game events (concerts and fireworks after the game) to attract both new fans and current fans, because the present and previous research have shown that entertainment is a high motivation factor for baseball fans. Because roller derby fans are motivated by aesthetics, roller derby organizations could attract more fans by holding skating seminars or having skating competitions during intermissions between the bouts. Additionally, roller derby organizations could have meet and greet sessions, which will allow the skaters and fans to interact with each other. During these interactions, fans can learn more about the skaters' costumes and why the skaters chose particular costumes and nicknames to fit their personality.

When compared to research on other female only sport events, roller derby fans had similar motives to attend the events. Similar to the Wann et al. (2008) study that looked at gymnastics and figure skating fans, roller derby fans are most motivated to attend the event for the entertainment, aesthetics, and eustress motives. For each of the three female only sports, the lowest fan motive was economics.

Strengths and Limitations

The current study contributed to the research findings by Rickard, Grieve, and Derryberry (2008) in that the Minor League baseball fans are motivated to attend the event due to the entertainment factors that are present at the game. It also added new knowledge that the family factor of the baseball game motivates Minor League baseball fans to attend the game. New knowledge was gained in the study to understand what motivates roller derby fans to attend the event, which has not been previously studied.

There are limitations to the current study. One limitation of the current study was using all self-report surveys. Self-report surveys rely on the assumption that participants are answering all statements truthfully and honestly. Another limitation of the current study is that all of the data was collected at one event for each sport. This decreases representativeness of the target population and only allows for responses from fans of one event. Additionally, fans were all from the same region of the country and may have different motivational and curiosity levels than fans of other areas, which potentially limits generalizability. Also, Minor League baseball fans' motives for attendance cannot be generalized to all levels of baseball. Due to it being family night at the Minor League baseball game, the statistical significance for the family motivation may be due to the events of that night and may not be generalizable to all Minor League baseball fans.

Future Research

Future research should focus on comparing motivations for attending roller derby with motivations for attending other more similar sports. For instance, research could look at roller derby and minor league ice hockey, which are both fast-paced events that require the athletes to have the ability to skate. By looking at similar sports, new

categories or dichotomies of sport could be studied to further develop sport fan motivation profiles. Another area of future research should expand on the knowledge of sport fan motivation factors of fans who attend women's sporting events. Research could look at a variety of women's sporting events, including women's soccer, softball, and gymnastics to see if the highest level of sport fan motivation continues to be entertainment and the lowest economic across a variety of female sporting events. Next, research could focus on gender difference in sport fan motivation and the proportion of each gender that attend a variety of sporting events. Finally, additional questions could be asked to fans to determine if characteristics of the player impacts why a fan is attending an event.

Conclusions

The current study found that factors not related to the sport itself motivate fans to attend the sporting events. For instance, Minor League baseball fans are more motivated to attend baseball games for family aspects than roller derby fans. Minor League baseball organizations should continue to provide family-centered events at the ballpark to increase both the reoccurrence of previous fans and gain new fans. Minor league baseball fans are also more curious about new sporting events than roller derby fans. It is important for up and coming sports such as roller derby to understand what attracts sport fans to new sporting events. In order to attract new fans, roller derby organizations should look at how they can increase the appeal of the facility, event, and excitement surrounding the sporting event. They should also look at attracting fans that like a wide variety of sporting events instead of focusing solely on roller derby fans. Roller derby

organizations should also increase the involvement of skating outside the individual bouts to motivate fans to continue coming to the roller derby games.

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APPENDIX A: DEMOGRAPHIC QUESTIONNAIRE

- 1.) What is your age?
- 2.) What is your gender?
- Male
 - Female
- 3.) What is your ethnicity?
- Caucasian
 - Hispanic or Latino
 - African American
 - Native American or American Indian
 - Asian/ Pacific Islander
 - Other
- 4.) What is your marital status?
- Single
 - Married
 - Divorced
 - Separated
 - Widowed
- 5.) What is the highest degree or level of school you have completed?
- Some high school, no diploma
 - High school graduate
 - Some college, no degree
 - Associate degree
 - Bachelor's degree
 - Master's degree
 - Professional degree
 - Doctorate degree
- 6.) What is your household income?
- Less than \$10,000
 - \$10,000 to \$19,000
 - \$20,000 to \$29,000
 - \$30,000 to \$39,000
 - \$40,000 to \$49,000
 - \$50,000 to \$59,000
 - \$60,000 to \$69,000
 - \$70,000 to \$79,000
 - \$80,000 to \$89,000
 - \$90,000 to \$99,000
 - \$100,000 to \$149,000
 - \$150,000 or more
- 7.) How many times have you attended an event at this facility?
- 8.) What level would you consider yourself a sport fan?

I would not consider myself a sport fan.

I would consider myself an extreme sport fan.

1 2 3 4 5 6 7 8

APPENDIX B: SPORT FAN MOTIVATION SCALE QUESTIONNAIRE

Instructions: Please answer EACH of the following questions about sport spectating using the 1 to 8 scale below. In the space next to each item, simply indicate (by writing a number) how well each item describes you. There are no right or wrong answers, we simply ask that you be completely honest in your responses. Remember, these questions are about sports spectating, not sports participation.

THIS IS NOT AT ALL
DESCRIPTIVE OF ME

THIS IS ALL VERY
DESCRIPTIVE OF ME

1 2 3 4 5 6 7 8

- _____ 1. One of the main reasons that I watch, read, and/or discuss sports is that doing so gives me the opportunity to temporarily escape life's problems.
- _____ 2. One of the main reasons that I watch, read, and/or discuss sports is so I can bet on the sporting events.
- _____ 3. One of the main reasons that I watch, read, and/or discuss sports is that I get pumped up when I am watching my favorite teams.
- _____ 4. One of the main reasons that I watch, read, and/or discuss sports is for their artistic value.
- _____ 5. One of the main reasons that I watch, read, and/or discuss sports is that I enjoy the beauty and grace of sports.
- _____ 6. One of the main reasons that I watch, read, and/or discuss sports is that I enjoy being physiologically aroused by the competition.
- _____ 7. Sports are enjoyable only if you can bet on the outcome.
- _____ 8. One of the main reasons that I watch, read, and/or discuss sports is that doing so makes me feel good when my team wins.
- _____ 9. One of the main reasons that I watch, read, and/or discuss sports is that doing so allows me to forget about my problems.
- _____ 10. I like to watch, read, and/or discuss sports because of the fights that occur during the event.
- _____ 11. Making wagers is the most enjoyable aspect of being a sports fan.
- _____ 12. One of the main reasons that I watch, read, and/or discuss sports is because most of my friends are sports fans.

- _____13. I enjoy watching sporting events because to me sports are a form of art.
- _____14. To me, watching, reading, and/or discussing sports is like daydreaming because it takes me away from life's hassles.
- _____15. One of the main reasons that I watch, read, and/or discuss sports is I am the kind of person who likes to be with other people.
- _____16. I enjoy sports because of their entertainment value.
- _____17. I enjoy watching sports more when I am with a large group of people.
- _____18. One of the main reasons that I watch, read, and/or discuss sports is to see the physical contact between players.
- _____19. I enjoy watching sports because it increases my self-esteem.
- _____20. I like the stimulation I get from watching sports.
- _____21. I enjoy watching, reading, and/or discussing sports simply because it is a good time.
- _____22. To me, sports spectating is simply a form of recreation.
- _____23. To me, my favorite team's successes are my successes and their losses are my losses.
- _____24. I like to watch, read, and/or discuss sports because doing so gives me an opportunity to be with my spouse.
- _____25. I like to watch, read, and/or discuss sports because doing so gives me an opportunity to be with my family.
- _____26. I enjoy sports because of the aggressive plays.

APPENDIX C: SPORT SPECTATOR IDENTIFICATION SCALE FOR BOWLING
GREEN HOTRODS

Instructions: Please answer the following questions based on your feelings for the Bowling Green Hotrods. There are no “right” or “wrong” answers, simply be honest in your responses.

1. How important to YOU is it that the Bowling Green Hotrods win?

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

2. How strongly do YOU see YOURSELF as a fan of the Bowling Green Hotrods?

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 Bowling Green Hotrods?

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 Bowling Green Hotrods via ANY of the following: a) in person or on television, b) on the radio, c) television news or a newspaper, and/or d) the Internet?

Never 1 2 3 4 5 6 7 8 Almost
Everyday

5. How important is being a fan of the Bowling Green Hotrods 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 Bowling Green Hotrods?

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

7. How often do YOU display the Bowling Green Hotrods’ 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

APPENDIX D: SPORT SPECTATOR IDENTIFICATION SCALE FOR NASHVILLE
ROLLERGIRLS

Instructions: Please answer the following questions based on your feelings for the Nashville Rollergirls. There are no “right” or “wrong” answers, simply be honest in your responses.

1. How important to YOU is it that the Nashville Rollergirls win?

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

2. How strongly do YOU see YOURSELF as a fan of the Nashville Rollergirls?

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 Nashville Rollergirls?

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 Nashville Rollergirls via ANY of the following: a) in person or on television, b) on the radio, c) television news or a newspaper, and/or d) the Internet?

Never 1 2 3 4 5 6 7 8 Almost
Everyday

5. How important is being a fan of the Nashville Rollergirls 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 Nashville Rollergirls?

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

7. How often do YOU display the Nashville Rollergirls’ 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

APPENDIX E: SPORT FAN EXPLORATORY CURIOSITY SCALE

Instructions: Please answer the following questions using the 1 to 7 scale below. In the space next to item, indicate (by writing a number) how well each statement describes you. There are no right or wrong answers; we simply ask that you be completely honest.

Strongly Disagree

Strongly Agree

1 2 3 4 5 6 7

- _____ 1. I enjoy flipping through sport network channels when I feel bored.
- _____ 2. I enjoy exploring brand new sport stadiums or facilities.
- _____ 3. When I see a new sport facility on TV, I want to go to it and explore it.
- _____ 4. I enjoy watching a major sporting event for the first time.
- _____ 5. Watching new sporting events with my friends is exciting.
- _____ 6. I enjoy being around “die-hard” sport fans to have a new experience.
- _____ 7. I often look for new opportunities to watch sports.
- _____ 8. I enjoy watching a new and unfamiliar sport with friends.
- _____ 9. My curiosity is aroused when watching exciting new sport events.
- _____ 10. When visiting a brand new sport facility, I want to explore it.

APPENDIX F: INSTITUTIONAL REVIEW BOARD APPROVAL



*INSTITUTIONAL REVIEW BOARD OFFICE
OF RESEARCH INTEGRITY*

Thank you for your submission of New Project materials for this project. The Western Kentucky University (WKU) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Exempt from Full Board Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by an implied consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Paul Mooney at (270) 745-2129 or irb@wku.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 Western Kentucky University (WKU) IRB's records.

APPENDIX G: INFORMED CONSENT

INFORMED CONSENT DOCUMENT

Project Title: Motivational Differences in Why Sport Fans Attend Minor League Baseball and Roller Derby

Investigator: Anissa Pugh, anissa.pugh405@topper.wku.edu Professor Rick Grieve, Ph.D., (270)-745-4417 or rick.grieve@wku.edu

You are being asked to participate in a project conducted through Western Kentucky University. The University requires that you give your agreement to participate in this project.

You must be 18 years old or older to participate.

The investigator will explain to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks of participation. You may ask any questions you have to help you understand the project. Please read this explanation and discuss with the researcher any questions you may have. You should be given a copy of this form to keep.

1. Nature and Purpose of the Project: The purpose of this study is to gain a better understanding of the motivational factors that influence why fans attend sporting events.
2. Explanation of Procedures: During participation you will be asked to complete a demographics section, which asks questions on age, education, ethnicity, and gender. Then, you will be asked to complete three short questionnaires (26 items, 7 items, and 10 items) that evaluate sport fan motivation, team identification, and sport fan curiosity. These items collectively should take about 10 to 15 minutes to complete.
3. Discomfort and Risks: This project appears to have minimal risks and discomfort. However, there is always a chance that a question could cause discomfort. Please let the researcher know if any questions are upsetting.
4. Benefits: Benefits of the study include a sense of well-being for contributing to scientific research, helping a Western Kentucky University graduate student, and providing information that will be used to better understand sport fan motivation.
5. Confidentiality: For this project, you will remain completely anonymous. This means that you will not be asked to write down any identifying information, such as your name. Although your individual response will remain anonymous, your data will be combined with the data of others and may be submitted for publication in scholarly journals or presented at conventions.
6. Refusal/Withdrawal: Refusal to participate in this study will have no effect on any future services you may be entitled to from the University. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty.

You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.

Your continued cooperation with the following research implies your consent.

THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY THE WESTERN KENTUCKY UNIVERSITY INSTITUTIONAL REVIEW BOARD Paul Mooney, Human Protections Administrator TELEPHONE: (270) 745-2129

APPENDIX H: DEBRIEFING FORM

Thank you for participating in this research project. This study examines the motivational differences that influence fans to attend a particular sporting event. You first completed a demographic questionnaire that provided us with basic information about yourself. Next, you completed a questionnaire used to measure sport fan motivational factors. You also completed a questionnaire measuring your level of identification with a particular team. Finally, you completed a questionnaire that measures the level of curiosity surrounding a particular sporting event. I want to remind you that your responses in this study will remain anonymous. If you have any questions regarding your participation, you may contact the primary investigator, Anissa Pugh, at anissa.pugh405@topper.wku.edu, or my supervising professor, Dr. Rick Grieve at (270)-745-4417.

APPENDIX I: MEAN SCORES BY GENDER FOR ROLLER DERBY FANS

Motive	Male <i>M (SD)</i>	Female <i>M (SD)</i>	t	p
Aesthetics	4.91 (1.84)	4.21 (2.27)	-1.03	.312
Aggression	3.36 (1.61)	3.17 (2.04)	-.308	.760
Economics	1.27 (.47)	1.09 (.20)	-1.67	.103
Entertainment	5.57 (1.42)	5.56 (2.25)	-.021	.983
Escape	3.13 (2.08)	3.65 (2.17)	.750	.458
Eustress	4.56 (1.26)	4.64 (2.11)	.142	.888
Family	3.73 (2.66)	3.56 (2.28)	-.223	.824
Group Affiliation	4.33 (1.80)	4.24 (2.10)	-.139	.890
Self-Esteem	3.35 (2.00)	3.85 (1.85)	.794	.432

Note: Standard deviations appear in parenthesis next to each mean. SFMS subscale scores ranged from 1 (*low motivation*) to 8 (*high motivation*). Bolded p values show significance at $p \leq .004$.

APPENDIX J: MEAN SCORES BY GENDER FOR MINOR LEAGUE BASEBALL
FANS

Motive	Male <i>M (SD)</i>	Female <i>M (SD)</i>	t	p
Aesthetics	3.45 (2.09)	2.65 (1.76)	-1.31	.198
Aggression	3.47 (1.98)	3.19 (2.06)	-.435	.666
Economics	1.10 (.20)	1.43 (1.00)	1.37	.179
Entertainment	6.88 (.84)	6.23 (1.47)	-1.63	.111
Escape	3.51 (1.88)	3.43 (1.57)	-.137	.891
Eustress	4.57 (1.34)	4.13 (1.90)	-.814	.421
Family	5.85 (1.76)	4.76 (2.18)	-1.70	.098
Group Affiliation	5.16 (2.10)	5.30 (1.67)	.248	.805
Self-Esteem	4.31 (1.55)	4.32 (1.33)	.011	.991

Note: Standard deviations appear in parenthesis next to each mean. SFMS subscale scores ranged from 1 (*low motivation*) to 8 (*high motivation*). Bolded p values show significance at $p \leq .004$.