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Analysis of Factors That Influence Satisfaction of Fans at Division II Basketball Games

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ANALYSIS OF FACTORS THAT INFLUENCE SATISFACTION OF FANS AT

DIVISION II BASKETBALL GAMES

A Thesis

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Master of Science

Brianne Lenhart

Indiana University of Pennsylvania

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ii

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Title: Analysis of Factors That Influence the Satisfaction of Fans at Division II Basketball Games

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This study analyzes factors that influence satisfaction of fans at Division II basketball games. Fans at Indiana University of Pennsylvania men's and women's basketball games were randomly approached and asked to answer a Likert-scale questionnaire about their experiences during games. The study used a survey from Wakefield and Sloan's 1995 research.

Ordered logistic regression was used to compute the results using R and the ggplot2 package. There were no statistically significant differences found between gender. Statistically significant results were more likely to be found from the responses of seniors than any other group. Juniors were also found to have responses related to the six dimensions produce statistically significant results. An odds ratio was calculated for the significant results to find the probability of changing a satisfaction level.

Future research should consider using a larger sample size. It is also suggested to compare the responses from men's games to women's game.

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I would also like to thank the Kovalchick Convention and Athletic Complex and Indiana University of Pennsylvania Athletic Department for allowing me to conduct my survey during men's and women's basketball games and to all of the fans that took the time to complete my survey at the games.

Last but not least, I would like to express my appreciation to all of my family, friends, and fellow graduate assistants that continued to encourage and support me in this endeavor. I cannot thank you enough for sticking by my side.

Thanks again,

Brianne Lenhart

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Sponsors, employees, suppliers, fans and the community are all customers relevant to sport organizations (Van Leeuwen, Quick, & Daniel, 2002). Providing good customer service is just as important for sport organizations as it is for any organization. The very nature of this industry encourages organizations to strive and achieve customer satisfaction.

There are multiple benefits associated with attaining satisfaction from the spectators. Customer satisfaction is a major component in customer retention (Cronin, Brady, & Hult, 2000). Organizations that are able to create environments and experiences that lead to high customer satisfaction tend to have positive word-of-mouth and customer loyalty (Anderson, Fornell, & Lehmann, 1994). This has been viewed to be true for spectator sports as well, as customer satisfaction levels have been used to predict a fan's likelihood of attending a future sporting event (Kwon, Trail, & Anderson, 2005). Despite this knowledge, little research has focused on the core product such as team performance and services like facilities and concessions and how these might predict customer satisfaction (Greenwell, Fink, & Pastore, 2002).

Customer satisfaction is important for many reasons. First, since a customer's satisfaction is their subjective judgement or perception, it is good criteria to use when an organization wants to evaluate their services (Cronin & Taylor, 1992). The influence of different factors varies by person and situation. The second reason is due to the relationship between service quality and behavioral intentions (Cronin et al., 2000). Customers make service quality evaluations that lead to purchase intentions. Customer satisfaction levels have been found to influence customer loyalty and repeat business (Oliver, 1997; Cronin & Taylor, 1992). This idea

1

was confirmed by Wakefield and Blodgett (1996) when they found that future purchase intentions of fans in football, baseball, and casino settings were influenced by their satisfaction with the service environment. Therefore, they concluded that customer satisfaction can not only be used to evaluate service quality, but predict repeat business. This study will analyze factors that influence fan satisfaction of fans at Division II basketball games.

Problem Statement

The purpose of this study is to analyze factors that influence satisfaction of fans at Division II basketball games.

Research Questions

1. Are there significant differences in satisfaction between gender and class ranking based on these six dimensions (Desire to Stay, Team Loyalty, Stadium Parking, Stadium Cleanliness, Fan Control, and Food Service)?

    a. Are there differences between males and females?

    b. Are there differences between students based on class standing?

    c. Are there differences between students and community members?

Hypotheses

1. It was hypothesized that there will be a difference in customer satisfaction among gender and class standings.

    a. It was hypothesized that there will be a significant difference in dimensions of satisfaction between males and females.

    b. It was hypothesized that there will be no significant difference in dimensions of satisfaction between class standings.

c. It was hypothesized that there will be a significant difference in dimensions of satisfaction between students and community members.

These hypotheses were made based on the researcher's experiences and background knowledge. It was anticipated that college students would have less exposure to venues and sport experiences that would contribute to their expectations. This same thought process was used when including community members. They have the potential to have had more life experiences at other venues to based their opinions of this facility on.

Definition of Terms

The following are the accepted definitions for these terms for this study:

Customer satisfaction:

- A customer's judgement of fulfillment from a product and/or service

Customer service:

- Assistance provided to a customer by someone from the organization

Perception:

- A customer's interpretation or view of the quality of products and/or services at an event

Fan:

- Someone who is attending and experiencing the game

Core Product:

- The game, including players

Service Quality:

- How well an experience or product meets a customer's expectations

Crowding:

- Uncomfortable feeling due to lack of space in a facility

Influence:

- Effect on something

Sportscape:

- Elements or stadium factors that remain the same from game to game

Assumptions

1. It was implied that fans would clearly understand the questions.

2. It was assumed that fans would be honest when filling out the survey.

Limitations

The following are limitations of this study:

1. The data was based on fans' opinions.

2. To encourage completion of the survey by fans, the questionnaire was limited to a brief number of questions.

3. This study did not account for the influence that purchased versus complimentary ticket entry may have had on responses.

Significance

Achieving customer satisfaction is important for sports organizations. Results from assessing customer satisfaction levels can be used to help organizations evaluate their services (Cronin & Taylor, 1992) and predict repeat patronage and customer loyalty (Oliver, 1997; Cronin & Taylor, 1992). Despite this knowledge, little research is available that focuses on factors that influence how a fan perceives a sporting environment and the impact this could have on their level of fan satisfaction.

Some research is available studying Division I football, professional baseball in Japan and the United States, rugby in Australia, and football in Greece. This study contributes to previous literature by analyzing fan perceptions of a Division II basketball sporting event in Western Pennsylvania.

CHAPTER II

REVIEW OF LITERATURE

The importance of understanding customers is not unique to just one industry. The competitive nature of the service industry necessitates the need for excellent service quality (Johnston, 1987). The hospitality industry must also consider factors that contribute to customer satisfaction. A restaurant's survival, for example, is based on whether or not they can create a loyal customer base. Benchmarking to develop standards takes place in the hospitality industry and in the sports industry. It is important for establishments that focus on service quality to assess themselves and their competitor's achievements on a regular basis as part of the benchmarking process (Tobin & Huffman, 2006). Among hospitality industry analysts, there is a general consensus that a customer's overall view of service quality is one of the most important factors in determining their customer satisfaction (Tobin & Huffman, 2006).

Motives for Attending Sporting Events

Sports are about the experience. Fans attend games for various reasons from trying to satisfy personal needs to gaining other benefits (Gencer, Kiremitci, & Boyacioglu, 2011). Fan motives can be linked to satisfying the need of vicarious achievement, aesthetics, drama, escape, gathering knowledge, quality of participant's skill level, entertainment, and social interaction (Trail & James, 2001). Fans who attend games with the motive of vicarious achievement likely experience feelings of self fulfilment, self-esteem, and prestige. These fans believe they deserve to feel this way because of the time and money they spend at games (Gencer et al., 2011). Fans who are motivated by aesthetics like the agility and artistic movements of games and that is why they attend. The motive for escape allows individuals who are unhappy with life at home or work to forget about the issues for a little while as they attend the game. Fans seeking vicarious

achievement may be looking to escape their daily life routine and watch the artistic displays of the game in a social setting with others (Gencer et al., 2011). Gencer et al. (2011) conducted a study using the Motivation Scale for Sport Consumption (Trail & James, 2001) and the Points of Attachment Index (Trail, Anderson, & Fink, 2003). After surveying 197 professional basketball spectators in Turkey, Gencer et al. (2011) suggested that aesthetics and escape are the dominant motives for attending, and that the game was the main point of attachment for fans.

Customer Satisfaction

One way organizations might achieve higher satisfaction would be to increase their customer service for fans. Findings by Cronin et al. (2000) suggest that service quality and service value lead to satisfaction. This conclusion was reached after performing two studies that investigated six different service industries: spectator sports, participation sports, entertainment, health care, long distance carriers, and fast food. These industries were chosen for their diversity. Quota sampling was used to account for age, gender, and ethnic background. Participants were asked to participate if they had had multiple experiences in the industry. Achieving customer satisfaction is important for sports organizations. Results from assessing customer satisfaction levels can be used to help organizations evaluate their services (Cronin & Taylor, 1992) and predict repeat patronage and customer loyalty (Oliver, 1997; Cronin & Taylor, 1992). Despite this knowledge, there is little research available that looks at how a customer perceives a sporting environment and the impact this could have on their level of customer satisfaction.

In order to stay competitive, organizations are focusing on improving their service quality and customer satisfaction to retain customers (Ko & Pastore, 2007). To increase customer satisfaction, organizations must provide high quality services consistently. In addition to

determining how satisfied a customer is, it is important to understand why a customer is satisfied (Van Leeuwen et al., 2002). Attendance at professional team events is a popular activity and fans are instrumental in generating revenue for an organization. Van Leeuwen et al. (2002) created the conceptual Sport Spectator Satisfaction Model (SSSM) to identify determinants of customer satisfaction and how these interact to influence satisfaction. The SSSM accounts for the influence of club identification and the win/lose phenomenon and demonstrates that satisfaction is a resultant of the core product and peripheral dimensions. The SSSM has helped to further educate professionals on the satisfaction of game attending professional sport fans (Van Leeuwen et al., 2002).

Oliver (1980) proposed what he called the Expectancy-Disconfirmation model which stated that customer satisfaction or dissatisfaction is how a consumer perceived the performance of a service versus their expectations. Satisfied customers' perceived performance of a service is greater than their expectation. Dissatisfied customers have not had their expectations met or exceeded (Tsuji, Bennett, & Zhang, 2007).

Yu et al. (2014) studied the relationship between service quality, perceived value, customer satisfaction, and behavioral intentions to gather information to provide worthwhile services to older adult consumers, specifically in sport and fitness centers. A convenience sampling method was used in a sport and fitness center in Seoul, South Korea to gather survey responses (Yu et al., 2014). Of the 203 responses to 55 items, 45.8% were from males and 54.2% from females (Yu et al., 2014). Results of this study demonstrated that perceived value was directly impacted by service quality. Perceived value had direct and indirect effects on future purchase intentions. Additionally, service quality directly affected customer satisfaction. Perceived value was also directly found to effect customer satisfaction and future purchase

intentions. Service quality did not though, have a direct effect on future purchase intentions. In this study, customer satisfaction seemed to have a stronger impact on loyalty, which increases repurchase intentions, than service quality or perceived value (Yu et al., 2014).

<div align="center">**Service Quality**</div>

Tools for Measuring Quality

Services are unique when it comes to defining quality. Services are intangible, heterogeneous, and produced and consumed at the same time (Chelladurai & Chang, 2000). These characteristics magnify the importance of the interactions between customer and service employees during the production and consumption of the service (Chelladurai & Chang, 2000). Chelladurai and Chang (2000) proposed an outline for understanding sport service quality from three viewpoints: targets of quality, standards of quality, and evaluators of quality. The framework can be used to benchmark the operations of an organization and identify and eliminate defective elements in the service process (Chelladurai & Chang, 2000). Service quality is one factor that influences long-term profitability of an organization (Parasuramam, Berry, & Zeithaml, 1985). Service quality that is perceived as high can increase customer satisfaction, loyalty, and retention, all of which can create revenue for an organization (Zeithaml, Parasuraman, & Berry, 1996). For an organization, it is more economical to retain current customers than it is to attract new ones. Previous research has linked both service quality and satisfaction and satisfaction and organizational success, so managers should continuously look for and implement procedures that evaluate and improve the services for their customers (Tsuji et al., 2007).

Howat, Absher, Crilley, and Milne (1995) studied dimensions of customer service quality with the use of the Centre for Environmental and Recreation Management Customer Service

<div align="center">9</div>

Quality (CERM CSQ) questionnaire in leisure centers. Data from 15 leisure centres in Australia that used the CERM CSQ in 1994 were compared by Howat et al. (1995). They concluded that a four-dimension model could be appropriate for Australian sport and leisure centers (Howat et al., 1995). According to Berry and Parasuraman (1991), customer service quality can be broken down into five dimensions: reliability, empathy, responsiveness, assurance, and tangibles. The most important dimension of quality from these is reliability or delivering a service in a trustworthy and accurate manner (Berry & Parasuraman, 1991). A customer's expectations range from a level that is just adequate to a level they hope to experience. Even though a certain level might be desired by a customer, a lower level of service could be accepted if it falls within their zone of tolerance. A customer's tolerance can be influenced by their previous experiences, word of mouth, and other similar services offered (Howat et al., 1995). Managers can use the CERM CSQ to measure their customer's desired level of service compared to the center's performance (Howat et al., 1995).

The Scale of Service Quality in Recreational Sports (SSQRS) was created to evaluate participant's perceptions of quality in recreational programs (Ko & Pastore, 2005). It includes items that represent four dimensions of service quality: program quality, interaction quality, outcome quality, and physical environment (Ko & Pastore, 2005). The instrument also includes a section on customer service. Strong evidence is available that supports the validity and reliability of the SSQRS and satisfaction scale (Ko & Pastore, 2005). Managers that use the SSQRS can help their programs improve what they offer and retain current customers (Ko & Pastore, 2007).

Ko, Zhang, Cattani, and Pastore (2011) proposed a conceptual model called the Model of Event Quality for Spectator Sports (MEQSS) to help understand service quality at major sporting

events. The model was primarily proposed for Major League Baseball, but it was expected that it would be used for other compatible sports (Ko et al., 2011). It was developed using multiple focus group interviews and a literature review. The measurement tool, Scale of Event Quality for Spectator Sports (SEQSS) was created to test the MEQSS model. The results of this study provide managers with a valid and reliable framework tool to gauge service quality perceptions of consumers (Ko et al., 2011). This model and scale can be used as a diagnostic tool to identify service strengths and weaknesses of an organization and provide areas for improvement (Ko et al., 2011).

Tsuji et al. (2007) studied the relationships between service quality, satisfaction, and future attendance intentions at action sports events, such as skateboarding, BMX bike riding, and snowboarding. The Gravity Games in Cleveland, Ohio had 2,297 attendees participate in this empirical evidence collection. Survey data was collected over the five-day event at various locations and places throughout the venue. The instrument used was called the Scale of Gravity Games (SGG) and included core service quality, peripheral service quality, satisfaction, and future intention constructs (Tsuji et al., 2007). Their results suggested that core service quality is the greatest factor in predicting fan satisfaction levels. This is contradictory with previous results demonstrated by Greenwell et al. (2002). The difference could be equated to the uniqueness of action sports and their consumers (Tsuji et al., 2007).

Yoshida and James (2011) attempted to create a tool to measure aesthetic, technical, and functional dimensions of service quality. Survey items were from other researchers' questionnaires and a thought-listing task with 40 college undergraduate students. The first data collection of fans took place at a professional baseball game in Tokyo. After using a proportionate sampling method and removing inadequate responses, 283 responses were

analyzed (Yoshida & James, 2011). The second data collection of fans at two Division 1-A college football games in the United States were conducted before the game around the stadium. Survey answers from 343participants were used for analysis (Yoshida & James, 2011). The survey results suggested that service quality dimensions should include the difference between aesthetic and functional quality (Yoshida & James, 2011). It was also concluded that technical quality can be viewed as a construct composed of opponent characteristics and player performance in North America (Yoshida & James, 2009). Managers can use this model to understand how service quality can be improved in the future.

<center>**Factors That Influence Fan Satisfaction**</center>

Facility

Fans have started to expect comfort and convenience at the facilities they visit. These expectations are making it necessary for team owners to build and renovate their stadiums. A poor facility, whether in design or construction, is often blamed for attendance and revenue shortcomings. Stadium atmosphere and amenities have been blamed for low attendance (Cannella, 1999). When a fan purchases a ticket, this includes the intention to be at a facility for an extended period of time (Wakefield & Sloan, 1995). This is why the potential exists for the stadium to play a substantial role in how much fans enjoy their experience. It has been suggested that spectators who enjoy their time in a facility are more likely to want to return and spend more time, while dissatisfied spectators are likely to want to reduce their time spent in the facility perhaps leading to them leaving early and never returning (Wakefield & Sloan, 1995). Findings from their research of 1,491 fans at five SEC stadiums suggest that effective stadium design and management can lead to maximizing and achieving capacity and therefore, increasing the

<center>12</center>

financial bottom line (Wakefield & Sloan, 1995). The stadium surroundings play a role in determining fans' attendance intentions (Wakefield & Sloan, 1995).

Greenwell et al. (2002) looked at the influence physical facility elements had on customer satisfaction and the influence of the facility relative to core product and service personnel. The final sample size of participants was 218 and included fans from a minor-league ice hockey game (Greenwell et al., 2002). Greenwell et al.'s (2002) research proposed that customers' perceptions of the facility, as a whole, predicted customer satisfaction, and that individually, attributes had very little impact. Scoreboard quality was the only element that uniquely predicted customer satisfaction. These results are consistent with research by Hill and Green (2000), that found that the facility as a whole predicted return intentions. Fans in their study did not use individual attributes to determine their satisfaction, but instead looked at the facility as a whole (Hill & Green, 2000).

Wakefield, Blodgett, and Sloan (1996) conducted a study to provide facility managers with a reliable survey tool to determine how fans perceive the facility. Many franchises have been willing to spend large sums of money on new stadiums and renovations over recent years. In some instances, managers might not be aware of needed facility improvements because they have become accustomed to conditions found in the stadium. Ambient conditions like temperature, air quality, noise, and odors were not measured because they are usually hard to gauge and are unable to be controlled by management (Wakefield et al., 1996). Data collection of adult fans took place at two SEC college football games using a survey. In order to validate the survey, it was administered at two minor league baseball games. This study demonstrated that the most substantial factor that influenced fans' liking of the sportscape was whether or not they felt crowded (Wakefield et al., 1996). The other major factor was the aesthetic quality of

the stadium. Often, a fan bases their first impression of a service provider on the appearance of the stadium (Wakefield et al. 1996).

Core Product

Yoshida and James (2010) conducted a study to view "relationships between service quality, core product quality, game and service satisfaction, and behavioral intentions." In that study, the core product was broken into two constructs: team characteristics and player performance. Team characteristics are the customer's perception of the home and away teams based on their standings, winning percentages, number of star players, and team history. Player performance includes the fan's perception of a player's physical and technical ability to perform well, play hard, and make exciting plays (Yoshida & James, 2010). In regards to a customer's satisfaction, it is believed that a fan's perception of the core product influences their game satisfaction. Yoshida and James's (2010) study was conducted in a professional sport setting in Japan and at a college setting in the United States. 283 fans at a Japanese professional baseball game and 343 fans who had attended two Division-1A college football games participated (Yoshida & James, 2010). Based on Yoshida and James's (2010) results, they suggested that the atmosphere is responsible for a sense of excitement resulting from the core product. Therefore, they recommend game atmosphere be promoted in conjunction with the core product (Yoshida & James, 2010). Applying this knowledge may help sport marketers satisfy and retain their customers.

Service Personnel

Service personnel are the employees that come into contact with customers. These employees facilitate actions that either add or detract from the fan's game experience (Greenwell, Fink, & Pastore, 2002). The quality of service employees provide in various

instances has been tied to their performance evaluations and compensation packages. This is due to the assumption that improvements in fan perceptions of quality, value, and satisfaction during a service encounter will lead to favorable outcomes (Cronin et al., 2000). In sports, these personnel can be ticket sellers, concessionaires, merchandisers, ushers, and customer service representatives.

Athanasopoulou, Skourtis, Zafeiropoulou, Siomkos, and Assiouras (2012) focused their research on the importance of facilities and staff for football fans. Their structured questionnaire was completed by 312 participants during two matches of Superleague football games in Athens and Tripoli. Twenty items were used to measure the dimensions of staff and facilities for fans and the results suggested that factors relating to staff and quick and easy access were more important to respondents than facility factors (Athanasopoulou et al., 2012).

Fans expect that employees will display a proper attitude towards them, will have expertise in their job area, and will behave in an appropriate manner. Fans are likely to have a positive perception of their interaction with the staff when employees react to fan's questions, problems, and concerns promptly (Ko & Pastore, 2007). These conclusions were drawn after mean scores for client-employee interaction and inter-client interaction were calculated (Ko & Pastore, 2007). These scores were based on a convenience sampling of 241 individuals that regularly participated in a campus recreation program at a university (Ko & Pastore, 2007).

Situations where fans are abusive and offensive towards other fans must be handled by stadium management and personnel. By carefully monitoring fan behavior and acting on uncomfortable situations appropriately, negative experiences for fans can be prevented (Wakefield & Sloan, 1995).

Team Loyalty

Team loyalty is devotion to a specific team based on the fan's interest in the team over a period of time (Wakefield & Sloan, 1995). The purpose of their study was to explore the effects of crowding, food service quality, fan behavior control, stadium parking, and stadium cleanliness on fans' desire to say at a stadium and future attendance intentions. These researchers administered a survey at five SEC football games and analyzed the results of 1,491 respondents using the covariance structural modeling method. According to their results, team loyalty plays the biggest role in determining a fan's desire to be at a stadium (Wakefield & Sloan, 1995). This desire influences their perception of customer service and therefore, satisfaction. Team loyalty can be increased through effective promotion of game excitement, accessibility of team members to fans, and discounted tickets (Wakefield & Sloan, 1995). This study provides management with a tool to maintain customer satisfaction and increase attendance (Wakefield & Sloan, 1995).

Fans attend games for different reasons. Developing a fan base that is willing to consistently return or purchase the product or service is a goal for all sport organizations (Yoshida, Heere, & Gordon, 2015). Since teams cannot guarantee a winning performance, it is important to understand why fans make repurchase decisions (Yoshida et al., 2015). The purpose of Yoshida et al.'s (2015) study was to examine the effects of team identification, points of attachment, satisfaction, and behavioral intentions toward repeat purchase intentions using a longitudinal approach. Questionnaires were distributed to fan loyalty program members in a Japanese professional soccer club before the game and netted 233 usable responses. Yoshida et al.'s, (2015) results suggested that team identification positively influenced behavioral intentions and that team identification exerted a greater influence on behavioral intentions than the

satisfaction dimensions of game satisfaction and service satisfaction. Results of this study were in conflict with those of previous research on consumer behavior theories.

A loyal fan does not desert the team in losing years. Team loyalty is an important factor in why spectators attend sporting events. Loyalty is to a team rather than the venue. Hill and Green (2000) consider loyalty to be a pre-existing condition because fans bring a certain amount of loyalty with them to the facility. Their study examined the impact of stadium factors on attendance intentions at three rugby league venues, accounting for team loyalty and involvement (Hill & Green, 2000). The sample for analysis consisted of responses from 530 Australian adults. These researchers concluded that loyalty and psychological involvement significantly predicted attendance intentions for fans (Hill & Green, 2000).

Crowding

Poorly designed stadiums can leave spectators feeling crowded. Crowding has been described as a negative response to the physical surroundings and can directly influence a spectator's satisfaction (Wakefield & Sloan, 1995). The design of the aisles, seats, and concourse areas can directly negatively or positively influence evaluations and feelings toward the sportscape (Wakefield & Sloan, 1995). Spectators that feel uncomfortable due to their proximity to other spectators or feel hampered trying to enter and exit the stands, restrooms, and or concession areas may wish to stay in their seat and possibly never return (Wakefield & Sloan, 1995). Wakefield and Sloan (1995) gathered survey responses of stadium factors at five different Southeastern Conference football stadiums during games. A systematic random sampling method was used and garnered 1,491 responses for analysis. Their results demonstrated that when compared to other stadium factors, such as parking and cleanliness, perceived crowding had the strongest effect on fans' desires to stay or leave the facility

(Wakefield & Sloan, 1995). Reconfiguring seating in facilities to provide more aisles and knee and elbow room may help reduce the crowding effect.

Hui and Bateson (1991) directed an experimental study to test if consumer's perceived control in a service encounter had a considerable impact on the service experience. Hypothetical consumers were shown on slides to the participants in a bank and bar setting during experimental sessions. These sessions produced 107 responses for the bank setting and 112 for the bar example. Their results showed that perceived control was a powerful concept when explaining the consumer's reaction to consumer density in the service environment (Hui & Bateson, 1991). The results also suggested that perceived crowding by the consumer can be lowered if some control is returned to the consumer and choices are given (Hui & Bateson, 1991). These findings are relevant to the current study since a survey question authored by Hui and Bateson (1991) is included in the current instrument.

Other Relevant Factors to Consider

Parking

The availability of parking, proximity to the stadium, and "exitability" of parking can enhance or detract from the entire experience at a facility (Wakefield & Sloan, 1995). If excessive amounts of time are needed to search for and walk from a parking space, fans may start to get agitated. Any major problem a fan might experience before the game starts could negatively influence their entire evaluation of the sportscape (Wakefield & Sloan, 1995). Fans that know they will be able to leave easily after the game because of options like mass transportation shuttles, may be less likely to leave early (Wakefield & Sloan, 1995).

Cleanliness

Stadium cleanliness is a function of service levels, but can also be the result of a facility's architectural design and age. The general appearance of a facility can directly influence fans' perceptions of the stadium (Wakefield & Sloan, 1995). If a stadium has limited or non-existent monitoring of facilities during the event, areas that become trashed may cause fans to not use them and become dissatisfied (Wakefield & Sloan, 1995). Cleanliness has been found to be an important factor in other retail settings, but in stadiums, fans may not expect them to be as clean as other places (Wakefield & Sloan, 1995). Management can increase the satisfaction of fans by exceeding their expectations in this area. Cleanliness can be particularly important to mothers of young children who do not wish to have to subject their child to a dirty facility (Wakefield & Sloan, 1995).

Food Service

Food service is an important aspect of revenue sources. Fans are usually in a stadium for three or more hours for a game. The quality of food items available to fans can add or subtract to a fans' experience (Wakefield & Sloan, 1995). Items can range from snacks like popcorn and peanuts to hotdogs, hamburgers, ice cream, soft drinks, and beer. The food's taste is directly related to the quality of the product, but how fresh or warm something is can also impact quality (Wakefield & Sloan, 1995). It has been predicted that stadiums with an excellent variety of items to choose from and good tasting food would boost the customer experience (Wakefield & Sloan, 1995). Wakefield and Sloan's (1995) research on this factor suggests that food service quality affects fans' desire to stay at a stadium.

CHAPTER III

METHODOLOGY

In this chapter items such as the participants, procedure, design, statistics, and instrument will be discussed. A copy of the survey completed by fans can be found in Appendix A.

Participants

Participants for this study were male and female students of Indiana University of Pennsylvania (IUP) and community members that attended IUP basketball games at the Kovalchick Convention and Athletic Complex (KCAC). The KCAC, located in Indiana, Pennsylvania, is where IUP basketball games are held. The age range of participants was 18 and over. No minors were surveyed as survey question two verified the participant's age. No exclusion was made based on race or ethnicity. Any fan in attendance had the chance to participate as long as they were at least 18 years of age. These participants were selected from February 2017 game attendees.

Recruitment Strategies

Participants for this study were recruited at IUP Men's and Women's basketball games. Fans were randomly approached and asked to answer a few questions about their experiences at the Kovalchick Convention and Athletic Complex during these games. At least 125 responses were predicted to be collected.

Procedure

This study was approved by the Indiana University of Pennsylvania Institutional Review Board. Prior to performing the study, permission was asked and obtained from the Kovalchick Convention and Athletic Complex and the IUP Athletic Department (Appendix B) administration. They were notified as to the purpose of this study and asked to allow the fans to

participate. After approval was obtained, fans were randomly approached at various areas in the arena including in their seats, on their way out of the restroom, standing in the concourse, and in line for the concession stand. Data collection took place before the game, during halftime and throughout the game by the primary investigator and multiple graduate students. These graduate students were trained on how to approach a fan and verbally explain the study. This script can be found in Appendix C.

Fans were asked to answer the questionnaire through a Qualtrics survey on an iPad. Each survey participant was asked to score their responses to questions about their experience using a Likert scale 1 to 5 unless otherwise noted. All participation in this survey was voluntary and participants could stop at any time. The questionnaire began by verifying through self-report that the participant was at least 18 years of age and then continued by collecting background information such as gender, class standing, ethnicity, education, and marital status. The proceeding questions asked about their desire to stay, team loyalty, stadium parking, stadium cleanliness, fan control, food service, crowding, and intentions to return. The survey was comprised of 16 questions and six of those questions were comprised of three subquestions. The questionnaire was took no more than 5 minutes to complete. The participants were not asked for their names at any point during the study. It was implied that a participant's consent was given by their willingness to participate.

Design

This study is a descriptive, quantitative research design with the use of survey questions from the previously developed scale by Wakefield and Sloan in 1995. The study population was comprised of a convenience sampling from the selected games.

Statistical Analysis

Ordered logistic regression was used to model the data. The ratings are the response options from the Likert scale. Specifically, for the rating of satisfaction the following odds were used:

θ_1 = prob (rating 1) / prob (rating > 1)

θ_2 = prob (rating 1 or 2) / prob (rating > 2)

θ_3 = prob (rating 1, 2, or 3) / prob (rating > 3)

θ_4 = prob (rating 1, 2, 3, or 4) / prob (rating > 4)

All of the odds are of the form:

θ_j = prob (satisfaction $\leq$ j) / prob (satisfaction > j)

The ordinal logistic model is then:

$\ln(\theta_j) = \beta_0 + \beta_1 *$ gender $+ \beta_2 *$ class standing $+ \varepsilon$

Both the data visualization and statistical analysis were performed exclusively in R (R Core Team, 2017). For visualization done in R, the ggplot2 (Wickham, 2009) package was used. For building the ordinal logistic regression model, the R function "polr" in package MASS (Venables and Ripley, 2002) was applied. Descriptive statistics for the demographics of gender and class standing were also calculated.

Instrumentation

In order to determine what factors influenced fan satisfaction, a self-report survey was given to randomly-approached fans at Indiana University of Pennsylvania basketball games to assess their reactions toward the six dimensions of fan satisfaction. The survey used for this study was originally constructed by Wakefield and Sloan (1995) for their own research. The study was comprised of demographic questions followed by the Wakefield and Sloan

questionnaire that included questions pertaining to the six dimensions, crowding, and attendance intentions.

Validation of Instrument

The questionnaire used in this study was originally used by Wakefield and Sloan in 1995. Before the survey was administered by Wakefield and Sloan (1995) for their study, pretests of the scales were conducted at two SEC football games. Wakefield and Sloan (1995) reported final coefficient alpha reliability of 0.77 for desire to stay, 0.91 for team loyalty, 0.86 for stadium parking, 0.88 for stadium cleanliness, 0.89 for fan control, 0.90 for food service, and 0.83 for crowding. These results produced a goodness-of-fit index (GFI) of 0.970, indicating an acceptable fit to the data. Evidence suggests discriminant and convergent validity among the seven constructs studied.

CHAPTER IV

RESULTS

The purpose of this study was to analyze factors that influence satisfaction of fans that attend Division II college basketball games.

Response Rate

Surveys were completed by 170 fans at the Kovalchick Convention and Athletic Complex. Of those completed, 26 surveys were not included because of missing responses. Therefore, 144 surveys were fully completed and deemed usable by the researcher. The overall usable response rate was 84.7 percent.

Demographics

Of the 144 participants in this study, 9.7% (n=14) were freshmen, 8.3% (n=12) were sophomores, 12.5% (n=18) were juniors, 18.1% (n=26) were seniors, 12.5% (n=18) were graduate students, and 38.9% (n=56) were community members (see Table 1 and Figure 1). When comparing gender in this study, 51.4% (n=74) participants were male, while 48.6% (n=70) were female (see Table 2 and Figure 2).
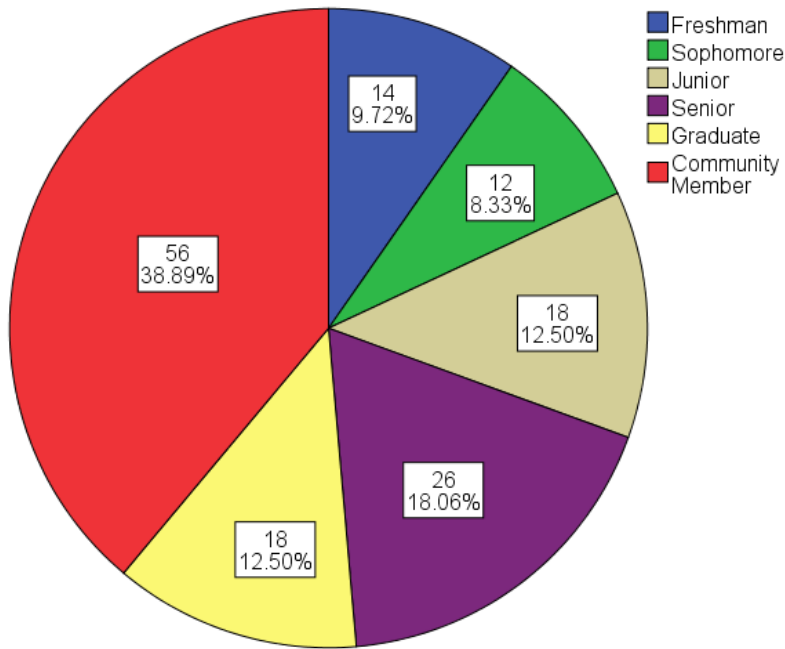
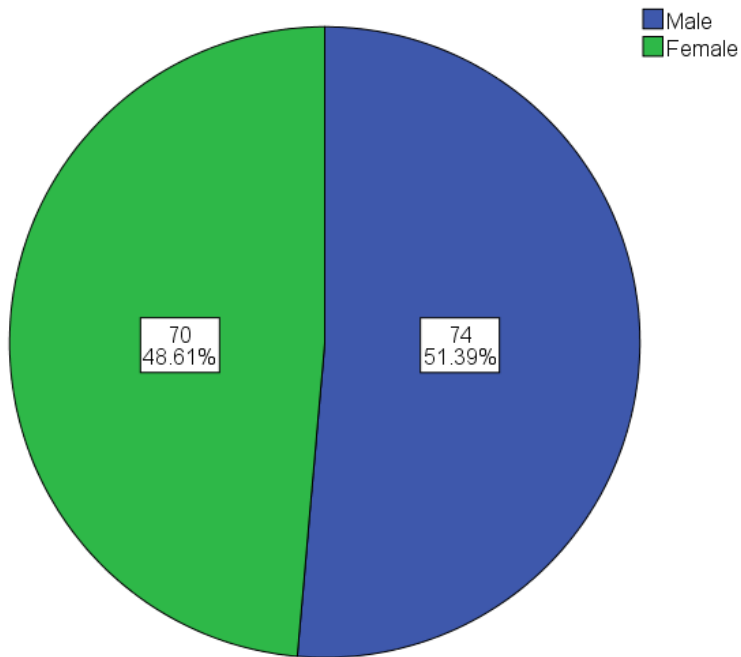*Figure 1.* Study population's class standing by percentage and frequency.

Figure 2. Gender percentages and frequencies of the study population.

Desire to Stay

When comparing gender, males were slightly more likely to have a desire to stay at the game than females (see Figures 3 and 4). The distribution of responses show in Figure 5 suggests that females are less likely to want to stay at the stadium for as long as possible. The 1 to 5 scale corresponds to the Likert scale response options.
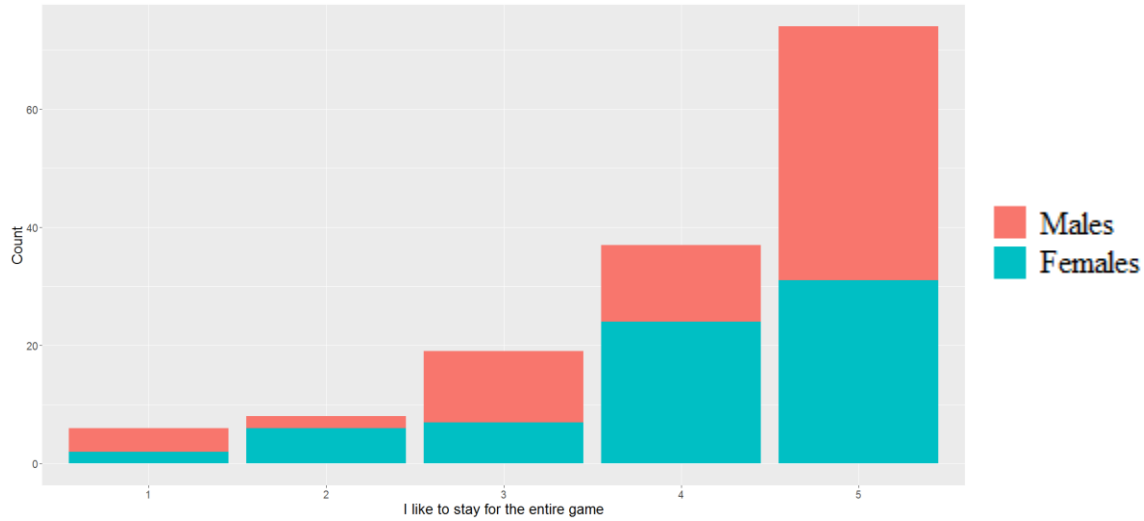
Figure 3. Responses based on gender for question 8_1 desire to stay.
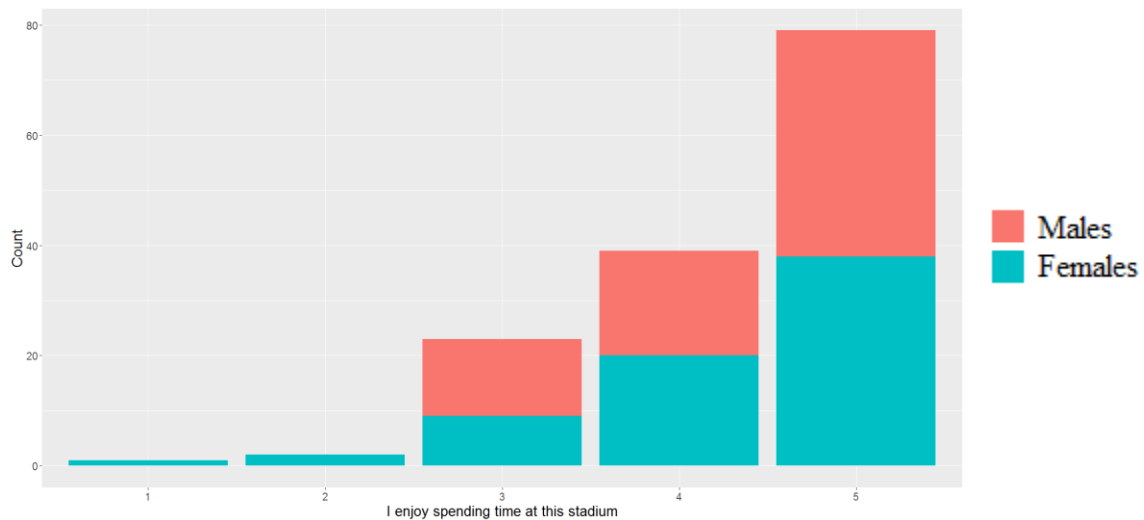
Figure 4. Responses based on gender for question 8_2 desire to stay.
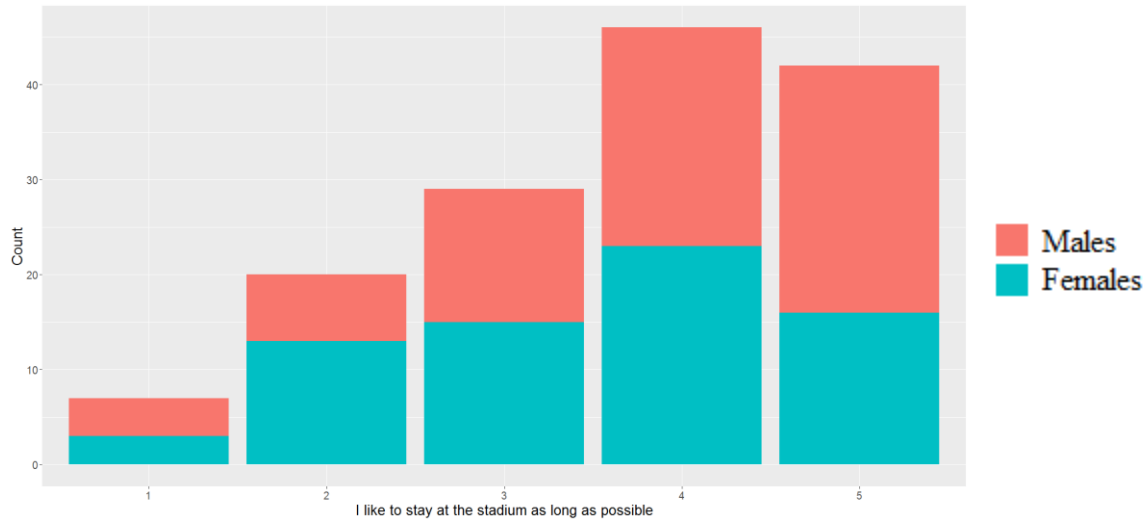
Figure 5. Responses based on gender for question 8_3 desire to stay.

Community members were more likely to respond that they liked to stay at the stadium than any level of class standing. Within the class standings, their desire to stay was relatively similar (see Figure 6 and 7). Of the class standings, graduate students were more likely to respond favorably to desire to stay than freshmen, sophomores, juniors, and seniors (see Figure 6 and 8).
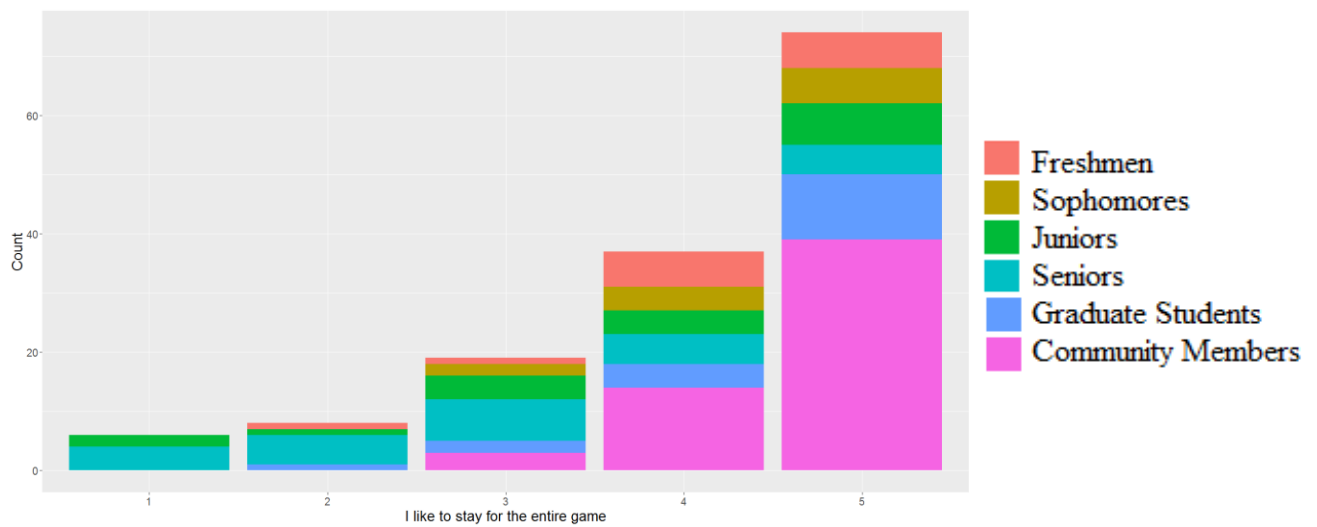

Figure 6. Responses based on class standing for question 8_1 desire to stay.
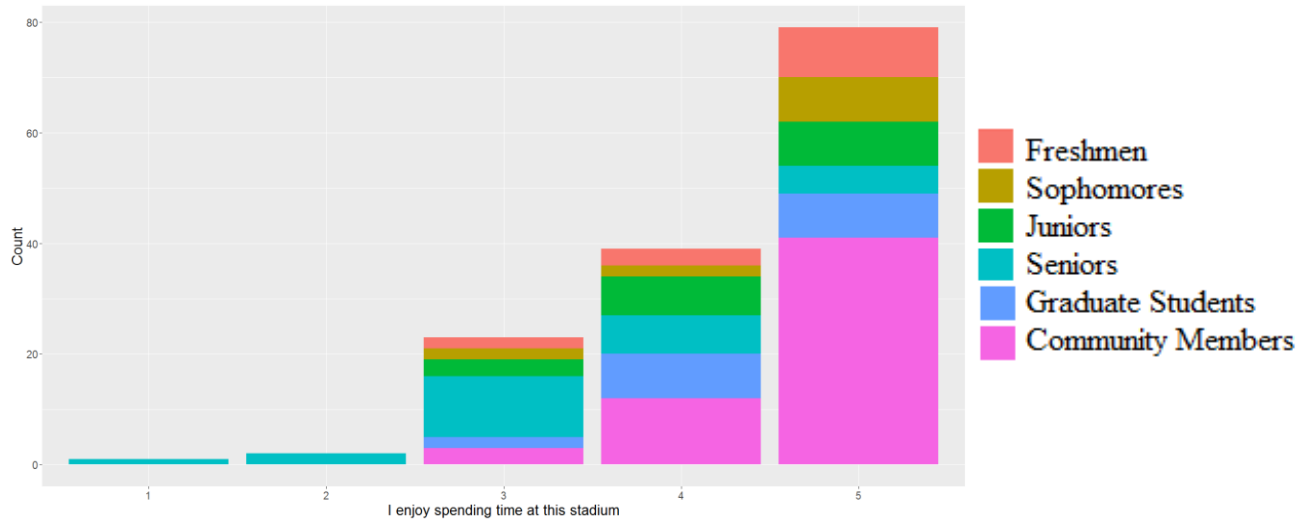
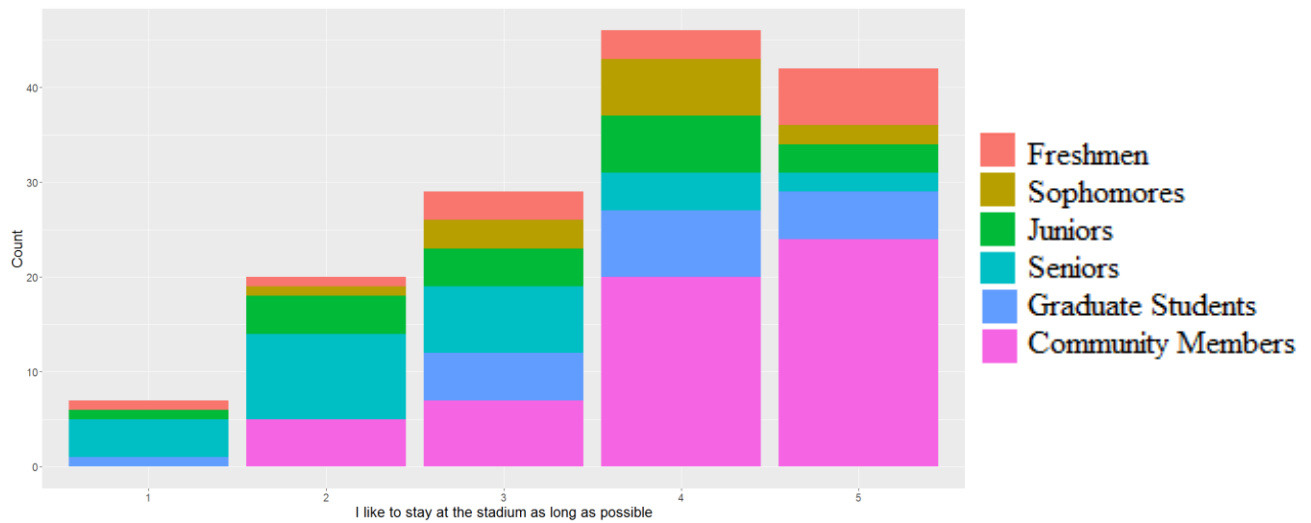*Figure 7.* Responses based on class standing for question 8_2 desire to stay.

Figure 8. Responses based on class standing for question 8_3 desire to stay.

Team Loyalty

Females were only a slightly more likely to indicate they like to let people know they are a home team fan compared to males (see Figure 10). Overall, there was not a significant visual difference between males and females and their likeliness to respond favorable to question 9 regarding team loyalty (see Figure 9 and 11).
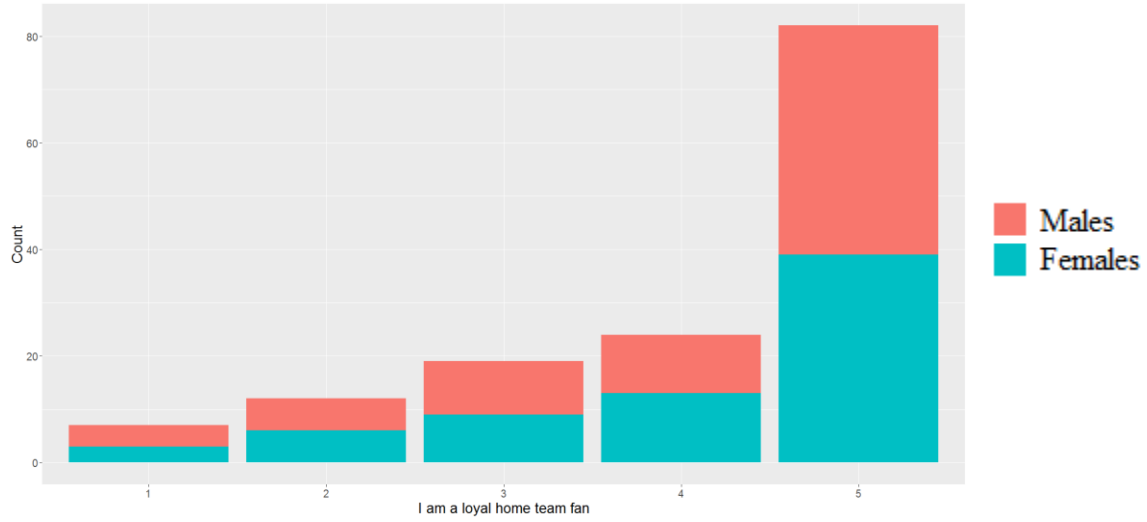
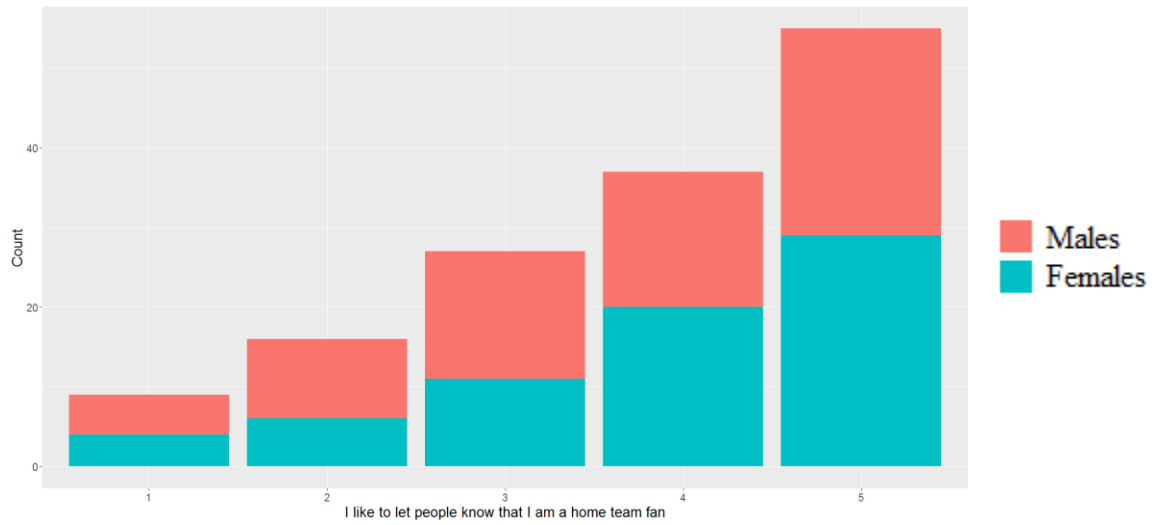*Figure 9.* Responses based on gender for question 9_1 team loyalty.

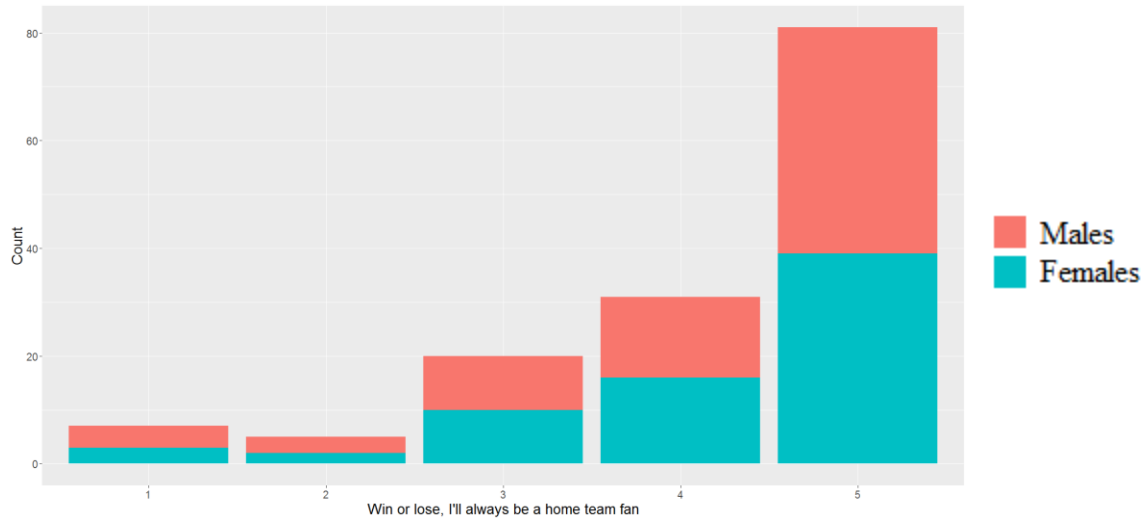*Figure 10.* Responses based on gender for question 9_2 team loyalty.

Figure 11. Responses based on gender for question 9_3 team loyalty.

Students were more likely to be loyal home team fans than community members (see Figures 12, 13, and 14). Freshmen were slightly more likely to be a home team fan than sophomores, juniors, seniors, or graduate students (see Figure 13).
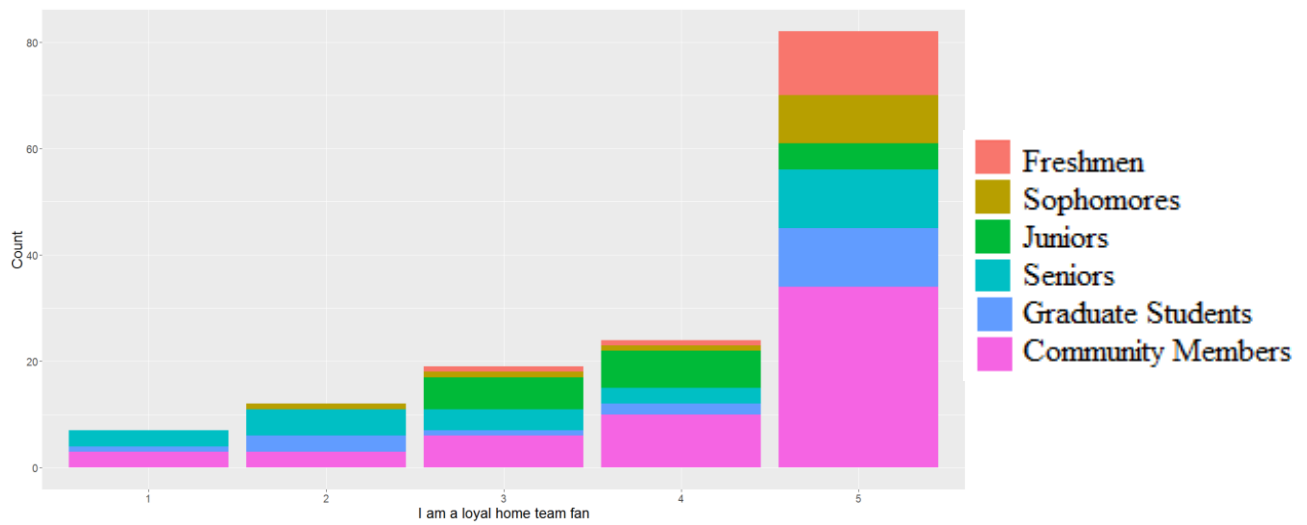

Figure 12. Responses based on class standing for question 9_1 team loyalty.
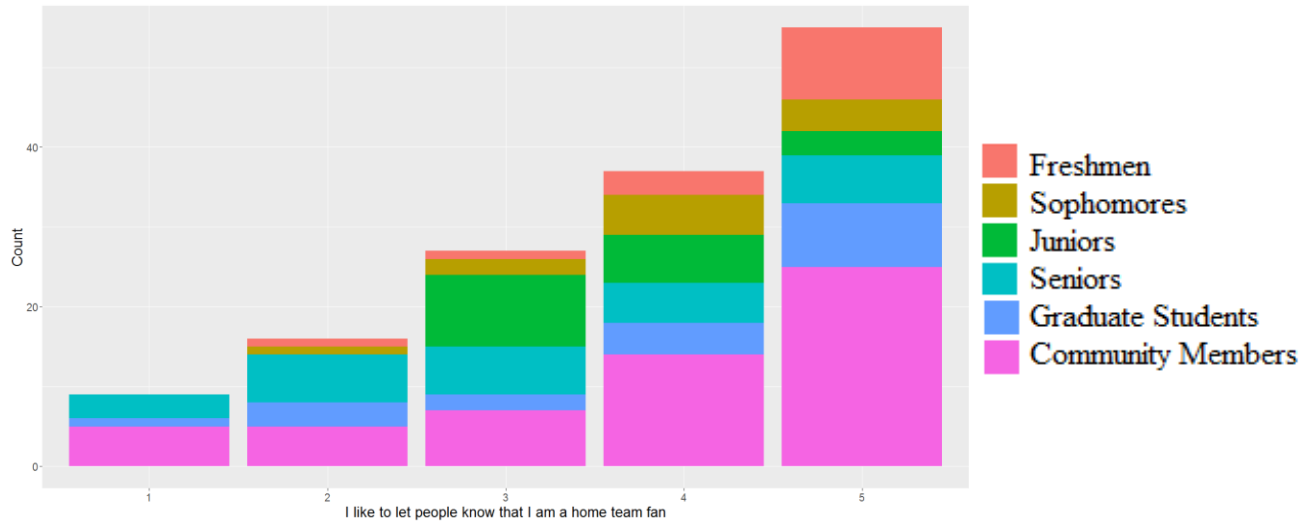
Figure 13. Responses based on class standing for question 9_2 team loyalty.

Figure 14. Responses based on class standing for question 9_3 team loyalty.

Stadium Parking

Men were only slightly more likely to find the stadium's parking favorable than females respondents (see Figure 17). When comparing these responses to those of the previous dimensions, there seems to be an overwhelmingly large number of fans that gave stadium parking a 3 or 4 on the Likert scale (see Figures 15 and 16).

Figure 15. Responses based on gender for question 10_1 stadium parking.

Figure 16. Responses based on gender for question 10_2 stadium parking.

Figure 17. Responses based on gender for question 10_3 stadium parking.

Students were more likely to agree that this facility had good parking compared to

community members (see Figures 18, 19, and 20). Specifically, more freshmen than any other

class standing level viewed the parking as favorable (see Figure 18). Compared to all of the

other five dimensions, a substantial number of community members were unsatisfied with the

parking at this stadium (see Figure 18).

Figure 18. Responses based on class standing for question 10_1 stadium parking.

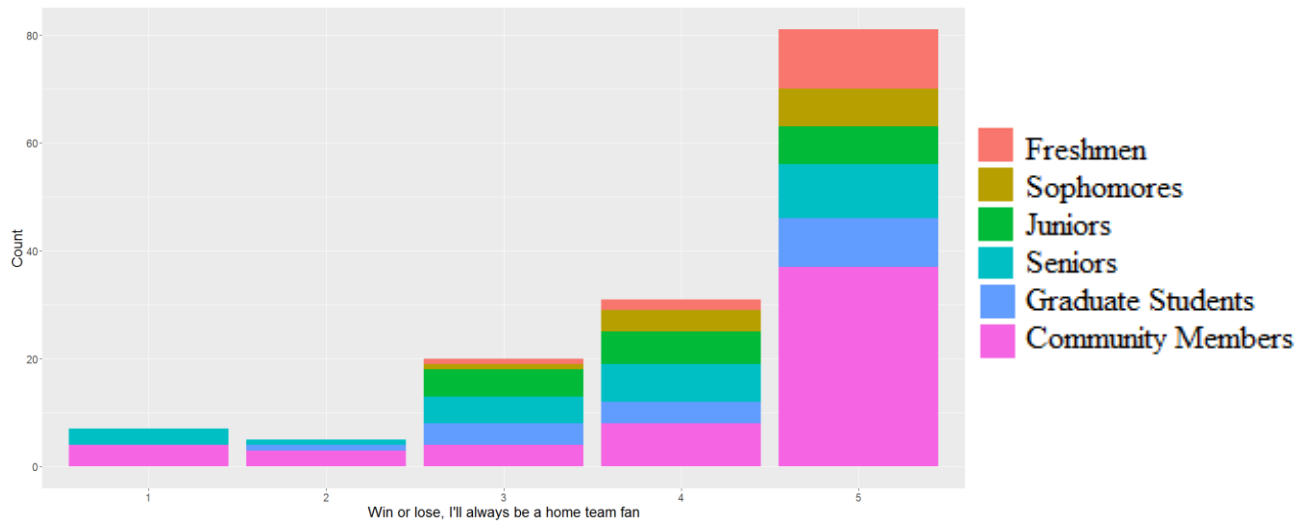*Figure 19.* Responses based on class standing for question 10_2 stadium parking.
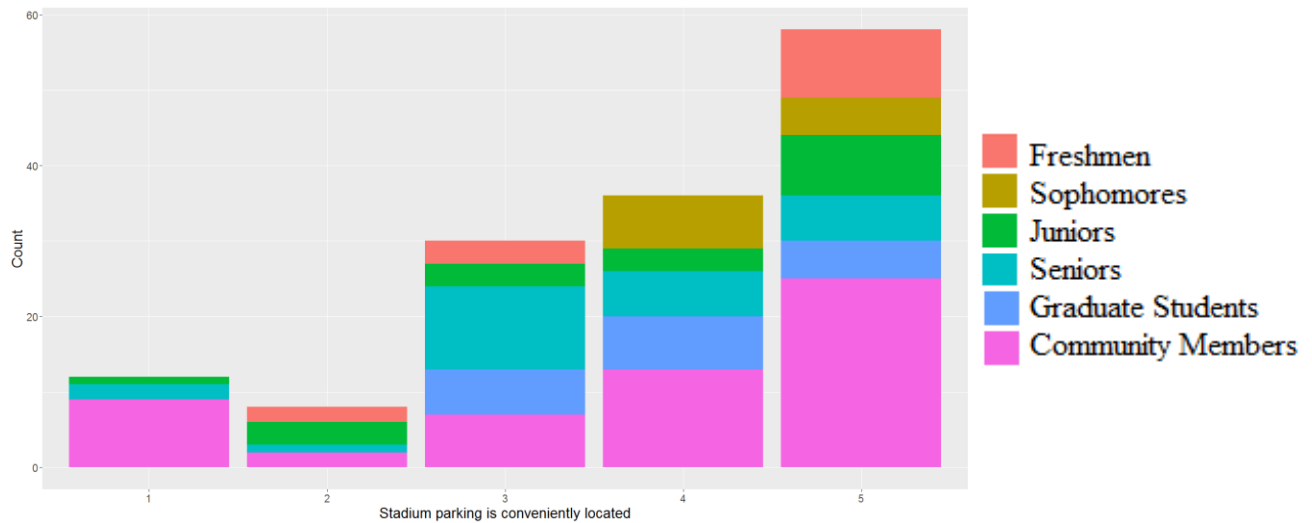
Figure 20. Responses based on class standing for question 10_3 stadium parking.

Stadium Cleanliness

More men tended to have a positive opinion of the stadium's cleanliness than female fans (see Figures 21, 22, and 23).
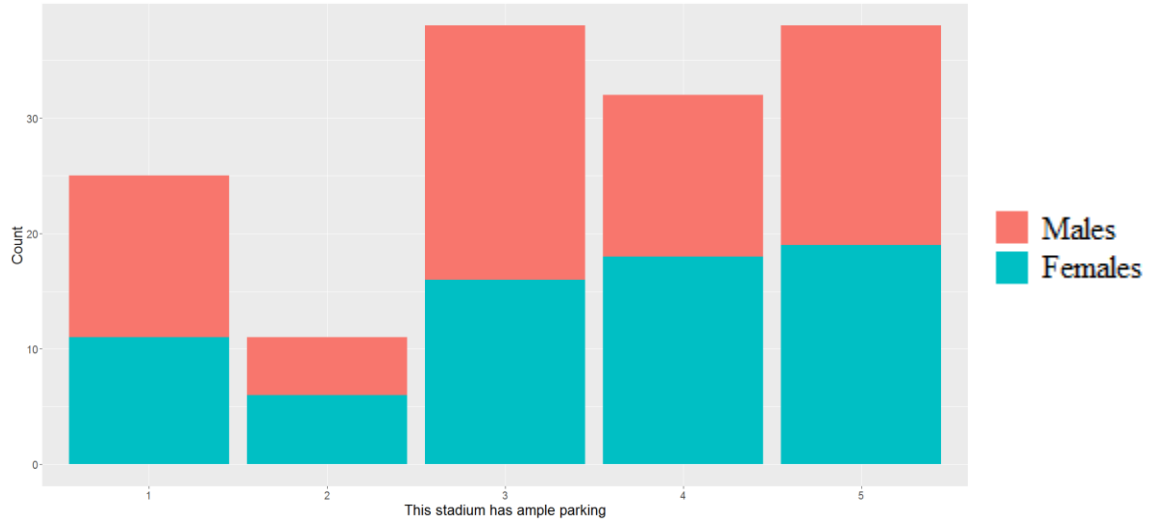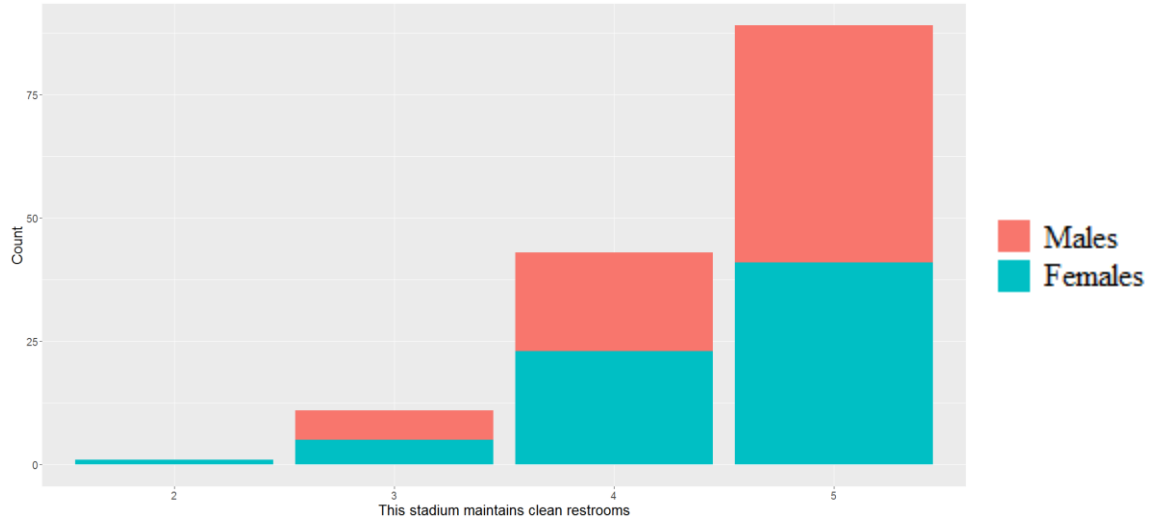
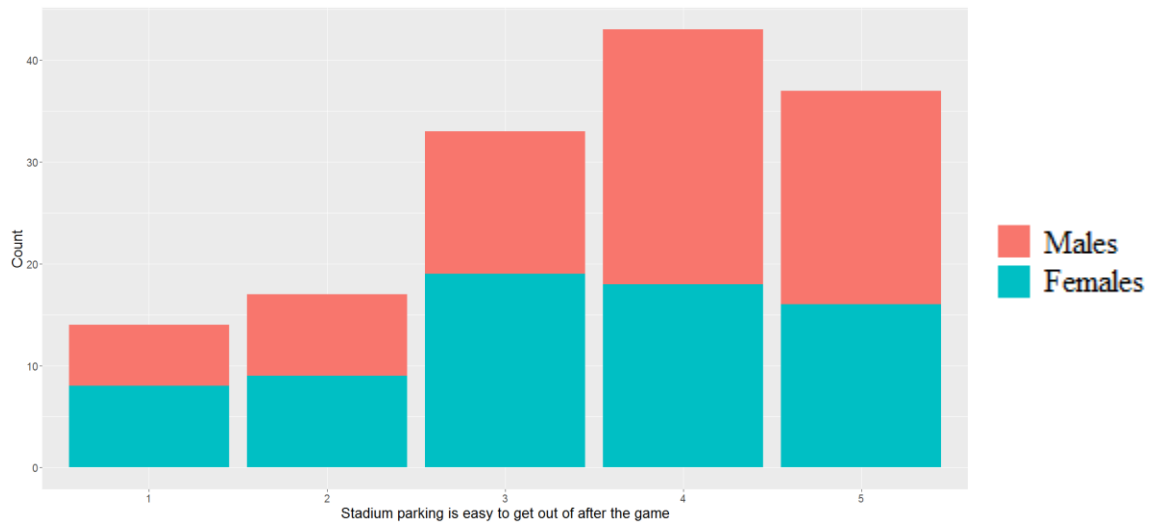*Figure 21*. Responses based on gender for question 11_1 stadium cleanliness.
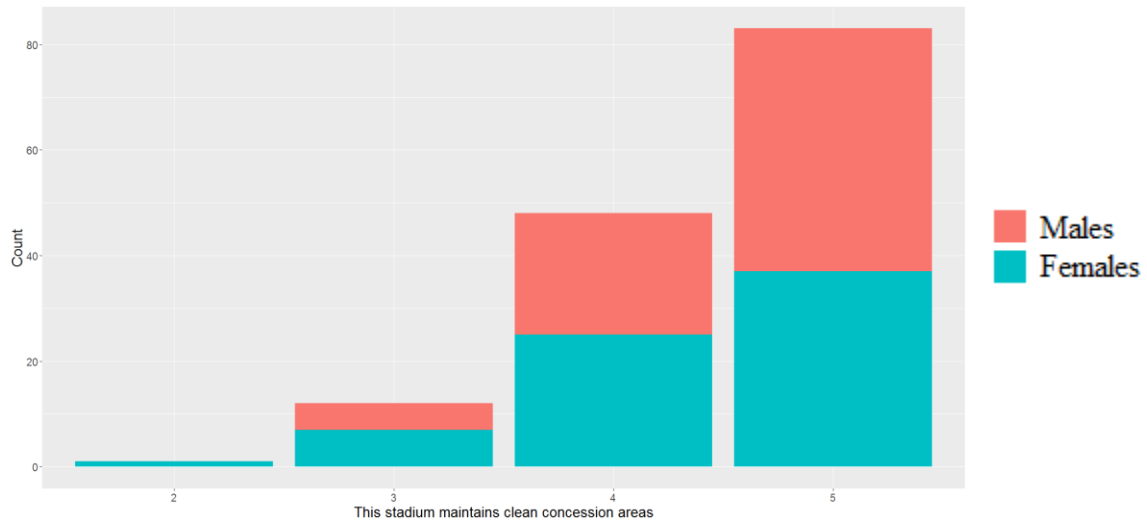
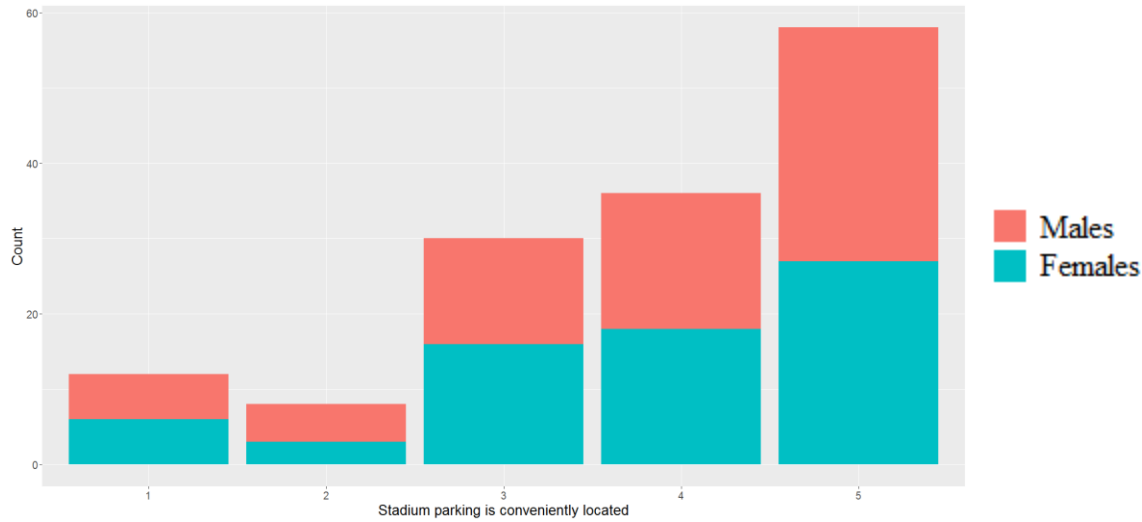*Figure 22*. Responses based on gender for question 11_2 stadium cleanliness.
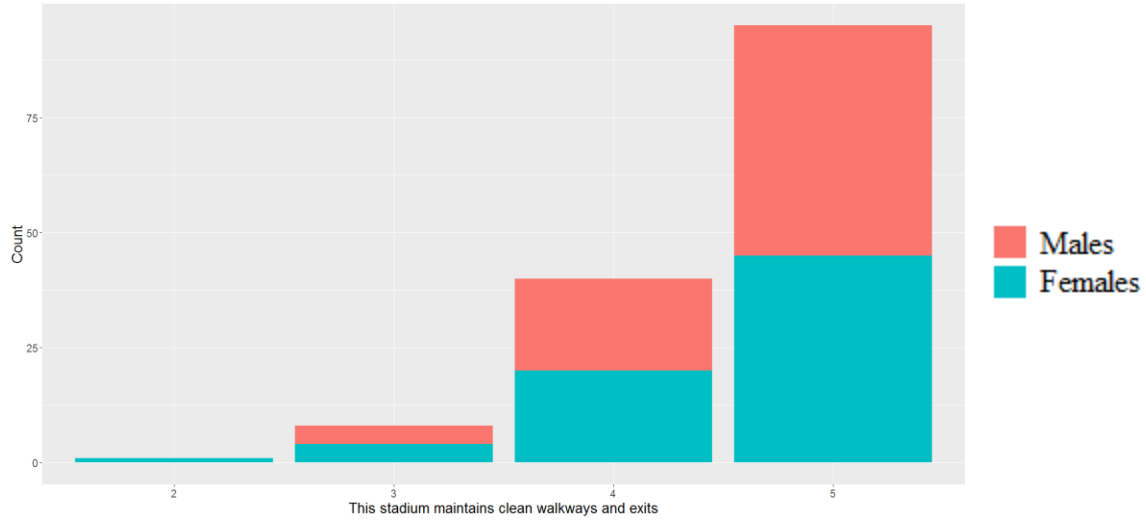
Figure 23. Responses based on gender for question 11_3 stadium cleanliness.

When comparing community members to students, community members were more likely to rate their stadium cleanliness responses as a 5 or very true (see Figures 24, 25, and 26). Within the levels of class standing, graduate students were more likely to find the stadium's cleanliness agreeable (see Figures 24, 25, and 26).
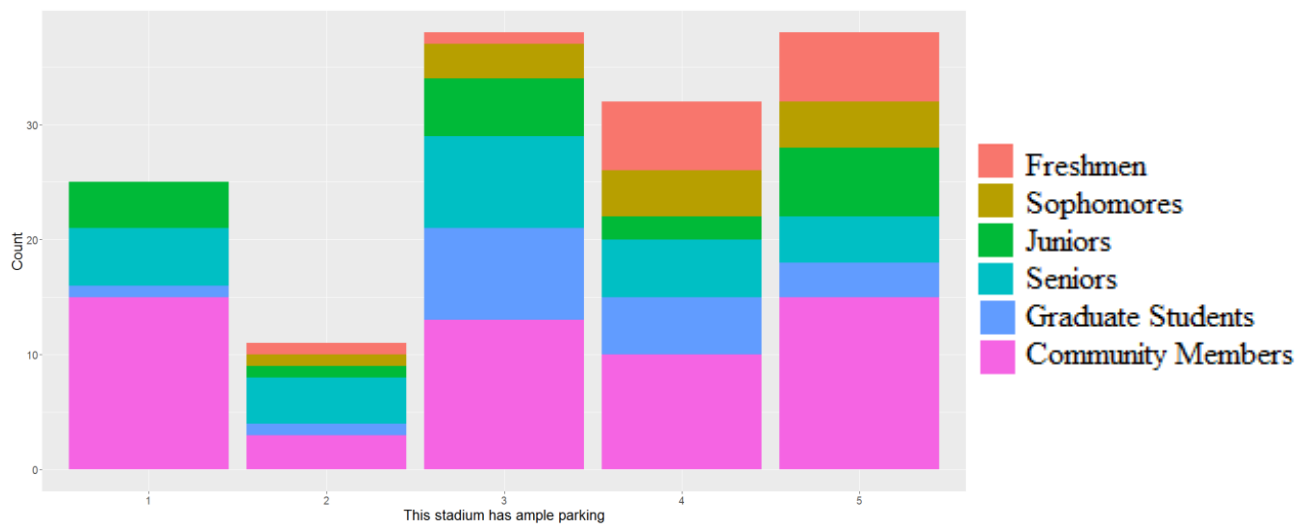

Figure 24. Responses based on class standing for question 11_1 stadium cleanliness.

Figure 25. Responses based on class standing for question 11_2 stadium cleanliness.
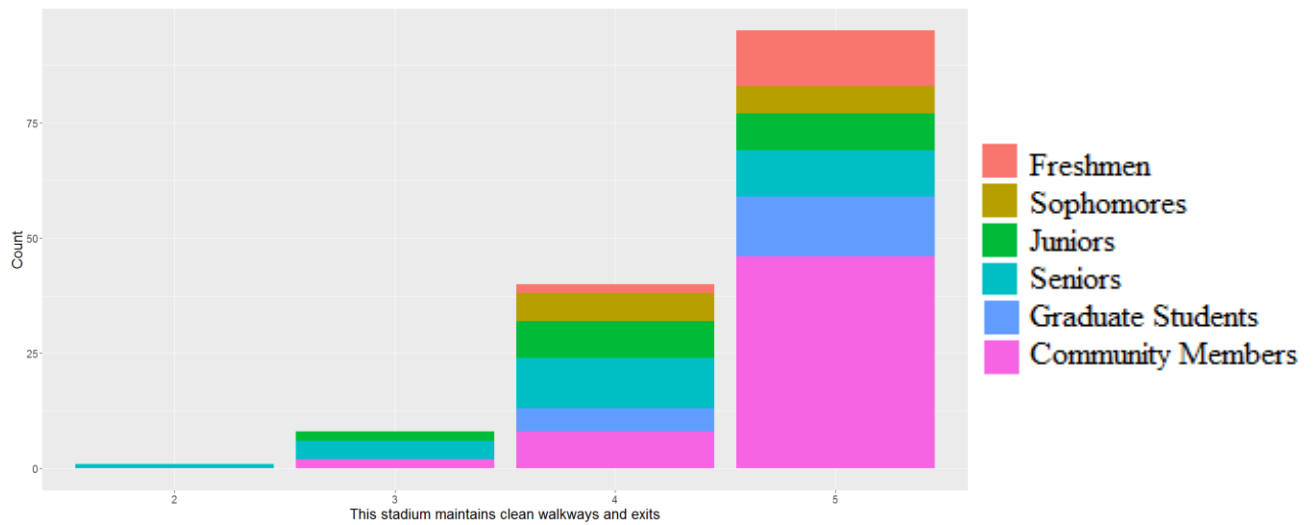
Figure 26. Responses based on class standing for question 11_3 stadium cleanliness.

Fan Control

While comparing gender, males were slightly more likely to rate the fan control at this stadium to be favorable than females (see Figures 28 and 29).
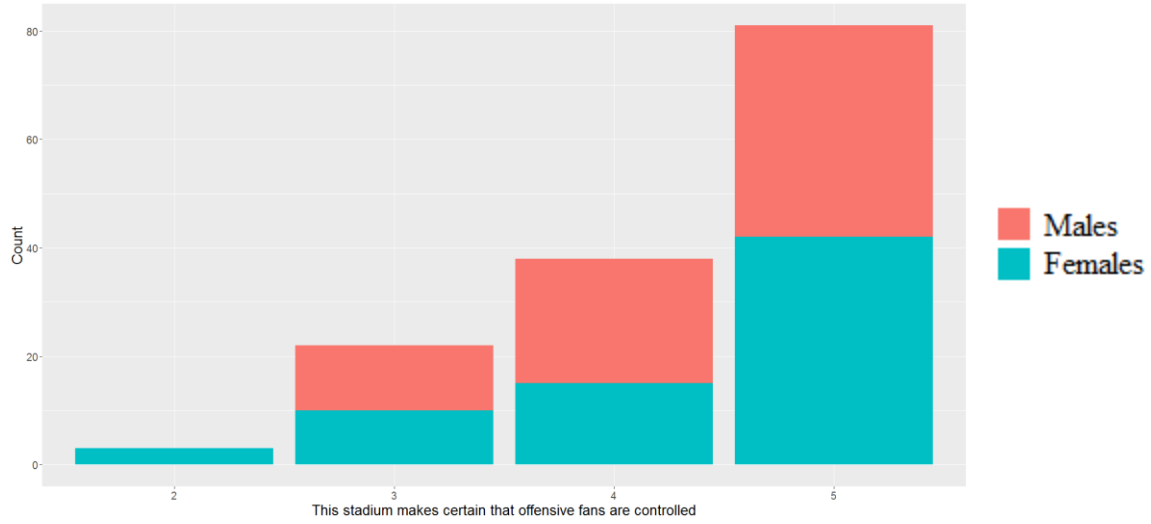
Figure 27. Responses based on gender for question 12_1 fan control.
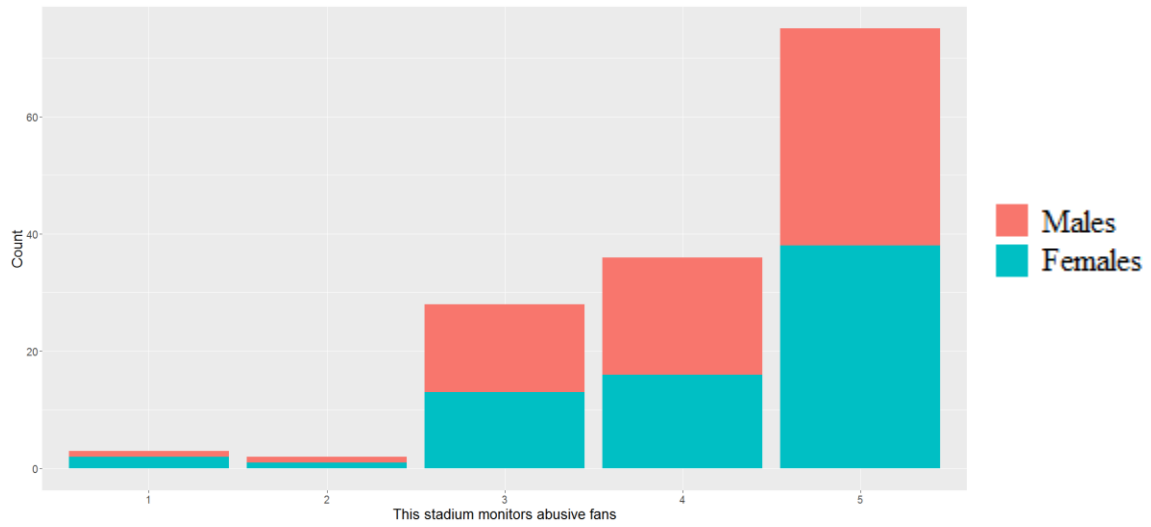
Figure 28. Responses based on gender for question 12_2 fan control.
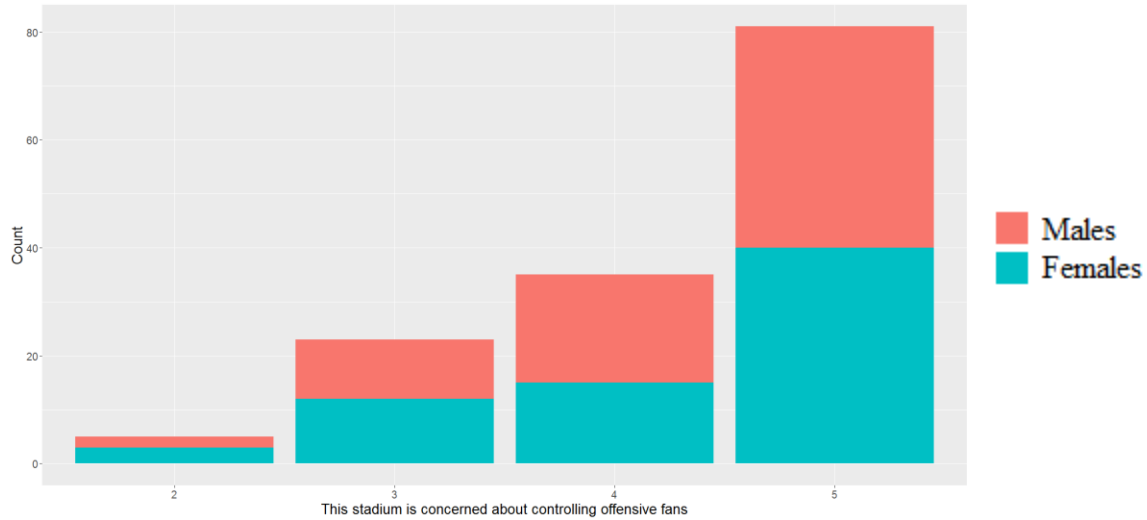
Figure 29. Responses based on gender for question 12_3 fan control.

There were no real visual differences between community members and students when comparing high satisfied responses (see Figures 30, 31, and 32). Freshmen followed closely behind by graduate students were the most likely to give a favorable response toward fan control at this venue (see Figure 31) when comparing within the class standings excluding community members.
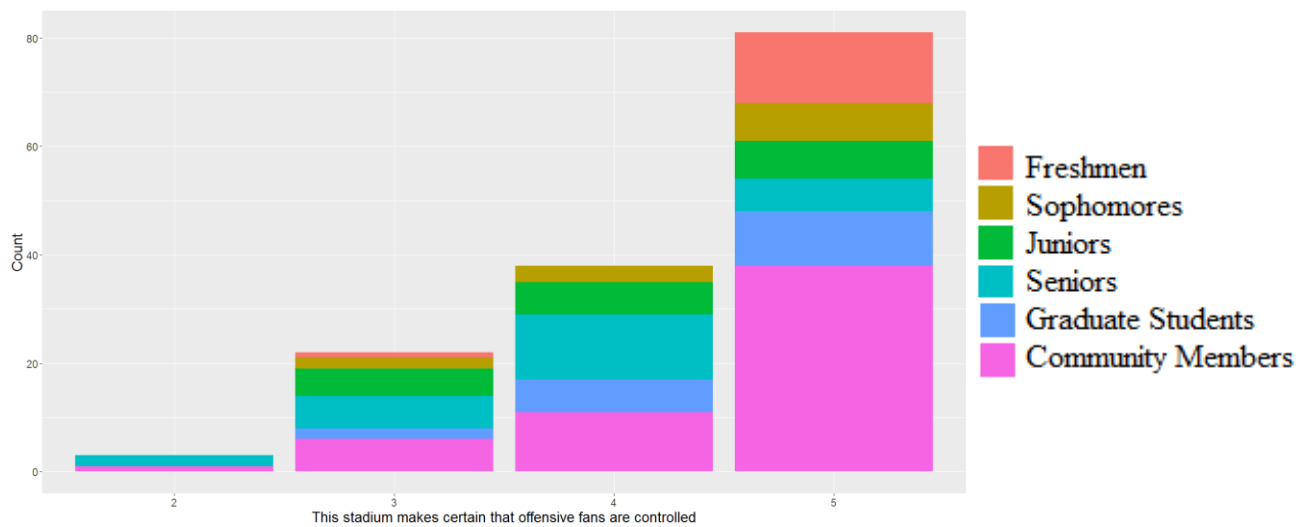
Figure 30. Responses based on class standing for question 12_1 fan control.
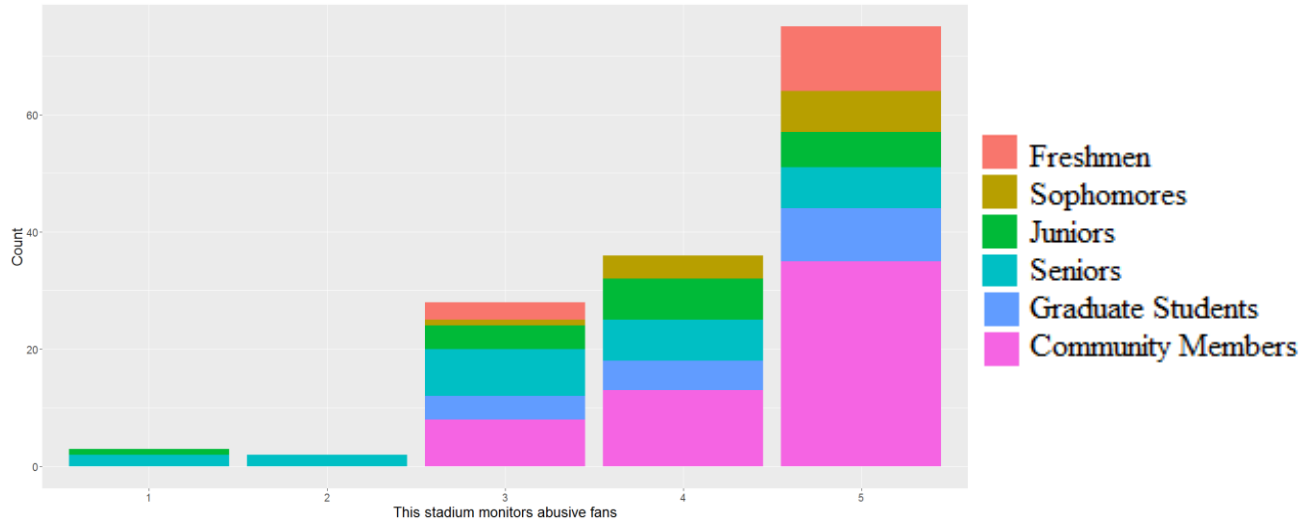
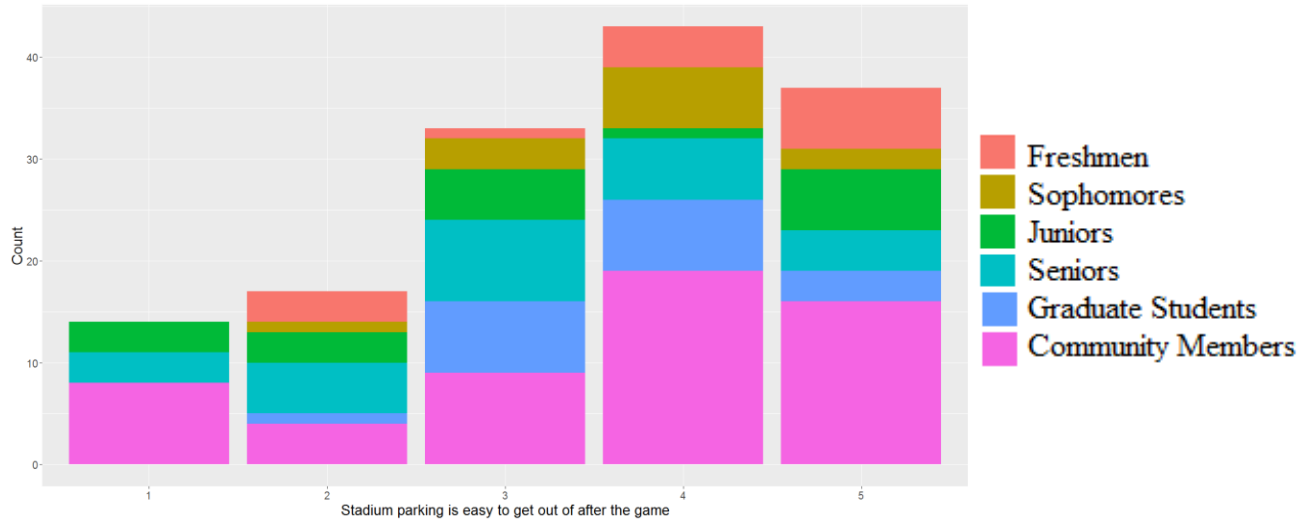*Figure 31.* Responses based on class standing for question 12_2 fan control.
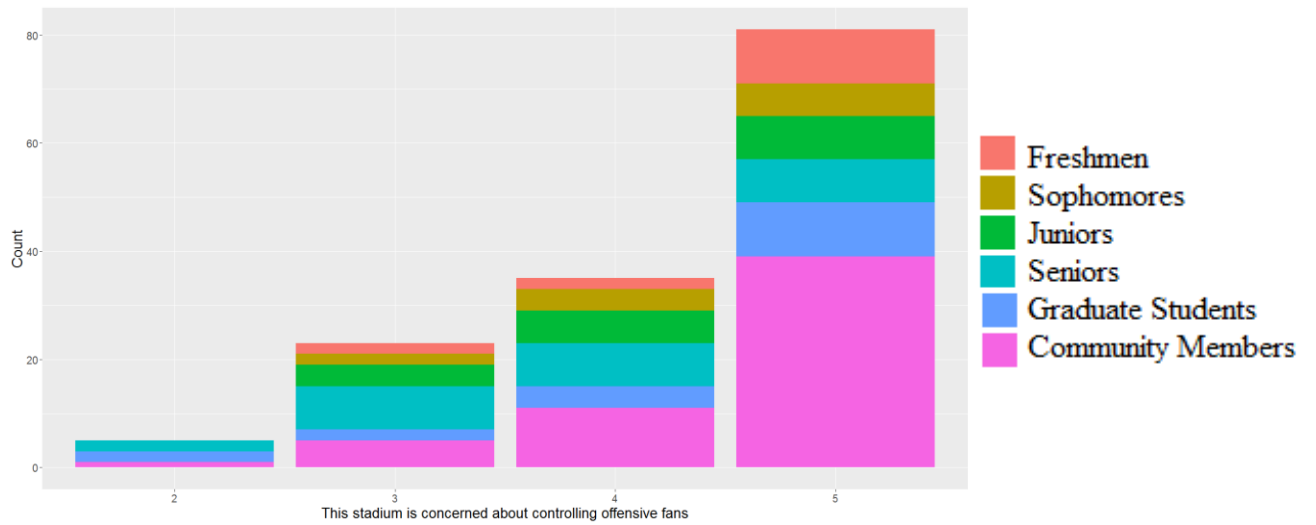
Figure 32. Responses based on class standing for question 12_3 fan control.

Food Service

There were no real noticeable differences between gender when comparing highly

satisfied responses of a 5 on the Likert scale (see Figures 33, 34, and 35).
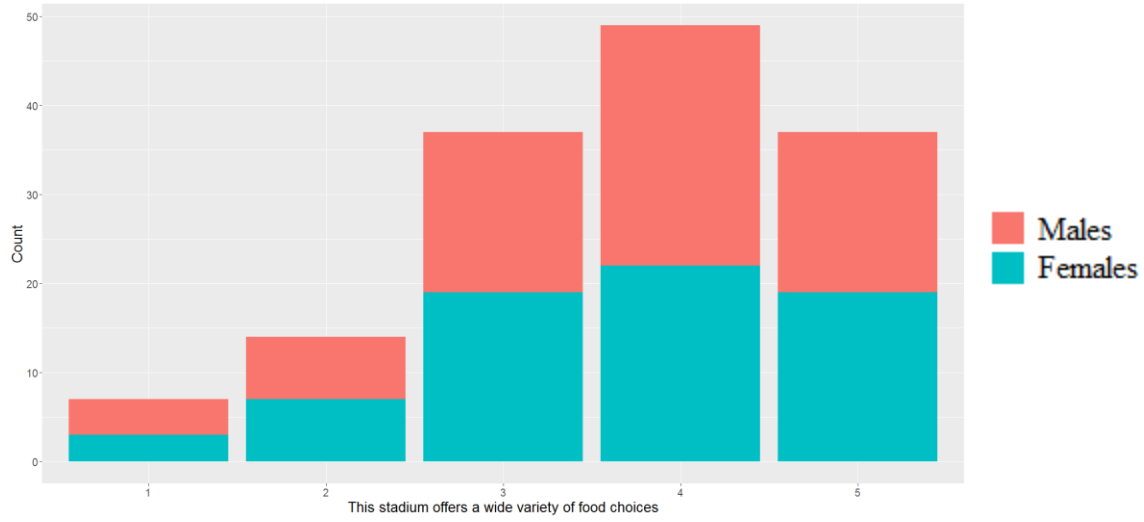
Figure 33. Responses based on gender for question 13_1 food service.
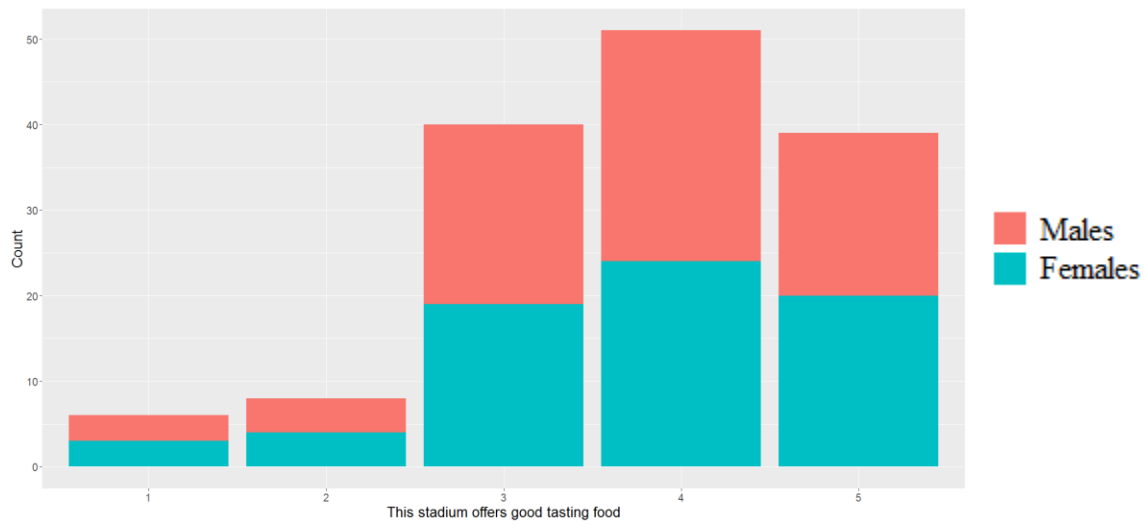
Figure 34. Responses based on gender for question 13_2 food service.
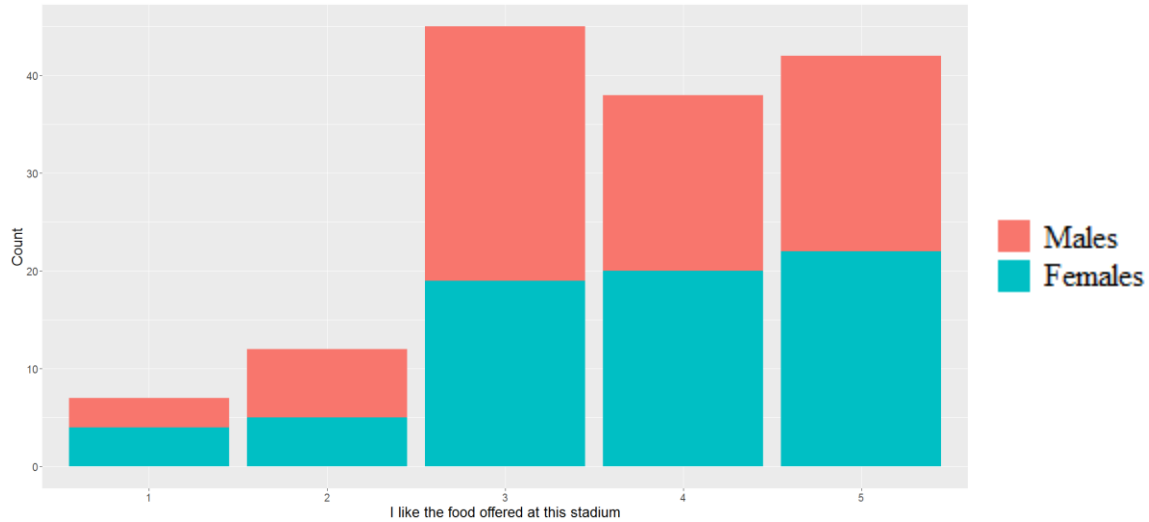
Figure 35. Responses based on gender for question 13_3 food service.

Based on the figures below, students were more likely than the community members to enjoy the food service offerings at this stadium (see Figures 33, 34, & 35). There was not much difference between the levels of class standing as freshmen were only slightly more likely to have a favorable position toward the food service at this venue (see Figure 37).
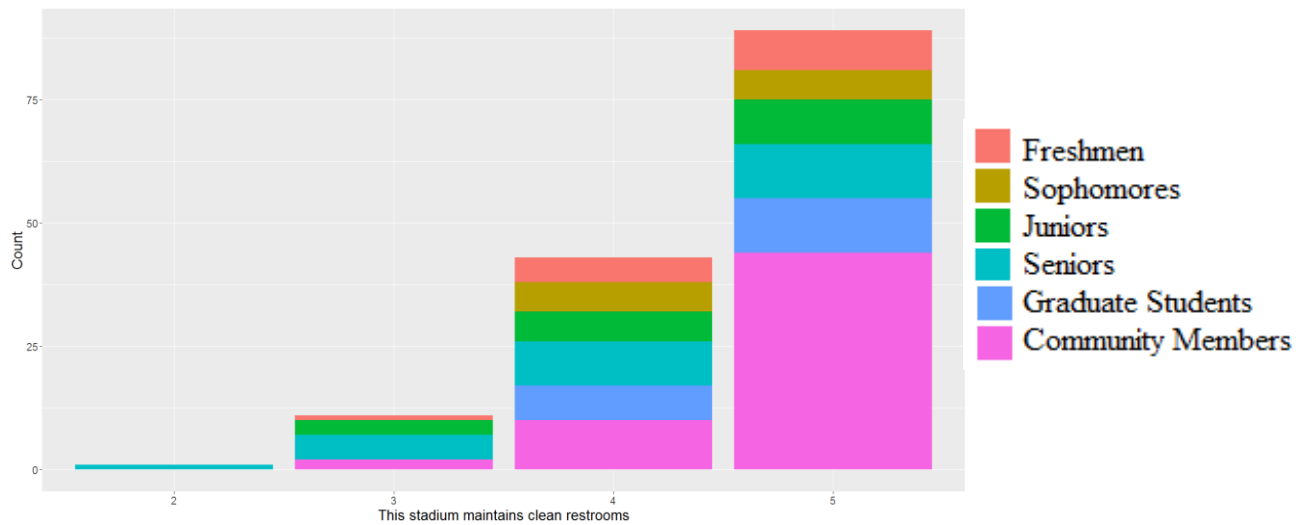

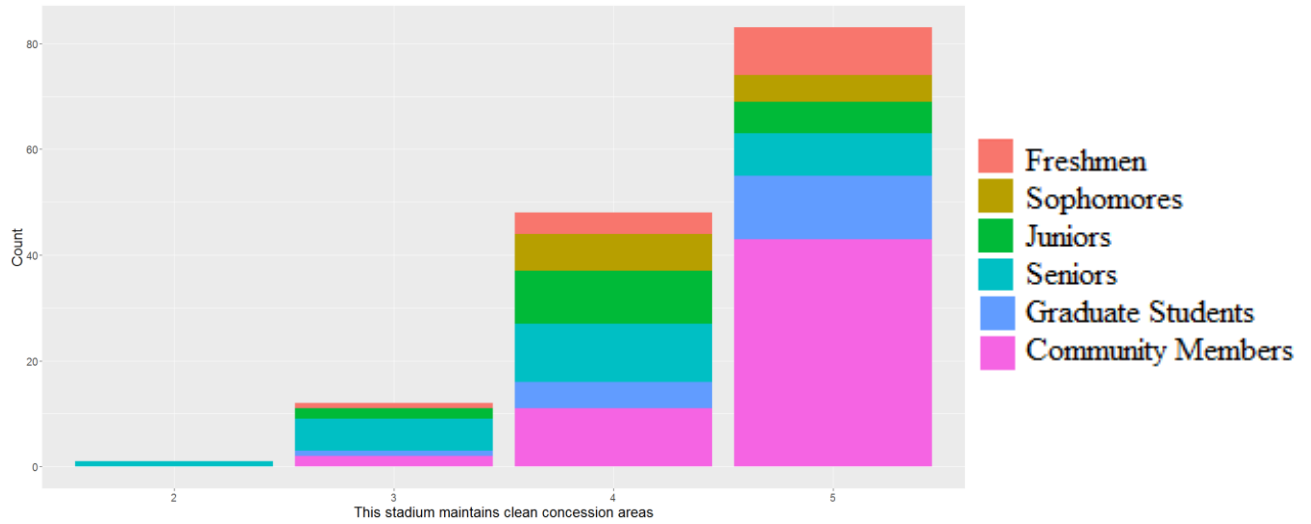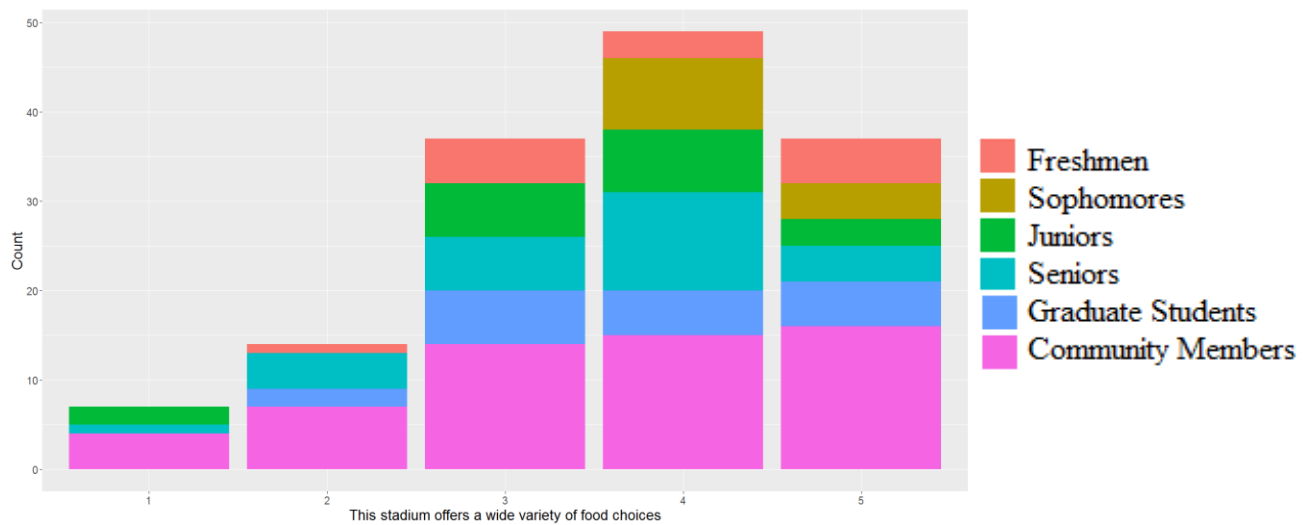*Figure 36.* Responses based on class standing for question 13_1 food service.
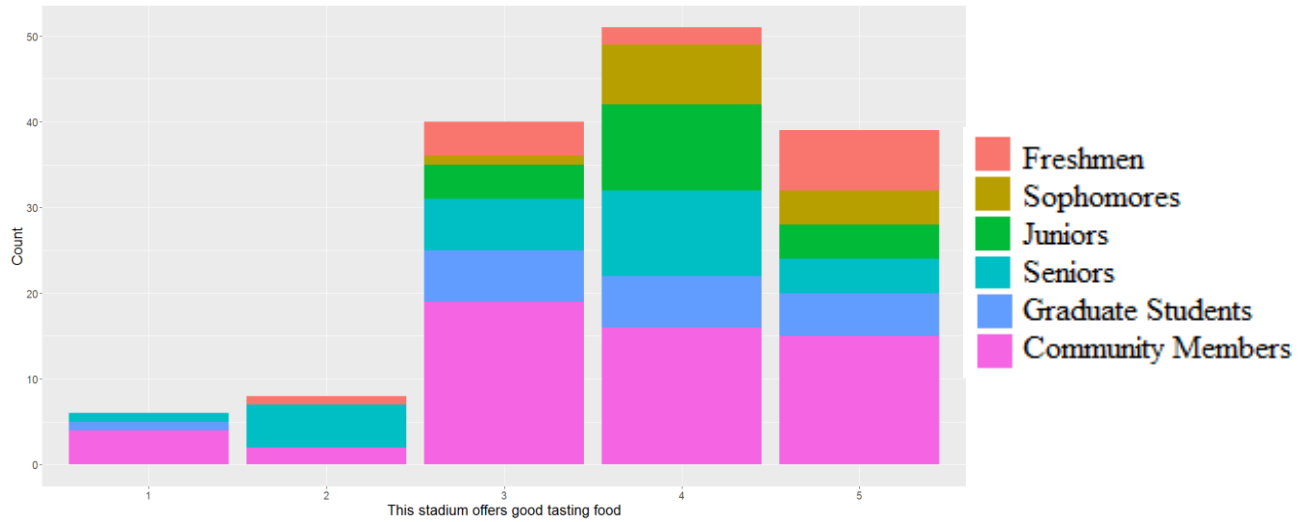
Figure 37. Responses based on class standing for question 13_2 food service.
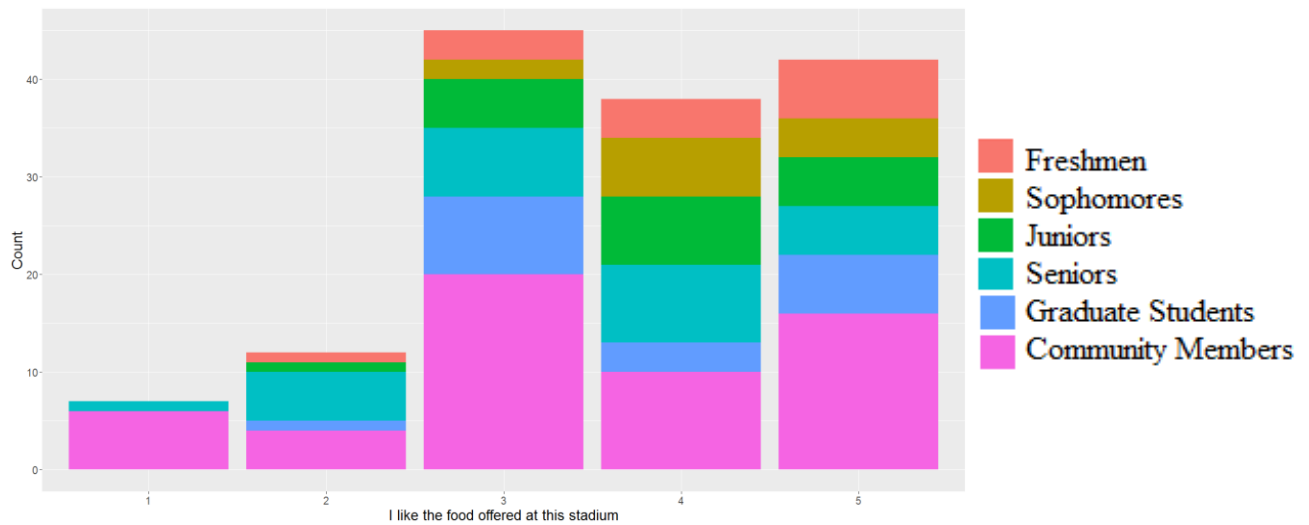
Figure 38. Responses based on class standing for question 13_3 food service.

Analysis of the Six Dimensions; Desire to Stay, Team Loyalty, Stadium Parking, Stadium

Cleanliness, Fan Control, and Food Service

In order to determine if there were any statistically significant differences between the responses provided by each gender for questions relating to the six dimensions, p-values were calculated for each. These p-values were used to determine if any of the questions produced significant results ($p < .05$). Based on the analysis, there were no statistically significant

differences between gender for any of the six dimensions of fan satisfaction. The p-values for

each of the survey questions related to gender and satisfaction within the six dimensions are

reported in Table 3.

Table 1

p-values for Gender

Question	p-value
Q8_1	0.5134
Q8_2	0.5288
Q8_3	0.2242
Q9_1	0.6664
Q9_2	0.2436
Q9_3	0.9905
Q10_1	0.9982
Q10_2	0.0940
Q10_3	0.6030
Q11_1	0.9090
Q11_2	0.3876
Q11_3	0.9417
Q12_1	0.5248
Q12_2	0.6337
Q12_3	0.5828
Q13_1	0.6754
Q13_2	0.8348
Q13_3	0.8445

In order to help answer the research questions regarding satisfaction levels based on the

population's class standing and community members, p-values were once again reported for each

of these groups. Table 4 lists which questions had a statistically significant difference ($p < .05$)

between class standings, the significant class standing, and the p-value. Questions Q10_2,

Q10_3, Q12_1, and Q13_2 had results that were slightly higher than $p < .05$. While not included

in this table since they were not significant, attention should be paid to these as well for possible

significance in other similar studies.

Table 2

Questions With Statistically Significant p-values

Question	Class Standing	p-value
Q8_1	Senior	0.0039
Q8_2	Senior	0.0011
Q8_3	Senior	0.0007
Q9_1	Junior	0.0120
Q9_1	Senior	0.0048
Q9_2	Junior	0.0428
Q9_2	Senior	0.0034
Q9_3	Junior	0.0475
Q9_3	Senior	0.0150
Q10_1	Senior	0.0067
Q10_1	Community Member	0.0151
Q10_2	Senior	0.0217
Q11_2	Senior	0.0151
Q11_3	Junior	0.0229
Q11_3	Senior	0.0050
Q12_1	Junior	0.0104
Q12_1	Senior	0.0020
Q12_2	Junior	0.0422
Q12_2	Senior	0.0033
Q12_3	Senior	0.0171

In order to expand the findings from this survey and to provide a more in-depth analysis of fan satisfaction, an odds ratio was calculated to determine the probability of a group to change their satisfaction level. This was performed for the significant findings from the questions referenced in Table 2 with $p < .05$. Since customer satisfaction levels can be used to predict repeat patronage, the ability of a facility and its managers to increase a fan's satisfaction level is important to understand, as supported by Cronin and Taylor's 1992 research on assessing customer satisfaction levels.

For question 8_1, the probability for senior students to change their satisfaction level is only 0.16 (16%) of the probability for other groups to change their satisfaction level with a 95%

CI of 0.046 to 0.55. The probability for seniors in question 8_2 to change their satisfaction level is .11 (11%) of the probability for all other class standings and community members to change their satisfaction level with a 95% CI of 0.025 to 0.391. For question 8_3, seniors are 0.11 (11%) likely to change their satisfaction level compared to the probability of all other class standings and community members (95% CI, 0.029 to 0.385).

For question 9_1 the probability of juniors to change their satisfaction level was 0.11 (11%) of the probability of any other group (95% CI, 0.016 to 0.534), while for seniors the probability for them to change their satisfaction level is 0.09 (9%) of the probability for the other groups (95% CI, 0.013 to 0.410). The probability for junior students to change their satisfaction level is 0.25 (25%) of the probability for any other group to change their satisfaction with a 95% CI of 0.063 to 0.926 for question 9_2. For the same question, the probability for seniors to change satisfaction levels was 0.14 (14%) compared to the probability for the other groups (95% CI, 0.037 to 0.506). For question 9_3, the probability for juniors to change their satisfaction level is only 0.22 (22%) of the probability for other groups to change their satisfaction level (95% CI, 0.041 to 0.910). The responses from seniors in question 9_3 suggest that the probability of them to change their satisfaction level is 0.16 (16%) of the probability of the other groups with a 95% CI of 0.032 to 0.643.

The probability of seniors in question 10_1 to change their satisfaction level is 0.20 (20%) of the probability that the other class standings or community members will change theirs at a 95% CI of 0.061 to 0.631. Community member's responses for the same question indicate that the probability of them changing their satisfaction level is 0.26 (26%) lower than any of the student groups (95% CI, 0.086 to 0.758). Seniors have a 0.23 (23%) probability of changing

their satisfaction levels compared to any other class standing or community members using a 95% CI of 0.065 to 0.798.

For question 11_2 the probability of senior students to change satisfaction levels is 0.19 (19%) of the probability for the other students or community members to change levels with a CI of 0.045 to 0.696. Question 11_3 results indicated that the probability of juniors to change satisfaction levels is only 0.13 (13%) of any other group to change their satisfaction level (95% CI, 0.017 to 0.655). The probability of senior students to make a change in their satisfaction is only 0.09 (9%) of the probability for others to change their satisfaction with a 95% CI of 0.012 to 0.411.

For question 12_1, junior students had a probability of 0.05 (5%) of changing their satisfaction level compared to all the other groups (95% CI, 0.003 to 0.360). The probability of seniors to change their satisfaction for this question is only 0.03 (3%) when compared to the other class standings and community members with a 95% CI of 0.002 to 0.198. The probability of juniors to change their satisfaction level for question 12_2 is 0.20 (20%) of the probability for all other class standings (95% CI, 0.037 to 0.876). For question 12_2, the probability of seniors to move satisfaction levels is 0.10 (10%) of the probability of any other class standing (95% CI, 0.020 to 0.431).

For question 12_3, the probability of senior participants to switch their satisfaction level is 0.19 (19%) when compared to the probability for all other groups to change their satisfaction levels (95% CI, 0.044 to 0.705).

Wakefield and Sloan (1995) studied the same six dimensions as this study, to help gauge fan satisfaction and consequently their future attendance intentions. They concluded that a fan's attendance in the future is dependent on their entire experience. Included in the study was a

question concerning future attendance intentions. The response frequencies and percentage of

the population are displayed in Table 3. The response most often provided by participants for

future attendance intentions with 38.9 percent was a 7 (n = 56) on a 7-point Likert scale with 7

being considered very frequent. The mean score given was a 5.42 out of 7 (see Table 4). This

suggests that many fans will likely return to this stadium in the future, but that there is room for

improvements in their overall satisfaction.

Table 3

Future Attendance Intention Frequencies

Survey Ranking	Response Frequency	Percent
1	2	1.4
2	4	2.8
3	9	6.3
4	26	18.1
5	34	23.6
6	13	9.0
7	56	38.9

Table 4

Attendance Intentions in the Future

	N	Minimum	Maximum	Mean	Std. Deviation
Attendance Intentions	144	1	7	5.42	1.545

CHAPTER V

DISCUSSION

Summary of the Study

There are multiple benefits associated with ensuring that fans are satisfied while attending sporting events. Customer satisfaction is a major component in customer retention (Cronin, Brady, & Hult, 2000). Organizations that are able to create environments and experiences that lead to high customer satisfaction tend to have positive word-of-mouth and customer loyalty (Anderson, Fornell, & Lehmann, 1994). Customer satisfaction levels have been used to predict a fan's likelihood of attending a future sporting event (Kwon, Trail, & Anderson, 2005).

Despite this knowledge, little research has examined the core product (e.g., team performance) and services like facilities and concessions and how these might predict customer satisfaction (Greenwell, Fink, & Pastore, 2002). Previous research (Wakefield and Sloan, 1995) has suggested that team loyalty strongly affects attendance and that stadium design and stadium services directly influence fans' desire to stay and attend games.

The reason for this research was to contribute to the knowledge of what factors influence fan satisfaction at a rarely, if ever, studied Division II college level.

This study yielded a preliminary total of 170 completed surveys by fans at Indiana University of Pennsylvania men's and women's basketball games. Of these collected responses, 144 (84.7%) were deemed fully completed with no missing data and, therefore, usable.

Hypotheses Results

Before this study was conducted, hypotheses were made based on the research question for sub questions a, b, and c. These hypotheses considered differences in satisfaction between gender, class standing, and students versus community members.

It was hypothesized that there would be a difference in customer satisfaction between the six dimensions, specifically for sub question a, that there will be a significant difference in dimensions of satisfaction between males and females. The results indicated that there was no statistically significant difference between male and female respondents ($p < .05$). Therefore, the hypothesis for sub question a was rejected.

It was hypothesized for question b that there will be no significant difference in dimensions of satisfaction between class standings. Based on the results of this study, seniors were found to have a statistically significant response to 13 out of the 18 possible responses. Juniors had responses that were statistically significant for 6 of the questions. Freshmen and sophomores were not found to have had any statistically significant results and community members provided one significant response ($p < .05$) (refer back to Table 2). Therefore, this hypothesis would be accepted when considering senior and junior responses to the survey questions compared to the other class standings, but rejected when considering Freshman, sophomores, and graduate students.

Hypothesis c predicted that there will be a significant difference in dimensions of satisfaction between students and community members. When comparing the statistically significant results from community members to those of the students, community members only had a statistically significant result for question 10_1. Therefore, hypothesis c was also rejected.

Conclusion

Overall, the results of this study suggest that there are no statistically significant differences between males' and females' satisfaction levels at these games. As for the differences between class standing, the results could be different between the under and upper classmen because there are different levels of maturity and expectations that can surface as a result of years being on campus. As freshmen and sophomores, game experiences are exciting and fans can often be in awe of the larger venue and higher level of competition. By junior and senior year, fans can become more critical and want more. What was exciting in the beginning, now might not meet their increasing level of expectation. They could now be dissatisfied with things that satisfied them as underclassmen. The results also suggest that there are significant differences between juniors and seniors compared to any other class standing including community members.

Based on the responses and opinions of the participants, a large percentage of the respondents are likely to attend another game in the future at this venue. This indicates that many fans were satisfied with their experience at this stadium. Wakefield and Sloan (1995) suggest that fans who enjoy their time at a facility are more likely to return. This study's results help to confirm this belief.

Fan satisfaction is important as it is a predictor of repeat attendance. Facility managers that recognize the importance of satisfying their fans' needs can better improve their service quality. This is crucial for today's facility managers as they compete against other activities for fans' time and money.

Some possible limitations to this study that should be considered is the nature of the data. The data is solely based on fan opinion which has the potential to change from game to game.

Additionally, the questionnaire was kept short and focused only on six dimensions that can contribute to fan satisfaction. Another item to consider, that was not addressed, was whether or not a fan had to pay for their game ticket.

Direction for Future Research

This study's findings cannot be generalized to apply to all venues and level of play due to the limited sample size from a Western Pennsylvania university. A larger, more diverse sample is recommended for future study. In the future, researchers should consider looking at responses from specifically women's versus men's games since there are often differences in game atmosphere and attendance numbers. It could also be of value to rank the results of the six dimensions to compare which factors are more important to fans. This information could provide managers with information on where to focus more of their efforts in order to increase fan satisfaction. An additional factor to consider that was not considered in this study, is the impact of responses based on whether fans purchased or were given complementary tickets. At Indiana University of Pennsylvania, students are admitted into the games for free while at the professional, development, and college Division I levels all fans typically pay for tickets. There is the possibility for differences in expectations and opinions based on whether or not a fan has money invested in an event.

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Appendix A

Survey

1. Consent Form
    ☐ Continue

2. Are you at least 18 years of age?
    ☐ Yes
    ☐ No

3. What is your gender?
    ☐ Male
    ☐ Female

4. What is your class standing?
    ☐ Freshman
    ☐ Sophomore
    ☐ Junior
    ☐ Senior
    ☐ Graduate
    ☐ Community Member

5. Ethnicity origin (or Race): Please specify your ethnicity.
    ☐ White
    ☐ Hispanic or Latino
    ☐ Black or African American
    ☐ Native American or American Indian
    ☐ Asian / Pacific Islander
    ☐ Other

6. Education: What is the highest degree or level of school you have completed? *If currently enrolled, mark highest degree completed.*
    ☐ Some high school, no diploma
    ☐ High school diploma
    ☐ Some college credit, no degree
    ☐ Trade/technical/vocational training
    ☐ College Graduate

7. Marital Status: What is your marital status?
    ☐ Single, never married
    ☐ Married or domestic partnership
    ☐ Widowed
    ☐ Divorced
    ☐ Separated

Please rate your experience using the following 1-5 scale.   1= Not at all   5= Very true

8. Desire to Stay
        1. I like to stay for the entire game.
                1   2   3   4   5
        2. I enjoy spending time at this stadium.
                1   2   3   4   5
        3. I like to stay at the stadium as long as possible.
                1   2   3   4   5

9. Team Loyalty
        1. I am a loyal [home team] fan.
                1   2   3   4   5
        2. I like to let people know that I am a [home team] fan.
                1   2   3   4   5
        3. Win or lose, I'll always be a [home team] fan.
                1   2   3   4   5

10. Stadium Parking
        1. This stadium has ample parking.
                1   2   3   4   5
        2. Stadium parking is easy to get out of after the game.
                1   2   3   4   5
        3. Stadium parking is conveniently located.
                1   2   3   4   5

11. Stadium Cleanliness
        1. This stadium maintains clean restrooms.
                1   2   3   4   5
        2. This stadium maintains clean concession areas.
                1   2   3   4   5
        3. This stadium maintains clean walkways and exits.
                1   2   3   4   5

12. Fan Control
        1. This stadium makes certain that offensive fans are controlled.
                1   2   3   4   5
        2. This stadium monitors abusive fans.
                1   2   3   4   5
        3. This stadium is concerned about controlling offensive fans.
                1   2   3   4   5

13. Food Service
   1. This stadium offers a wide variety of food choices.
          1   2   3   4   5

   2. This stadium offers good tasting food.
          1   2   3   4   5

   3. I like the food offered at this stadium.
          1   2   3   4   5

14. Crowding
How accurately do the following words describe the stadium?

Confined
     1   2   3   4   5   6   7   8
Stuffy
     1   2   3   4   5   6   7   8
Crowded
     1   2   3   4   5   6   7   8
Cramped
     1   2   3   4   5   6   7   8
Restricted
     1   2   3   4   5   6   7   8

15. Attendance Intentions
In the future, will your attendance at this stadium be
Not at all   Very Frequent
     1   2   3   4   5   6   7

16. Are there any other factors that influence your customer satisfaction while attending IUP basketball games?
_____

Appendix B

Site Approval Letter

I am writing to ask permission to gather survey responses during IUP Basketball Games as part of my Master's thesis.

The purpose of this study is to understand if a fan's perception of their experience at a sporting event influences their customer satisfaction and the chances of them coming again. This research could better help us understand environments and experiences that impact customer's satisfaction and loyalty to an organization. By understanding these factors, changes can be implemented to better serve the customer. Questions will be asked using an online survey called Qualtrics. This survey should take no longer than 5 minutes to complete. They will be asked basic demographic questions and then questions about their perceptions of the service, facility, staff, and likelihood of future attendance.

All of the responses will be kept anonymous. No one will put their name on the survey and their personal identity will not be revealed. All of the information provided will be used to draw conclusions about fan customer satisfaction and chances of repeat attendance.

Participation in this study is completely voluntary. Refusal to participate will involve no penalty for the fan. If they choose to participate, they can stop at any time and exit the survey. Completion of the survey implies consent in the research study.

Thank you for your consideration. If you have any questions about this study, please contact:
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Appendix C

Script

Hi. My name is _____ and I am a graduate student at IUP. I am conducting research with my fellow graduate students to understand if a fan's perception of a sporting event influences their customer satisfaction and repeat attendance. Would you be willing to answer a few questions about your experience here at the KCAC? Your participation is completely voluntary. The survey should take no longer than 5 minutes. Thank you.