2011

The effects of fantasy football participation on team identification and NFL fandom

Jeremy Lee
Louisiana State University and Agricultural and Mechanical College, jplee25@gmail.com

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_theses
Part of the Mass Communication Commons

Recommended Citation

This Thesis is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Master’s Theses by an authorized graduate school editor of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.
THE EFFECTS OF FANTASY FOOTBALL PARTICIPATION ON TEAM IDENTIFICATION AND NFL FANDOM

A Thesis

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Master of Mass Communication in The Manship School of Mass Communication

by

Jeremy Lee
B.A., Louisiana College, 2007
May 2011
ACKNOWLEDGMENTS

First, I would like to thank my dad, Gene Lee, mom, Mary Lee, brother, Joshua Lee, and sister, Jessica Lee, for their support and encouragement while pursuing my master’s degree. I would also like to thank Dr. Lance Porter for his guidance and support that turned a secondary statement made in his office into a fully developed academic research project. I would also like to thank my other thesis committee members, Dr. Anne Osborne and Dr. Aaron Clopton, for their advice and insight into this research area.
# TABLE OF CONTENTS

ACKNOWLEDGMENTS ........................................................................................................ ii

LIST OF TABLES ................................................................................................................... v

LIST OF FIGURES ............................................................................................................... vi

ABSTRACT ........................................................................................................................ vii

CHAPTER

1 – INTRODUCTION ............................................................................................................ 1

2 – LITERATURE REVIEW ................................................................................................. 3
   Fantasy Football ............................................................................................................... 3
   Sports Fandom ................................................................................................................ 5
   Team Identification ......................................................................................................... 7
   Team Loyalty .................................................................................................................. 8
   Social Identity Theory ................................................................................................. 10
   Consumer Behavior ..................................................................................................... 11
   Uses and Gratifications .............................................................................................. 18
   Motivations to Watch Mediated Sports ................................................................. 19

3 – RESEARCH QUESTIONS ............................................................................................... 24

4 – METHOD ....................................................................................................................... 25
   Procedure .................................................................................................................... 25
   Independent Variables ............................................................................................. 26
   Dependent Variables ............................................................................................... 27

5 – RESULTS ..................................................................................................................... 29
   Fantasy Football ........................................................................................................ 30
   Watching NFL Games .............................................................................................. 30
   Favorite Team vs. Fantasy Team ................................................................................ 31
   Identification, Loyalty, and Fandom of NFL Teams ............................................. 33
   Constructing the Measures ....................................................................................... 33
   Level of Participation and Team Identification .................................................... 38
   Level of Participation and Team Loyalty .............................................................. 40
   Level of Participation and NFL Fandom ............................................................... 41
   Level of Participation and Consumer Behavior .................................................... 42
   Win Preference .......................................................................................................... 43
   Gender Effects ........................................................................................................... 45
   Motivations to Play Fantasy Sports ....................................................................... 46
   Effects of Motivation Factors ............................................................................... 49
6 – DISCUSSION .................................................................................................................. 56
Limitations ......................................................................................................................... 61
Future Research ................................................................................................................ 62

REFERENCES ................................................................................................................... 63

APPENDIX: SURVEY ......................................................................................................... 74

VITA .................................................................................................................................... 84
LIST OF TABLES

1. Age, Race, Gender, and Citizenship ................................................................. 29

2. Favorite NFL Teams ................................................................................................... 32

3. Win Preference: Fantasy Team of Favorite NFL Team ............................................... 34

4. Team Identification Score for Favorite NFL Team ..................................................... 35

5. Team Loyalty Score for Favorite NFL Team ............................................................. 36

6. NFL Fandom Score for Favorite NFL Team ................................................................ 37

7. Participation Level and Team Identification, Team Loyalty, and NFL Fandom (Controlling for Team Record) ............................................................................. 39

8. Win Preference and Team Identification, Team Loyalty, and NFL Fandom (Controlling for Team Record) ............................................................................. 45

9. Factor Analysis for Motivations to Play Fantasy Sports .......................................... 48
LIST OF FIGURES

1. Participation Level and Team Identification, Team Loyalty, and NFL Fandom ..................39
2. Web of Terms for Team Identification..............................................................................40
3. Web of Terms for NFL Fandom.....................................................................................41
4. Win Preference and Team Identification, Team Loyalty, and NFL Fandom.........................44
5. Gender and Team Identification, Team Loyalty, and NFL Fandom..................................46
6. Levels of Motivation Factors and Participation Level ......................................................50
7. Levels of Motivation Factors and Team Identification ....................................................51
8. Levels of Motivation Factors and Team Loyalty ............................................................52
9. Levels of Motivation Factors and NFL Fandom .............................................................53
ABSTRACT

Nearly 27 million people in North America played fantasy sports in 2009. This quantitative study examined how a person’s level of participation in fantasy football affects team identification, team loyalty, fandom of the National Football League (NFL), and consumer behavior. I also looked at whether fantasy football participants prefer a win by their fantasy team or their favorite team. An online survey was conducted using a snowball sample. I found higher participation levels result in higher team identification, higher team loyalty, and higher fandom, where fandom of the NFL is higher than team identification. Higher levels of participation also led to more time spent watching NFL games as well as more time spent online researching and updating their fantasy football team. I also found that over 41% of fantasy football participants prefer a win by their fantasy team, instead of their favorite team. A win preference of fantasy team resulted in lower team identification and team loyalty, which could have major implications on ticket sales, team merchandise sales, and sponsorship sales.
The rise in popularity of fantasy sports is changing the way the fan interacts with and watches sports. Fantasy sports are even changing the way athletes think about the game. Following a 2009 game against the New York Jets, Jacksonville Jaguars running back, Maurice Jones-Drew, apologized to fantasy sports owners who had Jones-Drew on their fantasy team. In the game, the Jets were up by 22-21 with two minutes left to go in the game. The Jaguars were driving and about to score. The Jets were willing to concede the touchdown to the Jaguars in order to get the ball back with time left in the game (Chase, 2009). On orders from Jaguars coach Jack Del Rio, Maurice Jones-Drew was going in for a touchdown, when he did the unthinkable to fantasy owners. Jones-Drew took a knee on the one-yard line with under two minutes left to play in the game. Fantasy owners who needed the six points from a Jones-Drew touchdown fell down in disbelief. This move cost many fantasy owners a win. After the game, Maurice Jones-Drew had this to say, “Sorry to my fantasy owners. They told me to get as close as I can and take a knee” (Pedulla, 2009). Jones-Drew went on to say that it hurt his fantasy team because he owned himself. The Jaguars were able to milk the clock, because the Jets were out of timeouts, and kick a game-winning field goal as time expired to win 24-22.

This shows how fantasy sports are affecting the mindset of players and fans. Fantasy owners were not concerned with the Jaguars winning, they were upset that a player did not score a touchdown. Fantasy sports participation is increasing each year. According to Taylor, Funk, and Craighill (2006), approximately one in twelve people who use the Internet play in fantasy sports leagues. Advances in technology, such as broadband and wireless Internet and real-time stats, have contributed to the explosion of fantasy sports players. The Fantasy Sports Trade
Association (FSTA) reports an increase in fantasy sports participation from approximately 15 million people in 2006 to approximately 27 million people in 2009, generating $2 billion in annual revenue (FSTA, 2010).

Even though the popularity of fantasy sports is increasing, little research has been conducted about fantasy sports and specifically fantasy football. In this study, I look to expand on this limited research to look at the way a person’s participation level in fantasy football affects team identification and fandom of the National Football League (NFL). The NFL, NFL teams, marketers, media stations, fantasy websites, and anyone else in the football or fantasy football industry can use this research to better understand those people who play fantasy football. This study is important because it will determine if there is a positive or negative relationship between fantasy football participation and three factors, team identification, team loyalty, and NFL fandom.
CHAPTER 2
LITERATURE REVIEW

Even though team identification, team loyalty, and fandom have not been looked at exclusively with regard to fantasy football, I explain these topics with regard to other sports-related areas. But I begin with fantasy football because even though fantasy football is rising in popularity, some people might not know or understand what it entails.

Fantasy Football

People wishing to play fantasy football join leagues with friends, family, and/or people they never met before. These leagues hold a draft for the team owners to pick the players that they want. Each player takes a turn picking players, similar to the actual NFL draft, until all roster spots are filled. The number of roster spots differs depending on the league, but there are starting roster positions and bench roster positions. The bench players are still on the team but do not accumulate stats for your total.

Each week, an owner decides which players will start, depending on who he or she thinks has the best matchup or will get the most fantasy points. Each league has set rules on scoring before the season starts. For most leagues, six points are awarded for each touchdown scored by the real-life counterpart. Points are also given based on other stats, such as rushing yards, receiving yards, passing yards, field goals, extra points, interceptions, and sacks. The fantasy points for each player on an owner’s starting roster are added up. If the total points for your team are more than the other team’s total points, then you win that game. The league is divided into divisions. Throughout the season, teams are matched up against each other. At the end of the season, the teams with the best records from each division are matched up in the playoffs. After the playoffs, a league champion is crowned. The champion can be awarded with monetary prizes
(based on the entry fees that are pooled together), trophies, or other awards and prizes. Fantasy football has come a long way since its inception in the 1960s.

Fantasy football began in a hotel room at the Manhattan Hotel in 1962 (Esser, 1994). Wilfred “Bill” Wickenbach is considered to be the founding father of fantasy football. Winkenbach was a limited partner of the Oakland Raiders and was following his team on an East Coast road trip. Winkenbach came up with the idea for fantasy football from his earlier experiences with baseball and golf games. Over a few drinks, Winkenbach, along with Oakland Tribune writers, Scotty Stirling and George Ross, birthed fantasy football. When they returned to Oakland, they created the first fantasy football league, the Greater Oakland Professional Pigskin Prognosticators League (GOPPPL).

As technology advanced, more sophisticated games developed. One step in the evolution of fantasy sports was video games, such as Madden, NBA Live, NCAA, and others (Lomax, 2006). After that the next big development in fantasy sports was the explosion of the Internet. The Internet fundamentally changed the delivery of mediated sports because of its accessibility, interactivity, speed and multimedia content. Real (2006) believes that the web combines the advantages of newspapers (textual information) and live radio broadcasts (speed and sound).

Media research and theory has shifted away from the passive couch potato of bullet theory to the active user seeking information and gratification. The readily available information on the web allows fantasy league managers to make well-informed decisions of a “complex, seemingly realistic virtual team” (Real, 2006, p. 178). The amount of information and the competitive nature of the participants can make the game addicting, which has helped sports websites flourish. “In a surprisingly short time, sports Web sites had matured from unprofitable labors of love by fanatics to supplemental loss-leaders for leagues, teams, and media
corporations to directly profitable enterprises with huge growth potential” (Real, 2006, p. 172). One of the reasons for this rapid turnaround was that fantasy sports participants were willing to pay $20 or more to continue to play.

With the increase in the popularity of fantasy sports, media outlets have created ways to satisfy the information needs of fantasy team owners. ESPN has dedicated staff members to a fantasy sports department, which includes writers and reporters that only deal with the fantasy aspects of sports. Fantasy sports shows and segments have been added on Sunday mornings to give owners last-minute advice and injury reports before locking in their lineup. At halftime of the football games, tickers scroll at the bottom showing the fantasy leaders for each position. Even service providers are embracing the fantasy sports fan. Direct TV offers a subscription service, called the “Red Zone,” that shows every game once a team gets inside the 20-yard-line. This allows owners to see scoring drives live. The popularity of fantasy sports is changing the way people view sports and changing the way media outlets are presenting sports information (Umstead, 2008).

**Sports Fandom**

The concept of sports fandom is not clearly defined in research but normally deals with the state or attitude of being a fan or spectator. Researchers have differed in what constitutes sports fandom. Wann (1995, 1997) believes that sports fandom is comprised of sports fans and sports consumers. According to Wann (1995), sports fans have an interest “in and follow a sport, team, or [individual] athlete” (p. 2), whereas, sports consumers either watch or listen to mediated sports or attend a game in person. However, Gantz and Wenner (1995) found three distinct levels of fandom: (a) fans, or people who are deeply involved with their team; (b) spectators, or people with minimal interest; and (c) non-fans, or people who are not necessarily interested in sports,
but still watch to be with others. One key aspect of fandom is fanship. Fanship is defined as the act of being a fan (Arpan & Raney, 2003). The term “fan” comes from “fanatic,” which means “marked by excessive enthusiasm and often intense uncritical devotion” (Merriam-Webster, 2010). However, in research, the concept of fanship has been defined in various ways.

Anderson (1979) suggests that a fan is someone devoted to a sport or an individual with excessive enthusiasm. Another definition of fanship is someone whose life is consumed by sport even when the person is not actually doing anything sports-related (Spinrad, 1981). A fan can also be someone who has emotional and value significance towards a sport or team and is committed to consuming sporting events (Guttman, 1986; Hunt, Bristol, & Barshaw, 1999; Madrigal, 1995).

According to Crawford (2004), being a fan is an identity, not just a label or category. A fan’s identity typically comes from two concepts: sports fandom identification and team identification. Team identification has been defined as the extent that a fan feels psychologically connected to a team, sport, or individual athlete (Dietz-Uhler & Lanter, 2008; Murrell & Dietz, 1992; Rinehart, 1998; Wann, 1997, 2002, 2006; Wann & Branscombe, 1993; Wann, Melnick, Russell, & Pease, 2001). Sport fandom identification is a person’s self-perception as a sports fan (Wann, 2002). Even though sport fandom identification and team identification are correlated, “it is also likely that there are many individuals possessing a high level of fan identification (i.e., they are self-perceived sport fans) who do not strongly identify with a particular team or player” (Wann, 2002, p. 104).

The other key concept in sports fandom is consumption. A sports consumer is someone who watches or listens to a game through a medium or watches a game in person (Wann, 1995, 1997). Researchers sometimes use the terms sports consumer and sports spectator
interchangeably. Sports consumers (spectators) can be subdivided into two groups: direct and indirect sports consumers. Direct sports consumption is when an individual attends a game, whereas indirect sports consumption is when an individual watches or listens to a sporting event through a form of mass media, such as radio, television, or the Internet (Kenyon, 1969; McPherson, 1975). Sports consumption, whether direct or indirect, is important to the NFL and the individual teams because it affects how much money each one makes, whether from TV contracts, sponsorships, ticket sales, or team merchandise sales. One of the key factors of sports consumption is team identification.

**Team Identification**

Wann (2006) defined team identification as “the extent to which a fan feels a psychological connection to a team and the team’s performances are viewed as self-relevant” (p. 332). Team identification can also refer to a connection to a specific player (Rinehart, 1998; Wann, 1997). Team identification is a result of psychological, environmental, and team-related factors.

The first factor of team identification is psychological. There are three psychological factors that can influence team identification. A person’s need for affiliation and belonging is the first psychological factor. Community affiliation is one of the most significant factors in team identification. A second psychological factor is a person’s desire to feel included in a distinctive group (Wann, 2006). The last psychological factor involves a person’s look at death. “Applied to sport fandom, terror management theory would predict that identification with a sport team can assist in the maintenance of a positive image and, consequently, assist in one’s attempt to deal with one’s mortality” (Wann, 2006, p. 335).
Another cause of team identification is a person’s environmental surrounding. One main environmental cause is socialization, which allows a person to develop team identification because of friends and family. Another powerful agent of socialization is repeated exposure to the team through the media and the Internet (Wann, 2006). Socialization used to mean that living near a team was one of the most important factors in developing a fan’s team identification. But the Internet has changed that by allowing more people to follow their favorite teams, no matter where they live. The Internet allows fans to read all the local news and find all the information about their favorite teams as if they were locals. Walker (2003) reported that 55% of Major League Baseball (MLB) fans do not live near their favorite team.

The last cause of team identification focuses on team-related factors, which can be broken down into three categories: organizational characteristics, team performance, and player attributes. The first category, organizational characteristics, includes ownership, team decisions, and the tradition of the team. Another team-related factor that can impact team identification is the way a team performs. Previous research shows that there is a positive relationship between success and team identification (Sutton, McDonald, Milne, & Cimperman, 1997; Wann, Tucker, & Schrader, 1996). Player attributes, the final team-related factor, can also help facilitate team identification. Specifically, two player attributes, player attractiveness and player similarity to the fan, also contribute to team identification. Player attributes are normally more significant to teams with a history of poor performance (Wann, 2006).

Team Loyalty

In marketing research, consumer loyalty is one of four components of brand equity. The other three are brand awareness, brand associations, and perceived quality (Aaker, 1991; Heere & Dickson, 2008). In sports, team loyalty is equivalent to consumer loyalty. Sports research
defines team loyalty as the emotional and psychological connection to a specific team (Funk & James, 2004; Funk & Pastore, 2000; Hirt, Zillmann, Erickson, & Kennedy, 1992; James, 2001; Mahony, Madrigal, & Dennis, 2000; Smith, Patterson, Williams, & Hogg, 1981; Wakefield & Sloan, 1995).

Funk and James (2001) state that team loyalty is a highly developed attitude that demonstrates persistence, resistance to change, bias in cognitive processing, and acts as a guide for behavior. Persistence is the degree to which a person’s attitude towards a specific team remains unchanged over time (Funk & James, 2004; Petty, Haugtvedt, & Smith, 1995). Resistance is the ability of a person to remain loyal even when facing a persuasive argument against that specific team (Funk & James, 2004; Petty & Cacioppo, 1986). Bias in cognitive processing describes how cognitive thoughts cause attitudes to fluctuate at a given time (Erber, Hodges, & Wilson, 1995; Funk & James, 2004). Finally, according to Funk and James (2004), team loyalty helps to guide consumer behavior (i.e., team merchandise consumption, sports consumption, and sponsorship consumption).

The first step in developing team loyalty is attraction or interest in a sports team. Before any psychological connection can take place, the person must decide if he or she likes that team more than all others (James, 2001). Next, Kolbe and James (2003) proposed that an important component in developing team loyalty is the formation of a sport identity, which occurs through internalization. Internalization is the process of integrating a sports team into a person’s self-identity. Team loyalty may also be derived from the influence of family and peers over time (socialization). Because of socialization, team loyalty may form early in life (James, 2001).

Wakefield and Sloan (1995) suggests three ways to increase team loyalty. The first one is to boost the number of promotions to raise interest in the team and/or sport. Secondly, increasing
the appearances of players and coaches in the community would help to grow team loyalty. By being able to interact with the players and coaches, fans are able to create a personal bond to the team. Finally, a team can increase loyalty by targeting young fans and families by offering discounted tickets. Experiencing the excitement of the game live helps to increase the likelihood of developing a commitment towards the team.

**Social Identity Theory**

Social identity theory was developed in 1979 by Tajfel and Turner. Tajfel (1978) defined social identity as a person’s self-concept that comes from his or her knowledge of membership in a social group(s) and the value and emotional significance associated with that membership. Social identity theory states that people behave in certain ways to maintain and/or boost their self-esteem (Ervin & Stryker, 2001).

Two ways that fans handle their self-esteem when their favorite team wins or loses are basking in reflected glory (BIRGing) and cutting off reflected failure (CORFing). Both BIRGing and CORFing are rooted in social identity theory. Fans use BIRGing to try to receive glory even though they did nothing tangible to bring the team’s success (Hirt et al., 1992). CORFing is used after a team loses. Fans, who use CORFing to handle a loss, distance themselves from the failure of their team so that it does not threaten their self-esteem (Cialdini & Richardson, 1980). For example, a person who is BIRGing says that “we won,” whereas a person who is CORFing would say “they lost.”

Sports can work to increase a person’s self-esteem, thus increasing his or her social identity. One way social identity theory can be seen in sports is through team identification (Heere & James, 2007; Trail, Anderson, & Fink, 2005). By wearing team merchandise, team
colors, attending or watching games, and knowledge of players and stats, sports fans feel they are an integral part of the team.

According to Heere and James (2007), people develop external group identities through demographic categories and membership organizations. Demographic categories include the following: (1) geographic, (2) ethnic/racial, (3) gender-based, (4) sexuality-based, and (5) social class-based. Membership organizations include vocational (university or corporate), religious, and political. If there is a fit between any of the external group identities and the team, then team identity will develop. As these identities strengthen team identificatication, it will also result in greater team loyalty. If a fan connects to a team through multiple external identities, it becomes harder for that fan to break his or her commitment to that team. This is because the fan has multiple points of attachment for that particular team. According to Trail, Robinson, Dick, & Gillentine (2003), fans may develop team identification through one or more of the following points of attachment: (1) fan of a player(s), (2) fan of the coach, (3) fan of the sport, (4) fan of the level of sport, (5) connection to the community, and (6) attachment to the organization.

**Consumer Behavior**

The study of consumer behavior has evolved from an emphasis on rational consumer choices to irrational choices to the use of logical flow models, such as the information-processing model (Holbrook & Hirschman, 1982; Howard & Sheth, 1969). The information-processing model sees the consumer as thinking logically before making purchasing decisions (Bettman, 1979). The information-processing model also sees consumers as problem-solvers that use information, schemas, and weighing evidence to make purchasing decisions. However, researchers have questioned the information-processing model because it neglects important consumption behavior (Holbrook & Hirschman, 1982; Olshavsky & Granbois, 1979; Sheth,
In contrast to the information-processing model, the experiential view sees consumers as more pleasure oriented in their purchase decision-making process. According to Holbrook and Hirschman (1982), the experiential view sees consumption as “involving a steady flow of fantasies, feelings, and fun” (p. 132). When considering consumer behavior these days, one has to consider how the Internet affects it.

Online Consumer Behavior

The development and growth of the Internet has altered the way business is conducted, including sports and media (Boyle & Haynes, 2002; Chan-Olmstead & Ha, 2003; Mahan & McDaniel, 2006; McDaniel & Sullivan, 1998). The web has further fragmented media audiences by providing another outlet for information and entertainment (Dimmick, Chen, & Li, 2004; Mahan & McDaniel, 2006). Other ways that the web has changed sports media include the way they are produced, distributed, and consumed (McDaniel & Sullivan, 1998).

Traditional sports media were able to constrain the focus and availability of sports coverage to televised events or popular athletes, which limited coverage to sports entities that would draw the largest audiences (Whitson, 1998). Prior to the Internet, sports production was a one-way affair between the sports media producers and distributors and their audience. Interaction was limited to local sports call-in shows, fanmail, or letters to the editor (Mahan & McDaniel, 2006). Now fans are able to interact more with teams, the media, and other fans. Unlike traditional media consumption, fantasy sport consumption allows users to be actively involved in the consumption process (Kwak, Lim, Lee, & Mahan III, 2010). The use of the Internet is increasing the level of interactivity involved in sports consumption. Interactivity is a central component of the explosion of sport-related websites (Boyle & Haynes, 2002). “The notion of interactivity is perhaps the most intriguing dimension of new media sport. It suggests a
new way of consuming sport that is qualitatively different to anything that has preceded it” (Boyle & Haynes, 2002).

The Internet is not just a static text the users passively consume. Rather, it involves a higher level of participation than traditional media (radio, television, and print media) (Crawford, 2004). According to Ahuja, Gupta, and Raman (2003), online consumer behavior refers to “any Internet-related activity associated with the consumption of goods, services, and information” (p. 145). Crawford (2004) said he believes that sports fans’ online consumption will also influence their offline interactions and vice versa.

People’s social networks will cross-cut with those encountered on the Internet, people’s off-line interests will inform what they look at and participate in online (and vice versa), and the information they gain from the Internet can be drawn on (as with other forms of media) as a resource in fuelling off-line social networks, social performances and identity construction. (p. 145)

**Online Sports Business**

In the world of sport, the Internet is used to “invent and gratify consumer needs for corporate capitalism” (Crawford, 2004, p. 142). The Internet’s sport-related content has blurred the lines between marketing and entertainment (Shrum, 2004). As such, sport and media have entered into the global marketplace as branded commodities (Andrews, 2003; Bellamy, 1998; Burton, 2004; Mahan & McDaniel, 2006; McDaniel, 2004; McDowell & Sutherland, 2000). “[Branding] is so valuable that oftentimes it is considered as the most valuable asset of any company” (Broersma, 2005). Cyberbranding is the online promotion of media and sport brands (Bergstrom, 2000; Burton, 2004; Chan-Olmstead & Ha, 2003; Mahan & McDaniel, 2006).

According to Mahan and McDaniel (2006), the Internet has also changed the way retailers promote their products. By sponsoring sporting events or sports websites, the retailer is able to add direct links to their own site, which increases traffic to their site, potential online
sales opportunities, and brand exposure. One area of online sports that companies are looking to sponsor involves fantasy sports websites.

**Fantasy Sports**

One of the fastest growing markets of online sports content involves fantasy sports (Umstead, 1999). Fantasy sports started out as an offline sport, but the Internet has lowered the barrier of entry into fantasy sports leagues, which is probably the most significant factor to the rise of popularity (Holahan, 2006). According to Roy and Goss (2007), the fantasy sports industry sees an annual growth of 7-10 percent. In 2006, an estimated 12 million people spent more than $1.5 billion on fantasy sports. The typical fantasy sports participant is young, white, married, and well educated (Klaassen, 2006; Levy, 2005, Roy & Goss, 2007; Weekley, 2004). According to McFeatters (2006), fantasy sports also bring in an estimated $1.5 billion in advertising and subscription fees. This symbolizes a shift in fantasy sports from hobby to big business (Randle & Nyland, 2008).

The popularity of fantasy sports is shifting the focus from team accomplishments to individual performances. This shift increases interest in even the most mundane games (Nesbit & King, 2010), which inflates the value of sponsorships (Birch, 2004; Roy & Goss, 2007). Randle and Nyland (2008) argue that “if media outlets can develop good relationships with fantasy sports fans, by sponsoring leagues and providing up-to-date information, they have the potential to gain a devoted segment of the media viewing market” (p. 144).

According to Russo and Walker (2006), the fantasy sports industry is transitioning from a linear experience model to an engaged community model. To finalize the transition, two things need to occur. First, fantasy sports games will shift away from subscription-based leagues to ad-supported ones. Previous research indicated that approximately 63% of fantasy football players
recalled seeing an ad from one of five major fantasy advisers (Roy & Goss, 2007; Russo & Walker, 2006). Klaasen (2006) found that some fantasy sites can get up to seven-figures for advertising space on their websites.

Second, offline fantasy products and services must be developed to compliment the online games. This is already taking place in the media industry. For example, Direct TV, which sponsors ESPN’s fantasy league, had a subscription-based service called NFL Sunday Ticket. One feature in this service is called the Red Zone, which automatically switches to a game when a team gets within 20 yards of the end zone (red zone) (Klaasen, 2006). Radio is also turning its attention to fantasy sports. Sirius launched a 24-hour fantasy sports radio station on July 1, 2010 (Best, 2010). Services such as these are created to tap into the needs of the fantasy sports market (Randle & Nyland, 2008).

Fantasy Sports Consumption

According to Chistopher Russo, founder and chief executive of Fantasy Sports Ventures, sports have a highly engaged audience, and the fantasy sports audience is the most engaged of sports fans (Bindrim, 2009). Since scores and statistics can be updated almost instantly, sports fans are able to engage with sports at a different level through fantasy sports. Sports fans are able to show off their skills to opponents that could be anywhere from next door to the other side of the world (Umstead, 1999).

Participating in digital gaming can greatly increase knowledge of the sports and its players. According to Crawford (2000), not only can an interest in a sport help to draw interest to the digital version of that sport, but playing the digital version can lead to more of an interest in the real sport (Crawford, 2004). Following a sport or just showing an interest can involve many different patterns of consumption, which can include attending a sporting event, watching sports
on television or listening on the radio, and/or following sports news via newspapers, magazines, or the Internet (Crawford, 2004). Randle and Nyland (2008) conclude that playing in a fantasy sports league “acts as a catalyst to increase interest in and likelihood of attending real life games, reading sports material, memorizing sports trivia and statistics, and being caught up (to the exclusion of other activities) in the world of sport” (p. 151).

Contemporary sport fans and consumers are seduced into not only buying consumer products, but also into the idea that these products can convey a certain lifestyle or identity (Crawford, 2004). “Consumption is neither ‘good’ nor ‘bad’, but rather an inescapable constituent part of contemporary late-modern capitalism” (p. 119). A person’s ability to self-monitor their sensitivity and willingness to modify their behaviors to more fit the norms of a given situations influences behavioral loyalty to a specific sport or team (Armstrong, 2007; Mahony, Madrigal, & Howard, 1999; Miller & Thayer, 1989; Snyder, 1974).

**Fantasy Sports Consumption Influence**

The conceptual framework that Roy and Goss (2007) developed shows that fantasy sports consumption is “impacted by the interplay of psychological characteristics internal to consumers as well as social interactions and marketer-controlled influences that are external to consumers but can affect consumption decisions” (p. 98-99). The psychological influences that affect fantasy sports consumption decisions are control, escape, and achievement. Some fantasy sports participants decide to play because of the ability to exert control over a team. According to Bernhard and Eade (2005), owning a fantasy sports team allows the player to vicariously participate in professional sports. Marketers have used messages of control and ownership in advertising campaigns that appeal to people who are motivated by control to play (Shipman, 2001).
People also turn to sports for an opportunity to escape from their normal life or routine (Wann et al., 2001). Escape is achieved through fantasy sports participation because of the fun and pleasure the consumer gets from playing (Holbrook & Hirschman, 1982; Roy & Goss, 2007). The last psychological influence is achievement. Fantasy sports can give some people a sense of achievement when their fantasy team outperforms their opponent’s team. Roy and Goss (2007) believe that “this need to achieve success and outperform other league players motivates players to invest time and money in acquiring and analyzing information that could improve their fantasy teams’ performances” (p. 101). According to Shipman (2001), fantasy game marketers use advertising strategies based on the idea that successful fantasy players can obtain public recognition of their sports knowledge.

Another factor that helped grow fantasy sports participation is the chance to win money or prizes at the end of the season (Birch, 2004; Thompson, 2007). Social influences can also drive people to participate in fantasy sports. Two types of social influences are communing and socializing (Holt, 1995). Fantasy sports participants engage in community building with such activities as live drafts, message boards, emails, and online chatting with other fantasy players. Since the majority of fantasy sports players are male, Davis and Duncan (2006) suggest that fantasy sports provide a good place for male bonding. This idea of a men’s club makes it difficult for females to participate. The second social influence is socialization, which is the opportunity to communicate and stay in touch with family, friends, co-workers, or other people. Socialization is a strong influence driving people to play fantasy sports. Previous research identified socialization as a prime motivator for consumption of sports (Jenkins, 2010; Roy & Goss, 2007).

The last category of influence on fantasy sports consumption is marketer-controlled. Marketers can control fantasy sports consumption through product, price, and promotion
decisions. Game branding, game formats, and the design of the user experience all encompass the product element. Branding for a fantasy game or site can impact the perceived value, quality, and/or credibility of that game or site. One way host sites increase the product of a fantasy game is to offer multiple formats of fantasy games, which allows players to choose the game type that satisfies them the most. The third element of a fantasy game product is the design of the user experience. Just as stadiums and the physical environment that a sport is played in affect people’s decisions to attend sporting events (Wakefield & Blodgett, 1994, 1996; Wakefield, Blodgett, & Sloan, 1996), the online environment that surrounds a fantasy game influences people to play fantasy sports.

**Uses and Gratifications**

Uses and gratifications is an audience-centered, media-uses-and-effects perspective with a central premise that people are purposive, goal-directed, and motivated in their media use (Earnheardt & Haridakis, 2008; Katz, Blumler, & Gurevitch, 1974). According to Katz, Blumler, and Gurevitch (1973), uses and gratifications focuses on:

1. the social and psychological origins of (2) needs, which generate (3) expectations of (4) the mass media or other sources, which lead to (5) differential patterns of media exposure (or engagement in other activities), resulting in (6) need gratifications and (7) other consequences, perhaps mostly unintended ones. (p. 510)

In other words, people believe that media content can meet certain social and psychological needs. As a result, people seek out a particular medium at a certain time to satisfy a distinct need (Raney, 2006). Research has shown support for the application of the uses and gratification approach with a variety of media content and media channels (e.g., Johnson, 1995; Perse, 1986; Turow, 1974; Vincent & Basil, 1997).
Uses and gratifications is built on five tenets: (1) When choosing media or media content, people are goal-directed, purposive, and motivated; (2) People actively select media to satisfy their needs; (3) Media selection is affected by psychological and sociological factors of an individual; (4) All forms of media are in competition with each other to garner a person’s attention; and (5) The audience has the power to be more influential than the media in the audience-media relationship, based on the level of audience initiative and individual characteristics (Earnheardt & Haridakis, 2008; Katz et al., 1974; Katz, Gurevitch, & Haas, 1973; Rubin, 2002).

Uses and gratifications research has spawned other theories. One theory is media dependency theory, which states that media influence is determined by interactions between the media, the audience, and society (Ball-Rokeach & DeFleur, 1976). People will become more dependent on media that appear to meet more of their needs. In contrast, people will become less dependent on media that appear to not meet their needs (Ruggiero, 2000).

Mood-management theory (Zillmann & Bryant, 1985) is another theory that falls under the umbrella of uses and gratifications research. Mood-management theory posits that people use specific media content to minimize bad moods and maximize good moods. This can be seen in people’s motivations to watch certain content, including sports (Zillmann, 2000).

**Motivations to Watch Mediated Sports**

Raney (2006) was able to identify factors that motivate people to watch mediated sports. According to selective exposure, people tend to choose media content that they believe is consistent with their beliefs, attitudes, and thoughts (Zillmann & Bryant, 1985). People who find pleasure in mediated sports seek them out in heavy doses. People who watch sports report having three categories of motivation to watch: emotional, cognitive, and behavioral or social needs.
These motivation categories are the basis for finding out what motivates people to play fantasy sports.

**Emotional Motivations**

The first motivation category to watch mediated sports is emotional. According to Raney (2006), “people view mediated sports because they expect positive emotional impacts from their viewing. These emotional reactions…are assumed to be dependent upon and governed by the affiliations – or affective dispositions – that viewers have towards one (or both) the competing teams” (p. 315). Many scholars believe that the heart of fanship is these affiliations.

There are four subcategories of emotional motivation: entertainment, eustress (positive stress), self-esteem, and escape. Team allegiances are at the core of entertainment motivation. The enjoyment and emotional satisfaction of cheering on a favorite team is the most important motivational factor behind watching sports. According to the disposition theory of sports spectatorship (Bryant & Raney, 2000; Zillmann, Bryant, & Sapolsky, 1989; Zillmann & Paulus, 1993), a continuum of affect (from intense liking through indifference to intense disliking) can be used to describe a fan’s affiliation with a team. The enjoyment a sports fan gets from watching a game is determined on who wins and whether or not the fan likes or dislikes the winning or losing team.

Eustress motivation is when fans watch sports because of the positive emotions they get from increased arousal and excitement during viewing. Zillmann (1991) believes that the primary source of this arousal and excitement is the suspenseful nature of sports competition. Wann et al. (2001) suggests that many people do not get enough stimulation and excitement in their everyday lives. Consequently, they look to other venues to gain the stimulation and
excitement they lack. Sport fandom and spectatorship is just one outlet that can be used to fill this void. According to Brill (1929),

> The life of man in America or in any of the industrialized countries today, laboring on the farm, in the factory, in the office, is not the natural life of man. He is still an animal formed for battle and conquest, for blows and strokes and swiftness, for triumph and applause. But let him join the crowd around the diamond, the gridiron, the tennis court or the ring…Let him identify himself with his favorite fighter, player or team…He will achieve exaltation, vicarious but real. (p. 434)

The self-esteem motivation is when fans watch sporting events because they think it will help them feel better about themselves. More specifically, watching a favorite team can have a positive (if they win) or negative (if they lose) effect on a person’s self-esteem and self-confidence. The last emotional motivation is escape. Some fans watch sports as an escape from the stresses of daily life. This translates into fantasy sports as well. According to Leitch (2009), fantasy sports “allow us to take charge of our destiny, to ignore matters we can’t control” (p. 10). Escape motivation is less dependent on fanship and the outcome as the other emotional motivation factors. Some fans (nearly 2 out of 5 according to Wann, Allen, and Rochelle (2004)) watch sports just to escape boredom.

### Cognitive Motivations

According to Raney (2006), the two types of cognitive motivations for mediated sports consumption are learning motivation and aesthetic motivation. One of the most common cognitive motivations for watching sports is to learn about players and teams. Fans watch games to keep current with facts about players and stats because they like to be walking encyclopedias of sports knowledge and trivia. Some people are motivated to watch sports because of the aesthetic qualities of the competition, such as artistic beauty and grace of sport movements. Smith (1988) argued that “a splendid athletic performance rivals any great work of art.”
Behavioral and Social Motivations

The last category of motivation is behavioral and social. There are five subcategories that make up behavioral and social motivations for mediated sports consumption: release, companionship, group affiliation, family, and economics. Many fans report that watching sports allow them the opportunity to release emotions, such as letting loose, having a few beers or drinks, and letting off steam. A necessary condition of this appears to be the presence of friends (Gantz, 1981; Raney, 2006).

Fans consistently report enjoying sports more if they have their friends with them to talk about the action. Wann et al. (2001) stated, “sport fandom and sport spectating can help fulfill the human need for social interaction by providing a sense of belongingness. The fact that most spectators consume sport as a member of a social group suggests that fans do indeed use sport to satisfy social interaction needs” (p. 32).

Group affiliation is closely related to companionship. The group affiliation motivation is when fans of specific teams feel a sense of belonging that is shared by them and other fans of that team. Smith (1988) suggests that sports can help bring together schools, communities, cities, and even nations. Another reason for watching sports is to spend time with family. Sports programming is one of the last family co-viewing TV experiences. As one would expect, this is a particularly common motivation among sports fans that are married and/or have children (Wann et al., 2001).

Some people watch sports because of a financial investment (sports betting). Many people with high levels of economic motivation may not have been socialized into the values, beliefs, attitudes, and norms associated with sports fandom. People who are primarily motivated
to watch sports for economic reasons often do not qualify as sports fans at all (Raney, 2006; Wann et al., 2001). They only see sports as a way to make money.
CHAPTER 3
RESEARCH QUESTIONS

This study will attempt to identify relationships between fantasy football players’ participation level and their team identification, team loyalty, and NFL fandom. Even though fantasy football thrives on what actually happens in a game, it is more about the individual football players and less about the team or the outcome of the actual game, which leads to the following research questions:

RQ1: Does the level of participation in fantasy football affect team identification?

RQ2: Does the level of participation in fantasy football affect team loyalty?

RQ3: Does the level of participation in fantasy football affect NFL fandom?

RQ4: Does the level of participation in fantasy football affect a person’s consumer behavior?

RQ5: Does the preference of win (fantasy team vs. favorite team) affect level of participation, team identification, team loyalty, and NFL fandom?

RQ6: Does gender affect the level of participation in fantasy football, team identification, team loyalty, NFL fandom, and the players drafted to their fantasy football team?

RQ7: What motivates a person to play fantasy sports?

RQ8: How are participation level, team identification, team loyalty, and NFL fandom affected by each motivation factor to play fantasy sports?
CHAPTER 4
METHOD

Procedure

To obtain respondents to the online survey (See Appendix A), I used a snowball sampling or referral technique (Goodman, 1961; Welch, 1975). According to Goodman (1961), a snowball sample is when people in the target audience group are initially contacted, and then supply names of other people in the target group, who when contacted, supply other names of the target group, and so on. I adapted this technique to conduct my online survey. First, I sent the link to the online survey in a message to people on Facebook, Twitter, fantasy football leagues, and various message boards to get the initial respondents. I also included in the message a request to forward the link (or retweet it) to everyone they know that plays fantasy football, and so on, until a large enough sample size was obtained. The majority of the sample came after Matthew Berry, ESPN’s senior fantasy analyst, retweeted the link to the survey. As of December 14, 2010, Matthew Berry has 237,231 followers on Twitter. After completion of the survey, participants were thanked for their time. I did not give respondents any other remuneration.

Snowball sampling has been used in previous sports research. For example, McDaniel (2003) used a snowball sample to look at the interest in watching different types of sports among adults. Also, Facebook has been employed to obtain a snowball sample. Baresch, Knight, Harp, and Yaschur (2011) sent out a link to their survey via Facebook to get their initial sample and asked them to pass on the link to their Facebook friends.

Using the snowball sampling technique may lead to potential biases in the sample (Welch, 1975). Undersampling people who are isolated and/or oversampling groups that are more social are two ways that can lead to a biased sample. This potential bias may lead to other
biases in educational levels, social class, or income levels. One way to minimize these potential biases is to increase the sample size (Welch, 1975).

**Independent Variables**

**Participation Level**

Participation level of fantasy football players is one independent variable I measured for this study. I operationalized a person’s level of participation as the hours spent daily on his or her fantasy football team. To get the participation level variable, I asked participants two questions: (1) typically, how many hours a day do you spend on your fantasy football team?; and (2) yesterday, how many hours did you spend on your fantasy football team? I combined these two questions into one variable ($\alpha = .781$). Then I performed a high/low split around the mean to get a dichotomous variable.

**Motivations to Play**

The motivation to play fantasy sports is another measured independent variable for this study. I previously did a pilot study to determine motivation categories as a first step in developing a motivation to play fantasy sports scale. The previous study identified ten motivation categories: pass time, bragging rights, learning, escape, eustress (positive stress), ownership, socialization, achievement, entertainment, fandom, control, and team identification. The questions for this part of the study came from the Sport Fan Motivation Scale (SFMS), developed by Wann (1995), the Motivation Scale for Sport Consumption (MSSC), developed by Trail and James (2001), and the Fantasy Sports Motives (FSM) scale, developed by Spinda and Haridakis (2008). The motivation questions developed use a five-point Likert scale that ranges from strongly agree to strongly disagree.
Win Preference and Gender

In addition, I used win preference and gender as independent variables. Win preference refers to whether fantasy football managers prefer a win by their fantasy team or a win by their favorite NFL team. Lastly, I used gender as an independent variable to determine if men and women differ in their participation level, team identification, team loyalty, and NFL fandom.

Dependent Variables

Team Identification

Team identification was one of my dependent variables for this research, which I measured using the Sport Spectator Identification Scale (SSIS) developed by Wann and Branscombe (1993). I modified the SSIS for this project to separate which media the person uses to follow the NFL. Participants first had to select their favorite NFL team before proceeding to the modified SSIS. The questions that followed all had to deal with the team selected. The modified SSIS consisted of eleven questions that used various 7-point interval scales. All of the responses used 1 for the most negative response and 7 for the most positive response. The modified SSIS was found to be both valid and reliable ($\alpha = .83$) in determining a person’s level of team identification.

Team Loyalty

I also used team loyalty as a dependent variable for this study and measured it using a modified Psychological Commitment to Team (PCT) scale. The PCT segments sport consumers based on team loyalty. Mahony et al. (2000) originally developed the PCT scale, which initially used a 14-item survey. Kwon and Trail (2003) reexamined the PCT scale and showed that some of the items were not necessary and did not measure what was initially intended. Therefore, I
eliminated seven items from the initial PCT scale for this study. The PCT scale ($\alpha = .94$) measures team loyalty through a seven-point Likert scale that ranges from 1 (strongly disagree) to 7 (strongly agree).

**Fandom**

Fandom was the third dependent variable in this study. I measured fandom using the Sport Fandom Questionnaire, developed by Wann (2002). The Sport Fandom Questionnaire (SFQ) consists of five Likert-type scale items with a response range from 1 (strongly disagree) to 7 (strongly agree). I adapted the SFQ to test NFL fandom. This valid and reliable scale ($\alpha = .86$) measured and determined the fandom levels of the participants.

**Consumer Behavior**

Two concepts of consumer behavior were tested, game consumption and online consumption. I measured game consumption by the following: the number of hours a person spends watching NFL games during a typical week, where a person typically watches NFL games, and the likelihood that the person would actually attend an NFL game. To measure online consumption, I asked participants to indicate the number of fantasy football teams they manage in a typical season, the number of times they go online to see how their fantasy football team is doing, and if they played any other fantasy sport.
I conducted this research using an online survey and obtained participants ($N = 1805$) using a snowball sample. Respondents were predominantly between the ages of 21-34 ($n = 1303$; 72.2%), white ($n = 1554$; 86.1%), male ($n = 1692$; 93.7%), and citizens of the United States ($n = 1703$; 94.3%). The sample represented all 50 states, with California ($n = 172$) and New York ($n = 132$) having the most. See Table 1 for the complete list of demographics for respondents.

Table 1: Age, Race, Gender, and Citizenship

<table>
<thead>
<tr>
<th>Demographic Information</th>
<th>$n$</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>145</td>
<td>8.0</td>
</tr>
<tr>
<td>21-24</td>
<td>380</td>
<td>21.1</td>
</tr>
<tr>
<td>25-29</td>
<td>523</td>
<td>29.0</td>
</tr>
<tr>
<td>30-34</td>
<td>400</td>
<td>22.2</td>
</tr>
<tr>
<td>35-39</td>
<td>189</td>
<td>10.5</td>
</tr>
<tr>
<td>40+</td>
<td>168</td>
<td>9.3</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>10</td>
<td>0.6</td>
</tr>
<tr>
<td>Asian</td>
<td>56</td>
<td>3.1</td>
</tr>
<tr>
<td>Black/African-American</td>
<td>50</td>
<td>2.8</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>78</td>
<td>4.3</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>9</td>
<td>0.5</td>
</tr>
<tr>
<td>White</td>
<td>1554</td>
<td>86.1</td>
</tr>
<tr>
<td>Other</td>
<td>48</td>
<td>2.7</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>113</td>
<td>6.3</td>
</tr>
<tr>
<td>Male</td>
<td>1692</td>
<td>93.7</td>
</tr>
<tr>
<td>Citizenship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>1702</td>
<td>94.3</td>
</tr>
<tr>
<td>Other</td>
<td>102</td>
<td>5.7</td>
</tr>
</tbody>
</table>

*$N = 1805$*
Fantasy Football

I asked respondents to indicate the number of teams in a typical season that they manage ($M = 2.46; SD = 1.272$). Four hundred seventy-six (26.4%) reported only managing one team, 580 (32.1%) indicated two teams, 376 (20.8%) managed three teams, 180 (10.0%), and 193 (10.7%) managed five or more teams.

As far as the number of years participants played fantasy football ($M = 4.13; SD = 1.266$), the majority of respondents ($n = 1094; 60.6$%) played fantasy football for five or more years. Two hundred thirty-six (13.1%) played four years, while 202 (11.2%) played three years. The remaining participants ($n = 273; 15.1$%) played zero to two years.

I also asked participants to indicate the number of times they go online to check the stats for their fantasy football team(s) while watching an NFL game ($M = 5.44$; $SD = 1.229$). Respondents overwhelmingly reported checking their fantasy stats five or more times ($n = 1421$; 78.7%) while watching and NFL game. The remaining respondents indicated the following: four times ($n = 86$; 4.8%), three times ($n = 112$; 6.2%), two times ($n = 91$; 5.0%), one time ($n = 49$; 2.7%), and none ($n = 46$; 2.5%). Finally, participants reported that in addition to fantasy football, they also played fantasy baseball ($n = 823$), fantasy basketball ($n = 555$), fantasy hockey ($n = 183$), fantasy soccer ($n = 99$), fantasy golf ($n = 69$), fantasy NASCAR ($n = 67$), and other fantasy sports ($n = 31$). Six hundred three respondents indicated that they only played fantasy football.

Watching NFL Games

When asked about the number of hours spent typically watching NFL games per week ($M = 3.71; SD = 1.046$), respondents indicated as follows: 503 (27.9%) watch 10 or more hours, 526 (29.1%) watch seven to nine hours, 557 (30.9%) watch four to six hours, 180 (10.0%) watch two
to three hours, and 39 (2.2%) watch zero to one hour per week. I then asked participants where they normally watch NFL games ($M = 1.24; SD = .650$). Participants predominantly prefer to watch the games at home ($n = 1550; 85.9\%$). Participants also indicated that they liked to watch games at a friend’s place ($n = 115; 6.4\%$), a sports bar ($n = 102; 5.7\%$), or at another location ($n = 38; 2.1\%$).

Next, I asked participants, using a seven point Likert scale, the likelihood that they would attend an NFL game ($M = 4.17; SD = 2.109$). Seven hundred seventy-one (42.7\%) participants reported that it would be unlikely for them to attend an NFL game, while 970 (53.7\%) indicated that they would likely attend an NFL game. Sixty-four participants were undecided (3.6\%).

**Favorite Team vs. Fantasy Team**

I then asked the participants to indicate their favorite team from a dropdown menu. All 32 NFL teams had at least one respondent indicate that it was their favorite team. The team most favored was the New England Patriots ($n = 133; 7.4\%$), followed by the Chicago Bears ($n = 106; 5.9\%$) and the New York Giants ($n = 103; 5.7\%$). The team favored the least was the Jacksonville Jaguars ($n = 6; 0.3\%$). For the total of each team, see Table 2.

When it comes to drafting players for their fantasy team, participants were asked the likelihood that they would draft players from their favorite team ($M = 4.23; SD = 1.505$) and their favorite team’s rivals ($M = 4.37; SD = 1.444$). With regard to players from favorite teams, 860 (47.7\%) respondents are likely to draft them, while 520 (28.8\%) are unlikely. Four hundred twenty-five (23.5\%) were undecided. When it came to drafting players from their favorite team’s rivals, participants indicated the following: 856 (47.5\%) were likely, 423 (23.4\%) were unlikely, and 526 (29.1\%) were undecided.
Table 2: Favorite NFL Teams

<table>
<thead>
<tr>
<th>Favorite NFL Team</th>
<th>n</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona Cardinals</td>
<td>25</td>
<td>1.4</td>
</tr>
<tr>
<td>Atlanta Falcons</td>
<td>42</td>
<td>2.3</td>
</tr>
<tr>
<td>Baltimore Ravens</td>
<td>24</td>
<td>1.3</td>
</tr>
<tr>
<td>Buffalo Bills</td>
<td>52</td>
<td>2.9</td>
</tr>
<tr>
<td>Carolina Panthers</td>
<td>21</td>
<td>1.2</td>
</tr>
<tr>
<td>Chicago Bears</td>
<td>106</td>
<td>5.9</td>
</tr>
<tr>
<td>Cincinnati Bengals</td>
<td>25</td>
<td>1.4</td>
</tr>
<tr>
<td>Cleveland Browns</td>
<td>59</td>
<td>3.3</td>
</tr>
<tr>
<td>Dallas Cowboys</td>
<td>95</td>
<td>5.3</td>
</tr>
<tr>
<td>Denver Broncos</td>
<td>45</td>
<td>2.5</td>
</tr>
<tr>
<td>Detroit Lions</td>
<td>69</td>
<td>3.8</td>
</tr>
<tr>
<td>Green Bay Packers</td>
<td>85</td>
<td>4.7</td>
</tr>
<tr>
<td>Houston Texans</td>
<td>35</td>
<td>1.9</td>
</tr>
<tr>
<td>Indianapolis Colts</td>
<td>68</td>
<td>3.8</td>
</tr>
<tr>
<td>Jacksonville Jaguars</td>
<td>6</td>
<td>0.3</td>
</tr>
<tr>
<td>Kansas City Chiefs</td>
<td>50</td>
<td>2.8</td>
</tr>
<tr>
<td>Miami Dolphins</td>
<td>47</td>
<td>2.6</td>
</tr>
<tr>
<td>Minnesota Vikings</td>
<td>77</td>
<td>4.3</td>
</tr>
<tr>
<td>New England Patriots</td>
<td>133</td>
<td>7.4</td>
</tr>
<tr>
<td>New Orleans Saints</td>
<td>68</td>
<td>3.8</td>
</tr>
<tr>
<td>New York Giants</td>
<td>103</td>
<td>5.7</td>
</tr>
<tr>
<td>New York Jets</td>
<td>62</td>
<td>3.4</td>
</tr>
<tr>
<td>Oakland Raiders</td>
<td>34</td>
<td>1.9</td>
</tr>
<tr>
<td>Philadelphia Eagles</td>
<td>79</td>
<td>4.4</td>
</tr>
<tr>
<td>Pittsburgh Steelers</td>
<td>63</td>
<td>3.5</td>
</tr>
<tr>
<td>San Diego Chargers</td>
<td>49</td>
<td>2.7</td>
</tr>
<tr>
<td>San Francisco 49ers</td>
<td>95</td>
<td>5.3</td>
</tr>
<tr>
<td>Seattle Seahawks</td>
<td>39</td>
<td>2.2</td>
</tr>
<tr>
<td>St. Louis Rams</td>
<td>31</td>
<td>1.7</td>
</tr>
<tr>
<td>Tampa Bay Bucs</td>
<td>26</td>
<td>1.4</td>
</tr>
<tr>
<td>Tennessee Titans</td>
<td>42</td>
<td>2.3</td>
</tr>
<tr>
<td>Washington Redskins</td>
<td>50</td>
<td>2.8</td>
</tr>
</tbody>
</table>

*N = 1805*
Respondents were then asked if they preferred a win by their favorite NFL team or their fantasy football team. A majority of fantasy football players would rather have their favorite NFL team win ($n = 1057; 58.6\%$) over their fantasy football team ($n = 748; 41.4\%$). However when breaking down the findings by the respondents’ favorite teams, some fans preferred a win by their fantasy team (see Table 3).

**Identification, Loyalty, and Fandom of NFL Teams**

Team identification, team loyalty, and fandom varied depending on the participant’s favorite team. For team identification (see Table 4), New York Jets’ fans identified with them the most ($M = 5.37; SD = .860$), while fans of the San Francisco 49ers identified with them the least ($M = 4.48; SD = 1.005$). The Jets also have the most loyal fans ($M = 6.40; SD = .831$), whereas the Cincinnati Bengals have the lowest loyalty score ($M = 5.41; SD = 1.340$) (see Table 6). The Jacksonville Jaguars’ fans had the highest NFL fandom ($M = 6.13; SD = .882$) while the lowest NFL fandom went to the fans of the Atlanta Falcons ($M = 5.08; SD = 1.472$) (see Table 7).

**Constructing the Measures**

Before analysis took place, I needed to convert the scales included into usable variables. For the Sport Fandom Questionnaire (SFQ), I added the five items to get a total score (possible total score ranged from 5 to 35). I then took the average of the total score to create the new fandom score variable. The second scale converted into a usable variable was the Sport Spectatorship Identification Scale (SSIS). I averaged the total score of the eleven items (11-77) used in the SSIS to create the team identification score variable. The last scale I transformed into a working variable was the PCT scale. Again, I averaged the total score (7-49) from the modified Psychological Commitment to Team (PCT) scale to create the team loyalty variable.
<table>
<thead>
<tr>
<th>Favorite NFL Team</th>
<th>Win by favorite NFL team</th>
<th>Win by fantasy football</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>%</td>
</tr>
<tr>
<td>Arizona Cardinals</td>
<td>14</td>
<td>56.0</td>
</tr>
<tr>
<td>Atlanta Falcons</td>
<td>21</td>
<td>50.0</td>
</tr>
<tr>
<td>Baltimore Ravens</td>
<td>17</td>
<td>70.8</td>
</tr>
<tr>
<td>Buffalo Bills</td>
<td>24</td>
<td>46.2</td>
</tr>
<tr>
<td>Carolina Panthers</td>
<td>8</td>
<td>38.1</td>
</tr>
<tr>
<td>Chicago Bears</td>
<td>46</td>
<td>43.4</td>
</tr>
<tr>
<td>Cincinnati Bengals</td>
<td>9</td>
<td>36.0</td>
</tr>
<tr>
<td>Cleveland Browns</td>
<td>46</td>
<td>78.0</td>
</tr>
<tr>
<td>Dallas Cowboys</td>
<td>60</td>
<td>63.2</td>
</tr>
<tr>
<td>Denver Broncos</td>
<td>26</td>
<td>57.8</td>
</tr>
<tr>
<td>Detroit Lions</td>
<td>38</td>
<td>55.1</td>
</tr>
<tr>
<td>Green Bay Packers</td>
<td>46</td>
<td>54.1</td>
</tr>
<tr>
<td>Houston Texans</td>
<td>21</td>
<td>60.0</td>
</tr>
<tr>
<td>Indianapolis Colts</td>
<td>38</td>
<td>55.9</td>
</tr>
<tr>
<td>Jacksonville Jaguars</td>
<td>4</td>
<td>66.7</td>
</tr>
<tr>
<td>Kansas City Chiefs</td>
<td>32</td>
<td>64.0</td>
</tr>
<tr>
<td>Miami Dolphins</td>
<td>28</td>
<td>59.6</td>
</tr>
<tr>
<td>Minnesota Vikings</td>
<td>42</td>
<td>54.5</td>
</tr>
<tr>
<td>New England Patriots</td>
<td>85</td>
<td>63.9</td>
</tr>
<tr>
<td>New Orleans Saints</td>
<td>53</td>
<td>77.9</td>
</tr>
<tr>
<td>New York Giants</td>
<td>60</td>
<td>58.3</td>
</tr>
<tr>
<td>New York Jets</td>
<td>50</td>
<td>80.6</td>
</tr>
<tr>
<td>Oakland Raiders</td>
<td>16</td>
<td>47.1</td>
</tr>
<tr>
<td>Philadelphia Eagles</td>
<td>51</td>
<td>64.6</td>
</tr>
<tr>
<td>Pittsburgh Steelers</td>
<td>42</td>
<td>66.7</td>
</tr>
<tr>
<td>San Diego Chargers</td>
<td>28</td>
<td>57.1</td>
</tr>
<tr>
<td>San Francisco 49ers</td>
<td>47</td>
<td>49.5</td>
</tr>
<tr>
<td>Seattle Seahawks</td>
<td>19</td>
<td>48.7</td>
</tr>
<tr>
<td>St. Louis Rams</td>
<td>21</td>
<td>67.7</td>
</tr>
<tr>
<td>Tampa Bay Bucs</td>
<td>16</td>
<td>61.5</td>
</tr>
<tr>
<td>Tennessee Titans</td>
<td>17</td>
<td>40.5</td>
</tr>
<tr>
<td>Washington Redskins</td>
<td>32</td>
<td>64.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1057</strong></td>
<td><strong>58.6</strong></td>
</tr>
<tr>
<td>Favorite NFL Team</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>New York Jets</td>
<td>5.37</td>
<td>.860</td>
</tr>
<tr>
<td>Cleveland Browns</td>
<td>5.24</td>
<td>1.016</td>
</tr>
<tr>
<td>Pittsburgh Steelers</td>
<td>5.20</td>
<td>.871</td>
</tr>
<tr>
<td>Philadelphia Eagles</td>
<td>5.17</td>
<td>.898</td>
</tr>
<tr>
<td>New Orleans Saints</td>
<td>5.13</td>
<td>1.210</td>
</tr>
<tr>
<td>Dallas Cowboys</td>
<td>5.10</td>
<td>.969</td>
</tr>
<tr>
<td>New York Giants</td>
<td>5.09</td>
<td>.980</td>
</tr>
<tr>
<td>New England Patriots</td>
<td>5.05</td>
<td>.985</td>
</tr>
<tr>
<td>Baltimore Ravens</td>
<td>4.97</td>
<td>1.302</td>
</tr>
<tr>
<td>Minnesota Vikings</td>
<td>4.95</td>
<td>.978</td>
</tr>
<tr>
<td>Kansas City Chiefs</td>
<td>4.95</td>
<td>1.079</td>
</tr>
<tr>
<td>Buffalo Bills</td>
<td>4.93</td>
<td>1.164</td>
</tr>
<tr>
<td>Washington Redskins</td>
<td>4.92</td>
<td>1.182</td>
</tr>
<tr>
<td>Seattle Seahawks</td>
<td>4.91</td>
<td>1.000</td>
</tr>
<tr>
<td>Houston Texans</td>
<td>4.88</td>
<td>1.092</td>
</tr>
<tr>
<td>Chicago Bears</td>
<td>4.84</td>
<td>.958</td>
</tr>
<tr>
<td>Miami Dolphins</td>
<td>4.80</td>
<td>1.083</td>
</tr>
<tr>
<td>Jacksonville Jaguars</td>
<td>4.76</td>
<td>1.549</td>
</tr>
<tr>
<td>Green Bay Packers</td>
<td>4.75</td>
<td>1.016</td>
</tr>
<tr>
<td>Indianapolis Colts</td>
<td>4.73</td>
<td>1.175</td>
</tr>
<tr>
<td>Tennessee Titans</td>
<td>4.71</td>
<td>1.014</td>
</tr>
<tr>
<td>Carolina Panthers</td>
<td>4.66</td>
<td>.998</td>
</tr>
<tr>
<td>San Diego Chargers</td>
<td>4.65</td>
<td>1.225</td>
</tr>
<tr>
<td>Denver Broncos</td>
<td>4.63</td>
<td>1.141</td>
</tr>
<tr>
<td>Detroit Lions</td>
<td>4.62</td>
<td>1.086</td>
</tr>
<tr>
<td>Oakland Raiders</td>
<td>4.58</td>
<td>1.019</td>
</tr>
<tr>
<td>St. Louis Rams</td>
<td>4.54</td>
<td>1.115</td>
</tr>
<tr>
<td>Atlanta Falcons</td>
<td>4.52</td>
<td>1.206</td>
</tr>
<tr>
<td>Cincinnati Bengals</td>
<td>4.52</td>
<td>1.122</td>
</tr>
<tr>
<td>Arizona Cardinals</td>
<td>4.52</td>
<td>1.248</td>
</tr>
<tr>
<td>Tampa Bay Buccaneers</td>
<td>4.50</td>
<td>.919</td>
</tr>
<tr>
<td>San Francisco 49ers</td>
<td>4.48</td>
<td>1.005</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4.89</td>
<td>1.065</td>
</tr>
</tbody>
</table>
Table 5: Team Loyalty Score for Favorite NFL Team

<table>
<thead>
<tr>
<th>Favorite NFL Team</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York Jets</td>
<td>6.40</td>
<td>.831</td>
<td>62</td>
</tr>
<tr>
<td>Pittsburgh Steelers</td>
<td>6.24</td>
<td>.903</td>
<td>63</td>
</tr>
<tr>
<td>Cleveland Browns</td>
<td>6.24</td>
<td>1.238</td>
<td>59</td>
</tr>
<tr>
<td>New York Giants</td>
<td>6.23</td>
<td>1.131</td>
<td>103</td>
</tr>
<tr>
<td>Dallas Cowboys</td>
<td>6.17</td>
<td>.975</td>
<td>95</td>
</tr>
<tr>
<td>Philadelphia Eagles</td>
<td>6.16</td>
<td>1.059</td>
<td>79</td>
</tr>
<tr>
<td>New England Patriots</td>
<td>6.10</td>
<td>1.153</td>
<td>133</td>
</tr>
<tr>
<td>Washington Redskins</td>
<td>6.04</td>
<td>.947</td>
<td>50</td>
</tr>
<tr>
<td>Green Bay Packers</td>
<td>6.02</td>
<td>1.212</td>
<td>85</td>
</tr>
<tr>
<td>Chicago Bears</td>
<td>5.98</td>
<td>1.142</td>
<td>106</td>
</tr>
<tr>
<td>Carolina Panthers</td>
<td>5.93</td>
<td>1.181</td>
<td>21</td>
</tr>
<tr>
<td>New Orleans Saints</td>
<td>5.92</td>
<td>1.554</td>
<td>68</td>
</tr>
<tr>
<td>Miami Dolphins</td>
<td>5.89</td>
<td>1.394</td>
<td>47</td>
</tr>
<tr>
<td>Detroit Lions</td>
<td>5.83</td>
<td>1.358</td>
<td>69</td>
</tr>
<tr>
<td>Oakland Raiders</td>
<td>5.82</td>
<td>1.477</td>
<td>34</td>
</tr>
<tr>
<td>Kansas City Chiefs</td>
<td>5.81</td>
<td>1.239</td>
<td>50</td>
</tr>
<tr>
<td>San Francisco 49ers</td>
<td>5.76</td>
<td>1.286</td>
<td>95</td>
</tr>
<tr>
<td>Indianapolis Colts</td>
<td>5.71</td>
<td>1.346</td>
<td>68</td>
</tr>
<tr>
<td>Buffalo Bills</td>
<td>5.70</td>
<td>1.480</td>
<td>52</td>
</tr>
<tr>
<td>Baltimore Ravens</td>
<td>5.70</td>
<td>1.480</td>
<td>24</td>
</tr>
<tr>
<td>Tennessee Titans</td>
<td>5.69</td>
<td>1.284</td>
<td>42</td>
</tr>
<tr>
<td>Minnesota Vikings</td>
<td>5.68</td>
<td>1.074</td>
<td>77</td>
</tr>
<tr>
<td>Tampa Bay Buccaneers</td>
<td>5.68</td>
<td>1.324</td>
<td>26</td>
</tr>
<tr>
<td>Denver Broncos</td>
<td>5.66</td>
<td>1.333</td>
<td>45</td>
</tr>
<tr>
<td>St. Louis Rams</td>
<td>5.64</td>
<td>1.477</td>
<td>31</td>
</tr>
<tr>
<td>Houston Texans</td>
<td>5.63</td>
<td>1.383</td>
<td>35</td>
</tr>
<tr>
<td>Seattle Seahawks</td>
<td>5.58</td>
<td>1.524</td>
<td>39</td>
</tr>
<tr>
<td>Jacksonville Jaguars</td>
<td>5.55</td>
<td>2.230</td>
<td>6</td>
</tr>
<tr>
<td>Arizona Cardinals</td>
<td>5.53</td>
<td>1.307</td>
<td>25</td>
</tr>
<tr>
<td>San Diego Chargers</td>
<td>5.46</td>
<td>1.336</td>
<td>49</td>
</tr>
<tr>
<td>Atlanta Falcons</td>
<td>5.46</td>
<td>1.432</td>
<td>42</td>
</tr>
<tr>
<td>Cincinnati Bengals</td>
<td>5.41</td>
<td>1.340</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>5.91</td>
<td>1.257</td>
<td>1805</td>
</tr>
</tbody>
</table>
Table 6: NFL Fandom Score for Favorite NFL Team

<table>
<thead>
<tr>
<th>Favorite NFL Team</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jacksonville Jaguars</td>
<td>6.13</td>
<td>.882</td>
<td>6</td>
</tr>
<tr>
<td>Baltimore Ravens</td>
<td>6.05</td>
<td>.807</td>
<td>24</td>
</tr>
<tr>
<td>New York Jets</td>
<td>6.00</td>
<td>.806</td>
<td>62</td>
</tr>
<tr>
<td>Philadelphia Eagles</td>
<td>5.95</td>
<td>.928</td>
<td>79</td>
</tr>
<tr>
<td>Oakland Raiders</td>
<td>5.87</td>
<td>.834</td>
<td>34</td>
</tr>
<tr>
<td>Dallas Cowboys</td>
<td>5.85</td>
<td>.963</td>
<td>95</td>
</tr>
<tr>
<td>New York Giants</td>
<td>5.84</td>
<td>1.112</td>
<td>103</td>
</tr>
<tr>
<td>Pittsburgh Steelers</td>
<td>5.83</td>
<td>.986</td>
<td>63</td>
</tr>
<tr>
<td>Houston Texans</td>
<td>5.81</td>
<td>.851</td>
<td>35</td>
</tr>
<tr>
<td>Green Bay Packers</td>
<td>5.78</td>
<td>1.168</td>
<td>85</td>
</tr>
<tr>
<td>Kansas City Chiefs</td>
<td>5.76</td>
<td>.880</td>
<td>50</td>
</tr>
<tr>
<td>Seattle Seahawks</td>
<td>5.72</td>
<td>1.000</td>
<td>39</td>
</tr>
<tr>
<td>New England Patriots</td>
<td>5.72</td>
<td>1.217</td>
<td>133</td>
</tr>
<tr>
<td>Carolina Panthers</td>
<td>5.71</td>
<td>.898</td>
<td>21</td>
</tr>
<tr>
<td>Cleveland Browns</td>
<td>5.71</td>
<td>1.075</td>
<td>59</td>
</tr>
<tr>
<td>Minnesota Vikings</td>
<td>5.68</td>
<td>1.077</td>
<td>77</td>
</tr>
<tr>
<td>Tampa Bay Buccaneers</td>
<td>5.66</td>
<td>.905</td>
<td>26</td>
</tr>
<tr>
<td>Denver Broncos</td>
<td>5.65</td>
<td>1.111</td>
<td>45</td>
</tr>
<tr>
<td>New Orleans Saints</td>
<td>5.64</td>
<td>1.185</td>
<td>68</td>
</tr>
<tr>
<td>Indianapolis Colts</td>
<td>5.64</td>
<td>.914</td>
<td>68</td>
</tr>
<tr>
<td>St. Louis Rams</td>
<td>5.63</td>
<td>.969</td>
<td>31</td>
</tr>
<tr>
<td>San Diego Chargers</td>
<td>5.60</td>
<td>1.181</td>
<td>49</td>
</tr>
<tr>
<td>Buffalo Bills</td>
<td>5.60</td>
<td>1.206</td>
<td>52</td>
</tr>
<tr>
<td>Miami Dolphins</td>
<td>5.60</td>
<td>1.530</td>
<td>47</td>
</tr>
<tr>
<td>Cincinnati Bengals</td>
<td>5.53</td>
<td>1.262</td>
<td>25</td>
</tr>
<tr>
<td>Chicago Bears</td>
<td>5.51</td>
<td>1.136</td>
<td>106</td>
</tr>
<tr>
<td>San Francisco 49ers</td>
<td>5.51</td>
<td>1.121</td>
<td>95</td>
</tr>
<tr>
<td>Washington Redskins</td>
<td>5.49</td>
<td>1.252</td>
<td>50</td>
</tr>
<tr>
<td>Detroit Lions</td>
<td>5.33</td>
<td>1.477</td>
<td>69</td>
</tr>
<tr>
<td>Arizona Cardinals</td>
<td>5.26</td>
<td>1.3450</td>
<td>25</td>
</tr>
<tr>
<td>Tennessee Titans</td>
<td>5.17</td>
<td>1.566</td>
<td>42</td>
</tr>
<tr>
<td>Atlanta Falcons</td>
<td>5.08</td>
<td>1.472</td>
<td>42</td>
</tr>
<tr>
<td>Total</td>
<td>5.67</td>
<td>1.137</td>
<td>1805</td>
</tr>
</tbody>
</table>
Level of Participation and Team Identification

RQ1 asked how the participation level of fantasy football owners affects their team identification. Analysis indicated that higher levels of participation ($M = 4.95; SD = 1.040$) resulted in higher team identification scores than lower levels of participation ($M = 4.84; SD = 1.079$) ($t(1803), p < .05$) (See Figure 1). Using an open-ended question, I also asked participants if they thought that fantasy football affected the way they identify with their favorite team. Respondents indicated that playing fantasy football has not affected their team identification (See Figure 2). Here are a couple of responses that reflected the sentiment of the sample:

Participant1: “It hasn't affected my team identification. It has broadened my attention of the whole league, but hasn't hurt the attention to my favorite team.”

Participant2: “It hasn't affected my fandom in any significant way. I still put my favorite team's success above my fantasy success.”

I also conducted a two-way analysis of variance (ANOVA) to see if participation level affected team identification while controlling for the record of the participant’s favorite team. I created a dichotomous variable, team record, using the record of the teams during the 2010 season. Teams with an 8-8 record were included in the winning category. The two-way ANOVA indicated significant main effects for participation level ($F(1,1801) = 3.724; p < .05$) and team record ($F(1,1801) = 8.432; p < .01$) on team identification, but it showed no interaction effect ($F(1,1801) = 1.467; p = .226$) (See Table 7).
Figure 1: Participation Level and Team Identification, Team Loyalty, and NFL Fandom

\*p < .05; **p < .001

Table 7: Participation Level and Team Identification, Team Loyalty, and NFL Fandom (Controlling for Team Record)

<table>
<thead>
<tr>
<th>Participation Level</th>
<th>Team Record</th>
<th>Team Identification</th>
<th>Team Loyalty</th>
<th>NFL Fandom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>( M )</td>
<td>SD</td>
<td>( M )</td>
</tr>
<tr>
<td>High</td>
<td>Winning</td>
<td>5.05</td>
<td>1.032</td>
<td>6.06</td>
</tr>
<tr>
<td></td>
<td>Losing</td>
<td>4.83</td>
<td>1.041</td>
<td>5.89</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.96</td>
<td>1.040</td>
<td>5.99</td>
</tr>
<tr>
<td>Low</td>
<td>Winning</td>
<td>4.88</td>
<td>1.061</td>
<td>5.92</td>
</tr>
<tr>
<td></td>
<td>Losing</td>
<td>4.80</td>
<td>1.098</td>
<td>5.78</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.84</td>
<td>1.079</td>
<td>5.86</td>
</tr>
</tbody>
</table>
Figure 2: Web of Terms for Team Identification

Note. The thicker the line, the stronger the relationship between terms.

Level of Participation and Team Loyalty

To answer RQ2, I analyzed team loyalty across participation levels of fantasy.

Participants who had a high participation level ($M = 6.00; SD = 1.237$) reported higher team loyalty scores (See Figure 1) than those with a low participation level ($M = 5.86; SD = 1.267$) ($t(1803) = 2.151, p < .05$). Again, a two-way ANOVA showed no interaction effect ($F(1,1801) = .021; p = .884$) between participation level and team record on team loyalty; however, I found significant main effects for participation level ($F(1,1801) = 4.267; p < .05$) and record ($F(1,1801) = 6.984; p < .01$) on team loyalty (See Table 7).
Level of Participation and NFL Fandom

For RQ3, I examined if a person’s level of fantasy football participation affected their overall fandom of the NFL. Fandom scores (See Figure 1) were significantly higher for people with higher participation levels ($M = 5.84; SD = 1.054$) than those with lower participation levels ($M = 5.56; SD = 1.174$) ($t(1803) = 5.012; p < .001$). Then I ran a two-way ANOVA on level of participation and fandom, controlling for the 2010 record of the favorite NFL teams. As before, I did not find a significant interaction effect ($F(1,1801) = .016; p = .899$), but results indicated significant main effects for both participation level ($F(1,1801) = 24.457; p < .001$) and team record ($F(1,1801) = 5.722; p < .05$) (See Table 7). I also gave participants an opportunity to
express how they thought fantasy football participation affected their fandom of the NFL using an open-ended question (See Figure 3). Participants reported that playing fantasy sports increased their awareness and knowledge of players and teams, which resulted in them watching more NFL games. Here are a couple of responses from participants:

Participant3: “It has greatly increased my fandom of the NFL in general. Knowing about every team's skill players has improved my knowledge and interest in the games.”

Participant4: “I get to root for more players across the league since they are on my team. Fantasy football allowed me to become a bigger fan of the league in general.”

**Level of Participation and Consumer Behavior**

RQ4 asked if participation level affected a person’s consumer behavior. Consumer behavior here consists of both game consumption and online consumption. The first question for game consumption asked how many hours a person spent watching NFL games during a typical week. Overall, the majority of participants watch four or more hours a week of football ($n = 1286; 71.2\%$). However, people with higher levels of participation ($M = 4.02; SD = .972$) watch seven to nine hours of NFL games each week, while lower level participants ($M = 3.51; SD = 1.045$) watch four to six hours of games each week ($t(1803) = 10.232; p < .001$).

The second question for game consumption had to do with where a person watches NFL games. An overwhelming majority ($n = 1550; 85.9\%$) watch games at home. High participation levels ($M = 1.26; SD = .678$) did not differ from low participation levels ($M = 1.23; SD = .631$) in location preference to watch NFL games ($t(1803) = 1.156; p = .248$). The last area of game consumption tested was game attendance. Respondents with high levels of participation ($M =$
4.27; $SD = 2.114$) are just as likely to attend NFL games as those with low levels of participation ($M = 4.11; SD = 2.105$) ($t(1803) = 1.507; p = .132$).

Next, I tested two aspects of online consumption, the number of fantasy football teams managed by participants and the number of times a person goes online to check their fantasy team’s stats while watching NFL games. High level participants ($M = 2.67; SD = 1.297$) reported managing three teams, while low level participants ($M = 2.33; SD = 1.239$) manage two teams ($t(1803) = 5.577; p < .001$).

The other aspect of online consumption tested showed that most fantasy football players (n = 1421; 78.7%) go online to see how their fantasy team is doing five or more times while watching an actual NFL game. Analysis showed high level participants ($M = 5.76; SD = .812$) checked on their fantasy team(s) five or more time, whereas low level participants ($M = 5.24; SD = 1.393$) only checked four times ($t(1803) = 8.846; p < .001$).

**Win Preference**

RQ5 asked if whether a person would rather have their fantasy team win or their favorite team win (win preference) affected participation level, team identification, team loyalty, and NFL fandom. Comparison of win preference on participation level\(^1\) showed that people who prefer a win by their favorite team ($M = 1.68; SD = .467$) had lower participation levels than those who prefer their fantasy team to win ($M = 1.52; SD = .500$) ($t(1803) = 6.800; p < .001$).

For the next three dependent variables, team identification, team loyalty, and fandom, I controlled for the 2010 record of participants’ favorite teams (See Table 8). Results for team identification showed significant main effects for win preference ($F(1,1801) = 459.215; p < .001$).

---

\(^1\) For participation level, high was coded as 1 with low coded as 2. Therefore a higher mean equals a lower participation level.
.001) and team record \(F(1,1801) = 4.967; p < .05\) on team identification but did not show a significant interaction effect \(F(1,1801) = 1.395; p = .238\) of win preference and team record on team identification (See Figure 4).

Next, for team loyalty, I again found significant main effects for win preference \(F(1,1801) = 451.274; p < .001\) and team record \(F(1,1801) = 4.697; p < .05\) but found no significant interaction effect \(F(1,1801) = .722; p = .396\) (See Table 8). Lastly, results indicated no interaction effect \(F(1,1801) = .050; p = .824\) but significant main effects for both win preference \(F(1,1801) = 85.126; p < .001\) and team record \(F(1,1801) = 4.906; p < .05\) on NFL fandom (See Table 8).

Figure 4: Win Preference and Team Identification, Team Loyalty, and NFL Fandom

\[***p < .001\]
Table 8: Win Preference and Team Identification, Team Loyalty, and NFL Fandom (Controlling for Team Record)

<table>
<thead>
<tr>
<th>Win Preference</th>
<th>Team Identification</th>
<th>Team Loyalty</th>
<th>NFL Fandom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td><strong>Favorite Team</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winning</td>
<td>5.31</td>
<td>.803</td>
<td>6.42</td>
</tr>
<tr>
<td>Losing</td>
<td>5.26</td>
<td>.821</td>
<td>6.34</td>
</tr>
<tr>
<td>Total</td>
<td>5.29</td>
<td>.810</td>
<td>6.39</td>
</tr>
<tr>
<td><strong>Fantasy Team</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winning</td>
<td>4.39</td>
<td>1.142</td>
<td>5.32</td>
</tr>
<tr>
<td>Losing</td>
<td>4.23</td>
<td>1.088</td>
<td>5.15</td>
</tr>
<tr>
<td>Total</td>
<td>4.31</td>
<td>1.119</td>
<td>5.24</td>
</tr>
</tbody>
</table>

**Gender Effects**

For RQ6, I examined gender against participation level, team identification, team loyalty, and NFL fandom. When looking at participation level, I found that men ($M = 1.61; SD = .488$) have higher levels of participation than women ($M = 1.73; SD = .444$) ($t(1803) = 2.690; p < .01$). Next, men ($M = 4.88; SD = 1.074$) and women ($M = 5.04; SD = .909$) did not differ in their team identification scores ($t(1803) = 1.582; p = .114$). With regard to team loyalty, women ($M = 6.18; SD = .888$) showed significantly more team loyalty (See Figure 5) to their favorite teams than men ($M = 5.89; SD = 1.276$) ($t(1803) = 2.316; p < .05$). Next, I tested gender against NFL fandom and found that men ($M = 5.67; SD = 1.140$) and women ($M = 5.62; SD = 1.091$) do not differ in their scores ($t(1803) = -.486; p = .627$) (See Figure 5).

I also looked at gender differences in the likelihood of participants to draft players from their favorite team and their favorite team’s rivals. Women ($M = 4.84; SD = 1.623$) are more likely to draft players from their favorite team than men ($M = 4.19; SD = 1.488$) ($t(1803) = .760; p = .450$).
4.480; \( p < .001 \). When it came to drafting players from rival teams, men \((M = 4.38; \text{SD} = 1.443)\) and women \((M = 4.27; \text{SD} = 1.459)\) did not differ \((-t(1803) = -.728; \text{\( p = .467 \))}.\)

**Figure 5: Gender and Team Identification, Team Loyalty, and NFL Fandom**

*\(p < .05\)

**Motivations to Play Fantasy Sports**

For RQ7, I asked thirty-three questions to determine if the ten motivations that were established from the pilot study were accurate. A principal components factor analysis with varimax rotation was used to determine the number of factors. Nine factors emerged from this analysis that used all 33 items (see Table 9). I determined the nine factors to include: entertainent, bragging rights, ownership, escape, learning, team identification, pass time, socialization, and fandom. These nine factors explained 71.28% of the total post-rotation variance.
The first factor, *Entertainment* (eigenvalue = 3.616), explained 10.96% of the total post-rotation variance. The six items that make up this factor show that people are motivated to play fantasy sports for the amusement and entertainment they get from it ($M = 4.42; SD = .502; \alpha = .807$). *Bragging Rights* (eigenvalue = 3.083) is the second factor and explained 9.34% of the post-rotation variance. This factor contained six items that relate to people being able to brag about their accomplishments in fantasy sports, such as their ability to pick players, winning a fantasy league, and the sense of achievement they get (M = 3.80; $SD = .750; \alpha = .824$).

The next factor is *Ownership* (eigenvalue = 2.766). The three items that make up this factor show that people are motivated to play fantasy sports in order to get the sense of owning, managing, and coaching an actual sports team and explained 8.38% of the variance ($M = 3.11; SD = 1.201; \alpha = .929$). Factor 4, *Escape* (eigenvalue = 2.763), explained 8.37% of the total post-rotation variance. The three items that compose this factor explain that people play fantasy sports to escape life’s stresses, including school or work ($M = 3.14; SD = 1.091; \alpha = .883$).

*Learning* (eigenvalue = 2.407) explained 7.29% of the variance. This motivation factor consists of three items that show people are drawn to fantasy sports to learn more about teams and players and to keep up-to-date with sports information ($M = 4.08; SD = .822; \alpha = .868$). The four items that make up factor 6, *Team Identification* (eigenvalue = 2.383), indicate that people are motivated to play based on the way they identify with their favorite team and explained 7.22% of the post-rotation variance ($M = 3.31; SD = .906; \alpha = .783$).
Table 9: Factor Analysis for Motivations to Play Fantasy Sports

<table>
<thead>
<tr>
<th>Factors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is enjoyable.</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is entertaining</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It increases the excitement of watching sports.</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It lets me enjoy more games.</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is amusing.</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy being emotionally stimulated by the competition.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>Winning my fantasy league will give me bragging rights all year long.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>I get to brag about my abilities to pick players.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>I love to “trash talk” and tell other owners how much better my team is</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>I feel a personal sense of achievement when my fantasy team does well.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>I feel like I win when my fantasy team wins.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>It boosts my self-esteem when I win.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.53</td>
<td></td>
</tr>
<tr>
<td>I can feel like the owner of an actual sports team.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>I can feel like the general manager of an actual sports team.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>I can feel like the coach of a team.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>It takes me away from life’s hassles.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.87</td>
<td></td>
</tr>
<tr>
<td>It helps me get away from life’s troubles.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>I can forget about school or work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.78</td>
<td></td>
</tr>
<tr>
<td>It allows me to learn more about teams.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>It allows me to learn more about players.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>I feel more up-to-date with sports information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.72</td>
<td></td>
</tr>
<tr>
<td>I get to draft players from my favorite teams.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>I get to control players from my favorite team.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>I am a big fan of my favorite team (pro, college, etc.).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>It shows that I’m a big sports fan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.50</td>
<td></td>
</tr>
</tbody>
</table>
### Table 9 (Continued): Factor Analysis for Motivations to Play Fantasy Sports

<table>
<thead>
<tr>
<th>Factors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>It gives me something to do when I am bored.</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is something to do in my free time.</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It gives me something to do to occupy my time.</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It helps me keep in touch with people I care about or like.</td>
<td>.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can spend time with friends who are playing.</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy interacting with other fantasy sports participants.</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I consider myself a general sports fan.</td>
<td>.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am a huge fan of sports in general.</td>
<td>.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Participants were asked, “I play fantasy sports because…”

Factor 7, *Pass Time* (eigenvalue = 2.295), explained 6.96% of the total variance. The three items that make up this factor show that people are motivated to play fantasy sports in order to have something to do to occupy their time, especially when they are bored (*M* = 3.77; *SD* = .871; *α* = .833). *Socialization* (eigenvalue = 2.200) is the next motivation factor and consists of three items that indicates people want to play fantasy sports to keep in touch with friends and family and to interact with other fantasy sports participants. This factor explained 6.67% of the variance (*M* = 3.95; *SD* = .837; *α* = .817). The last factor, *Fandom* (eigenvalue = 2.010), explained 6.09% of the variance and consisted of two items that show people are motivated to play because they consider themselves to be sports fans (*M* = 4.47; *SD* = .718; *α* = .850).

**Effects of Motivation Factors**

For my last research question, I examined each motivation factor I found in RQ7 against the following dependent variables: participation level (See Figure 6), team identification (See
Figure 7), team loyalty (See Figure 8), and NFL fandom (See Figure 9). Before I conducted my analysis, I made each motivation factor a dichotomous variable using the split high/low method.

![Figure 6: Levels of Motivation Factors and Participation Level](image)

Figure 6: Levels of Motivation Factors and Participation Level

*Note. Because participation level was coded as 1 (High) and 2 (Low), the higher number equals a lower participation level.  
*p < .05; **p < .01; ***p < .001

**Entertainment Motivation Factor**

People who are highly motivated ($M = 1.53; SD = .499$) to play fantasy sports because of the entertainment they get from it have higher participation levels than those who are not that motivated for entertainment ($M = 1.72; SD = .449$) ($F(1,1803) = 68.554; p < .001$). Higher motivated participants also indicated higher team identification scores ($M = 4.93; SD = 1.063$) than lower motivated participants ($M = 4.83; SD = 1.066$) ($F(1,1803) = 4.321; p < .05$). Next I found people with higher entertainment motivation ($M = 5.96; SD = 1.283$) reported higher team loyalty than those with lower entertainment motivation ($M = 5.84; SD = 1.220$) ($F(1,1803) = 1$).
4.305; \( p < .05 \)). Lastly, fandom of the NFL was higher for those with high entertainment motivation (\( M = 5.83; SD = 1.098 \)) than people with low entertainment motivation (\( M = 5.46; SD = 1.151 \)) \( (F(1,1803) = 49.962; p < .001) \).

![Figure 7: Levels of Motivation Factors and Team Identification](image)

*\( p < .05 \); **\( p < .001 \)

**Bragging Rights Motivation Factor**

After analyzing the bragging rights motivation factor, I found that people who like to brag about their accomplishments (\( M = 1.56; SD = .496 \)) are more involved in playing fantasy football than those who are not motivated by bragging rights (\( M = 1.68; SD = .467 \)) \( (F(1,1803) = 25.733; p < .001) \). With regard to team identification, people that are highly motivated (\( M = 5.02; SD = 1.052 \)) reported significantly higher scores than those that are low in motivation (\( M = 4.71; SD = 1.057 \)) \( (F(1,1803) = 39.085; p < .001) \). I also found that people who are drawn to play fantasy sports because of bragging rights (\( M = 6.04; SD = 1.190 \)) showed more team loyalty to their favorite team than those who are not (\( M = 5.75; SD = 1.318 \)) \( (F(1,1803) = 24.654; p < \).
Finally, people who play to boast about their skills ($M = 5.84; SD = 1.064$) reported greater fandom of the NFL than those who are not as motivated by boasting ($M = 5.45; SD = 1.186$) ($F(1,1803) = 55.387; p < .001$).

**Figure 8: Levels of Motivation Factors and Team Loyalty**

* $p < .05$; *** $p < .001$

**Ownership Motivation Factor**

People motivated by the sense of ownership they get by playing showed deeper levels of participation ($M = 1.59; SD = .492$) than participants not motivated by ownership ($M = 1.64; SD = .480$) ($F(1,1803) = 5.189; p < .05$). People who are high in ownership motivation ($M = 5.77; SD = 1.131$) also indicated more overall fandom of the NFL than those who are low in ownership motivation ($M = 5.56; SD = 1.134$) ($F(1,1803) = 18.532; p < .001$). However, motivation levels did not differ when I examined them against team identification ($F(1,1803) = 2.173; p = .141$) and team loyalty ($F(1,1803) = 2.249; p = .134$).
Respondents who play fantasy football to escape the hassles of everyday life had higher participation levels ($M = 1.58; SD = .494$) than respondents who are not motivated by escape ($M = 1.65; SD = .477$) ($F(1,1803) = 8.925; p < .01$). I also found people who are highly motivated by escape ($M = 5.75; SD = 1.120$) had greater fandom of the NFL than people who are low in escape motivation ($M = 5.59; SD = 1.148$) ($F(1,1803) = 9.203; p < .01$). When I compared high and low motivation for escape to team identification and team loyalty, I found no statistical difference with either team identification ($F(1,1803) = .375; p = .540$) or team loyalty ($F(1,1803) = .170; p < .680$).

**Learning Motivation Factor**

People motivated by learning more about players and teams through fantasy football participation ($M = 5.75; SD = 1.057$) showed higher overall fandom of the NFL than people not
motivated by learning ($M = 5.56; SD = 1.230$) ($F(1,1803) = 11.428; p < .001$). Examination of motivation levels showed no difference for level of participation ($F(1,1803) = .012; p = .912$), team identification ($F(1,1803) = 1.001; p = .317$), and team loyalty ($F(1,1803) = .812; p = .368$).

**Team Identification Motivation Factor**

Participants who are highly motivated to play fantasy football because of the affinity they have for their favorite team show higher team identification ($M = 5.13; SD = .958$) than those who are low in motivation ($M = 4.61; SD = 1.111$) ($F(1,1803) = 116.482; p < .001$). Highly motivated participants also show greater team loyalty ($M = 6.19; SD = .981$) than lower motivated participants ($M = 5.60; SD = 1.445$) ($F(1,1803) = 105.305; p < .001$). Next, participants who are not motivated by team identification ($M = 5.49; SD = 1.183$) indicated lower fandom of the NFL than those who are highly motivated ($M = 5.83; SD = 1.070$) ($F(1,1803) = 40.490; p < .001$). Finally, I found no difference in participation between high and low motivation levels ($F(1,1803) = 2.584; p = .108$).

**Pass Time Motivation Factor**

People who play fantasy football just to have something to do to pass the time showed no difference in participation level ($F(1,1803) = .031; p = .861$), team identification ($F(1,1803) = .356; p = .551$), team loyalty ($F(1,1803) = .090; p = .764$), or NFL fandom ($F(1,1803) = 1.253; p = .263$), than those who are not motivated just to occupy time.

**Socialization Motivation Factor**

When I compared motivation levels to play fantasy football based on participants’ ability to socialize, I found that highly motivated people do not differ from lowly motivated people when it comes to participation level ($F(1,1803) = .230; p = .632$), team identification ($F(1,1803)$
=.901; \( p = .343 \), team loyalty (\( F(1,1803) = .062; p = .804 \)), and NFL fandom (\( F(1,1803) = .085; p = .770 \)).

**Fandom Motivation Factor**

People who are motivated to play fantasy football based on their overall fandom of sports indicated higher team identification (\( M = 5.06; SD = .996 \)) than those who are not motivated highly by fandom (\( M = 4.64; SD = 1.114 \)) (\( F(1,1803) = 72.337; p < .001 \)). Also, higher motivation (\( M = 6.08; SD = 1.177 \)) showed greater team loyalty scores (\( M = 5.65; SD = 1.327 \)) (\( F(1,1803) = 52.466; p < .001 \)). When it came to fandom of the NFL, people who are high sports fans in general reported higher scores (\( M = 5.87; SD = 1.067 \)) than people who do not play because of fandom (\( M = 5.37; SD = 1.173 \)) (\( F(1,1803) = 86.928; p < .001 \)). However, fandom motivation levels did not factor in to participation level (\( F(1,1803) = 2.689; p = .101 \)).
CHAPTER 6
DISCUSSION

For my thesis, I explored fantasy football to see if participation levels, win preference, and gender affected team identification, team loyalty, and NFL fandom. I also wanted to determine what motivates a person to play fantasy sports and the effect these motivation factors have on levels of participation, team identification, team loyalty, and overall fandom of the NFL. Analysis indicated some interesting results that may have implications for anyone involved in the business of professional football as well as fantasy football.

One of the key components of my study was to see how fantasy football participation affected NFL fandom. Results showed that higher levels of participation increased overall fandom of the NFL. One way NFL fandom can be gauged is through sports media consumption, which can be measured by the amount of hours spent each week watching NFL games. In 2002, the NFL conducted an online survey to see how fantasy football participation affected the amount of football watched on television. The results showed that people who play fantasy football averaged two to three more hours of watching football each week than the average fan who did not play fantasy football (Cox, 2002). Even though this survey explained the difference between NFL fans that play fantasy football and fans that do not, it did not distinguish how fantasy football players differ based on their level of involvement. I found that the higher a person’s level of involvement in fantasy football, the more time spent watching NFL games each week. Specifically, people who were high in their level of participation watched seven to nine hours of games each week, while those with low participation watched four to six hours. This is due to more games becoming relevant since fantasy owners have players on multiple teams.
(Nesbit & King, 2010). More time spent watching games can also benefit companies because it increases exposure to the advertisements and sponsorships (Birch, 2004; Roy & Goss, 2007).

When asked, fantasy football participants acknowledged that they are watching more NFL games because fantasy football has increased their awareness and knowledge of players and teams. The ability to learn more about players and teams is an important motivating factor to play fantasy football. It is also a factor that should be promoted by the league because it increases fandom, while not affecting team identification and team loyalty, which have implications on sports consumption that I will be discussing a little later.

Higher participation levels also mean more time spent online in order to check the stats of their fantasy team(s). Cox (2002) showed that while watching a football game on television, 40 percent of people who play fantasy football were on a computer at least once. In this study, results show that 97.5% of fantasy football players go online at least once while watching an NFL game. Nearly 79% of participants go online, on average, five or more times during a game to check the stats of the players that are on their fantasy football time. This increases the number of page views that the site gets (Umstead, 2008), which allows the host to charge higher rates for advertisements (AdSpeed, 2010). More time spent online checking on fantasy teams equals more time spent on a website, which allows the site to charge more for advertising (Toren, 2010). Fantasy football gives advertisers access to a hardcore audience, which generates ad revenue for online hosting sites (Howard, 2009).

Another interesting thing I found had to do with whether a person preferred a win by their favorite team or a win by their fantasy team. In 2006, Taylor et al. conducted research showing that 29% of people who play fantasy sports would rather see their fantasy team win than their favorite team. I found that 41.4% of fantasy football players would prefer a win by their fantasy
team instead of their favorite team. One explanation of this increase is that fantasy football puts the emphasis on the individual players rather than an actual team. I believe the nature of fantasy football leads people to make the NFL more individualistic in nature.

In the fantasy football realm, the way an individual player performs is more important than an actual NFL team winning or losing. The popularity of fantasy football and the high player turnover rate in the NFL due to free agency makes it easier for fantasy football owners to cheer for their fantasy team players rather than an actual team. This is confirmed in this study because fantasy football participation results in higher NFL fandom than team identification. If this trend continues, it could be bad for the league and the individual teams because someone who prefers a win by their fantasy team has lower team identification, team loyalty, and NFL fandom than those who prefer a win by their favorite team.

Some argue that fantasy sports are eliminating the collective bond fans have for a certain team because fantasy sports participation turns people more inward rather than collective (Leitch, 2009). However, people with a high level of participation reported higher team identification scores. Participants claimed that fantasy football participation has not affected their team identification. However, if more people prefer a win by their fantasy football team instead of their favorite team, it could be lowering their team identification without them recognizing it. This is important because team identification has been identified as a major decision factor in sports consumption.

Wann (2006) separates sport consumption into three categories: game consumption, team merchandise consumption, and sponsorship consumption. Game consumption is made up of direct and indirect sport consumption. Direct sport consumption is when a person attends a game. According to many researchers, team identification may be the most important psychological
factor impacting game attendance (Fisher & Wakefield, 1998; Greenwood, 2001; Hill & Green, 2000; Mahony, Nakazawa, Funk, James, & Gladden, 2002; Wakefield & Sloan, 1995; Wann, 2006; Wann & Branscombe, 1993; Wann et al., 2001; Wann, Roberts, & Tindall, 1999; Williamson, Zhang, Pease, & Gaa, 2003). Research has shown a positive relationship between the degree of team identification and game attendance (Murell & Dietz, 1992; Wakefield, 1995; Wann & Branscombe, 1993; Wann et al., 1999). For example, participants who are fans of the Jacksonville Jaguars have the highest NFL fandom score, but they are towards the bottom of the league in team identification and team loyalty, which could be why they are struggling to sell tickets to home games. In contrast, the Cleveland Browns’ fans are near the top in both team identification and team loyalty, but they are lower in overall NFL fandom. Yet Cleveland did better in ticket sales than Jacksonville in 2010, even though Cleveland was 5-11 and Jacksonville was 8-8. High team identification is good news for the NFL and its teams since ticket sales make up anywhere from 20% to 50% of the total revenue of the league (Kim & Trail, 2010).

Indirect sport consumption is when a person follows a sport by some media outlet (e.g., television, radio, Internet). Sports teams can increase team identification by providing information and generating interest through media coverage, which leads to an increase in indirect sport consumption (Fisher, 1998; Wann & Branscombe, 1993; Wann et al., 2001). Results from this study confirm that people who spend more time watching NFL each week have significantly higher team identification scores.

Team merchandise consumption is the second category of sport consumption and involves the purchase of team-related apparel and products. For many sports fans, team merchandise is used to display their connection to their chosen team and identify them as a member of a particular support group (Crawford, 2004). This is not a new concept. In ancient
Rome, fans of charioteers would often dress up in team colors to identify themselves as supporters of certain athletes (Crawford, 2004; Guttman, 1986). Also, Dant (1999) suggests the following:

Supporters of soccer have always declared their allegiances through a series of objects, some of which have had a certain usefulness (the warmth of a wooly hat and scarf in team [colors]) and others (pennants, badges, flags) which are simply waved, attached to clothing, stuck on walls, or hung in cars. (p. 5-6)

Research has shown that the higher the level of team identification, the more likely a fan is to purchase team-related merchandise (Fisher & Wakefield, 1998; Madrigal, 2000, 2004; Wann, 2006). Sponsorship consumption is the last category of sport consumption. Sponsorship consumption involves how fans perceive the sponsors of teams and the likelihood that fans will purchase products from the sponsors. When fans have high levels of team identification, research shows that they are more likely to purchase items from sponsors (Gwinner & Swanson, 2003; Madrigal, 2000, 2004).

Team loyalty is similar to team identification. Interestingly, women are more loyal to their favorite teams than men. This explains why women who play fantasy football are more likely to draft players from their favorite teams. Results also indicated that higher participation levels yield higher team loyalty. According to previous research, people that have higher team loyalty are more likely to watch and attend games featuring their favorite team (James, 2001; Kolbe & James, 2003; Mahony et al., 2000; Smith et al., 1981; Trail & James, 2001; Wakefield & Sloan, 1995). Also, Howard and Thompson (1984) found that the higher the loyalty, the more likely a person is to pay attention to the advertising used about or around the object.

The last area that I analyzed was what motivates a person to play fantasy sports. The following nine motivation factors resulted from this study: entertainment, bragging rights,
ownership, escape, learning, team identification, pass time, socialization, and sports fandom. The factors that I found differ from those Spinda and Haridakis (2008) found when they were developing their Fantasy Sports Motives Scale (FSMS). The FSMS has the following motivation factors: ownership, achievement/self-esteem, escape/pass time, socialization, bragging rights, and amusement. The FSMS does not take into account sports fandom, learning, or team identification as motivation factors. Fandom and learning were two of the three strongest motivation factors to play fantasy sports that I found. These are important factors that need to be included.

Learning could be the most important factor for the NFL and the individual teams since it increases fandom but does not affect team identification and loyalty. It is also important because people want to be walking encyclopedias of sports knowledge, which can help them in their fantasy league. For example, a person who plays fantasy football would have to learn more about a team’s offensive tendency before drafting an offensive player. You would want to draft a running back on a team that has a tendency to run more than pass rather than a pass heavy team. Learning can also appeal to people who want to play for the opportunity to brag about their abilities. By learning more about players and teams, a person can draft a better fantasy team. This can lead to more wins, which allows more opportunities for boasting. According to Mulhern (2010), “the appeal of fantasy sports is twofold: It acts as another outlet for sports-crazed fans to use their knowledge, while also providing a social component for those involved.”

Limitations

Even though there was a large response to the survey, there were still problems with a homogeneous sample. Participants were 94% male. The majority of fantasy football participants are men but this is still higher than what was previously found (89%) (Taylor et al., 2006).
Another demographic limitation is that the sample skewed younger (58.1% were 18-29) than what Taylor et al. (2006) found (34% were 18-29).

The length of the survey could also be a limitation of this study. The survey included 76 questions. This could lead to a regression toward the mean on the answers. The length could also lead to survey fatigue. There were a number of people who did not complete the survey. The sampling method could also be a limitation. The snowball sampling technique could lead to sample biases in educational levels, social class, gender, race/ethnicity, or income levels (Welch, 1975). Another limitation is that significant differences were indicated for some tests where the means were not that far apart. The large sample size could be showing they are different when in fact they are not.

**Future Research**

Future research should sample NFL fans that do not play fantasy football as well as those who play. This would allow for comparisons of fandom levels, team identification, team loyalty, and consumer behavior between the two groups. Another topic that needs to be researched is what the most popular fantasy football sites are and what draws people to these sites. Is it the game type? Website design? Additional options given to the league? Future research should also look at the effectiveness of advertising and sponsorship on fantasy websites. The research done in this study should also be extended to other sports, such as baseball and basketball, to see if fantasy sports participation is enhancing or detracting from the sport.
REFERENCES


65


Shrum, L. J. (2004). What's so special about entertainment media and why do we need a psychology for it?: An introduction to the psychology of entertainment media. In L. J. Shrum (Ed.), *Blurring the lines between entertainment and persuasion: The psychology of entertainment media* (pp. 1-9). Mahwah, New Jersey: Lawrence Erlbaum Associates.


APPENDIX
SURVEY

Q1. Do you play fantasy football?
○ Yes
○ No

Q2. Typically, how many hours a day do you spend on your fantasy football team?
○ 0
○ 1
○ 2
○ 3
○ 4+

Q3. Yesterday, how many hours did you spend on your fantasy football team?
○ 0
○ 1
○ 2
○ 3
○ 4+

Q4. During a typical season, how many fantasy football teams do you manage?
○ 1
○ 2
○ 3
○ 4
○ 5+
Q5. How many years have you played fantasy football?
- 0-1
- 2
- 3
- 4
- 5+

Q6. What other fantasy sports do you play? (check all that apply)
- Basketball
- Baseball
- Hockey
- Golf
- NASCAR
- Soccer
- Other ____________________

Q7. Please choose the response that most accurately describes you as a fan of the National Football League (NFL).

   Strongly Disagree   1   2   3   4   5   6   7   Strongly Agree

1. I consider myself to be an NFL fan.
2. My friends see me as an NFL fan.
3. I believe that following the NFL is the most enjoyable form of entertainment.
4. My life would be less enjoyable if I were not allowed to follow the NFL.
5. Being a fan of the NFL is very important to me.

Q8. Please list your favorite NFL team.

Now answer each of the following questions with this team in mind by choosing the most accurate response to each item.
Q9. How important is it to you that the team listed above wins?
- Not at all Important
- Very Unimportant
- Somewhat Unimportant
- Neither Important nor Unimportant
- Somewhat Important
- Very Important
- Extremely Important

Q10. How strongly do you see yourself as a fan of the team listed above?
- Not at all a Fan (1)
- 2
- 3
- 4
- 5
- 6
- Very much a Fan (7)

Q11. How strongly do your friends see as a fan of the team listed above?
- Not at all a Fan (1)
- 2
- 3
- 4
- 5
- 6
- Very much a Fan (7)
Q12. During the season, how closely do you follow the team listed above in person?
- Never
- Once
- 2-3 times
- 4-5 times
- 6-8 times
- 9-10 times
- 11+ times

Q13. During the season, how closely do you follow the team above via the following:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Less than Once a Month</th>
<th>Once a Month</th>
<th>2-3 Times a Month</th>
<th>Once a Week</th>
<th>2-3 Times a Week</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Radio</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Newspaper</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Internet</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Q14. How important is being a fan of the team listed above to you?
- Not at all Important
- Very Unimportant
- Somewhat Unimportant
- Neither Important nor Unimportant
- Somewhat Important
- Very Important
- Extremely Important
Q15. How much do you dislike the greatest rivals of the team listed above?
- Like Extremely
- Like Very Much
- Like Slightly
- Neither Like nor Dislike
- Dislike Slightly
- Dislike Very Much
- Dislike Extremely

Q16. How often do you display the above team's name or insignia at your place of work, where you live, or on your clothing?
- Never
- Less than Once a Month
- Once a Month
- 2-3 Times a Month
- Once a Week
- 2-3 Times a Week
- Daily

Q17. Please answer how strongly you agree or disagree with the following statements.

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree
1. I would watch a game featuring my favorite NFL team regardless of which team they are playing.
2. Being a fan of my favorite NFL team is important to me.
3. Nothing could change my allegiance to my favorite NFL team.
4. I am a committed fan of my favorite NFL team.
5. I could never switch my loyalty from my favorite NFL team even if my close friends were fans of another team.
6. It would be unlikely for me to change my allegiance from my current favorite NFL team to another.
7. It would be difficult to change my beliefs about my favorite NFL team.
Q18. I play fantasy sports because...

Strongly Agree  1  2  3  4  5  Strongly Disagree

1. It gives me something to do when I am bored.
2. I get to brag about my abilities to pick players.
3. It allows me to learn more about teams.
4. It helps me get away from life’s troubles.
5. I enjoy being emotionally stimulated by the competition.
6. I can feel like the general manager of an actual sports team.
7. It helps me keep in touch with people I care about or like.
8. I feel a personal sense of achievement when my fantasy team does well.
9. It is entertaining.
10. I consider myself a general sports fan.
11. I am a big fan of my favorite team (pro, college, etc.).

Q19. I play fantasy sports because...

Strongly Agree  1  2  3  4  5  Strongly Disagree

1. It is something to do in my free time.
2. Winning my fantasy league will give me bragging rights all year long.
3. It allows me to learn more about players.
4. I can forget about school or work.
5. It lets me enjoy more games.
6. I can feel like the owner of an actual sports team.
7. I can spend time with friends who are playing.
8. I feel like I win when my fantasy team wins.
9. It is enjoyable.
10. I am a huge fan of sports in general.
11. I get to draft players from my favorite team.
Q20. I play fantasy sports because...

1. It gives me something to do to occupy my time.
2. I love to “trash talk” and tell other owners how much better my team is.
3. I feel more up-to-date with sports information.
4. It takes me away from life’s hassles.
5. It increases the excitement of watching sports.
6. I can feel like the coach of a team.
7. I enjoy interacting with other fantasy sport participants.
8. It boosts my self-esteem when I win.
9. It is amusing.
10. It shows that I’m a big sports fan.
11. I get to control players from my favorite team.

Q21. Typically, how many hours a week do you watch NFL games?
- 0-1
- 2-3
- 4-6
- 7-9
- 10+

Q22. Where do you normally watch NFL games?
- Home
- Friend’s place
- Sports bar
- Other ____________________

Q23. How many people do you normally watch an NFL game with?
- 0
- 1-2
- 3-4
- 5+
Q24. How likely are you to attend an NFL game in person?
  o Very Unlikely
  o Unlikely
  o Somewhat Unlikely
  o Undecided
  o Somewhat Likely
  o Likely
  o Very Likely

Q25. What gives you more personal satisfaction?
  o A win by your favorite NFL team
  o A win by your fantasy team

Q26. How likely are you to draft players from your favorite NFL team?
  o Very Unlikely
  o Unlikely
  o Somewhat Unlikely
  o Undecided
  o Somewhat Likely
  o Likely
  o Very Likely

Q27. How likely are you to draft a player from your favorite team's rivals?
  o Very Unlikely
  o Unlikely
  o Somewhat Unlikely
  o Undecided
  o Somewhat Likely
  o Likely
  o Very Likely
Q28. How many times do you check your fantasy team's stats while watching a game?
- 0
- 1
- 2
- 3
- 4
- 5+

Q29. How do you think playing fantasy football has affected your fandom of your favorite team?

Q30. How do you think playing fantasy football has affected your fandom of the NFL?

Q31. What is your age?
- 18-20
- 21-24
- 25-29
- 30-34
- 35-39
- 40+

Q32. What is your race/ethnicity?
- American Indian or Alaska Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian or Pacific Islander
- White
- Other ____________________

Q33. Are you
- Female
- Male
Q34. What country are you a citizen of?
- United States
- Other ________________

Q35. What state are you a resident of?
VITA

Jeremy Lee graduated from Louisiana College in May 2007 with a Bachelor of Arts in media communications and a minor in computer science. After graduation, Jeremy worked for four television stations in various positions, including news and sports reporter, sports anchor, videographer, and webmaster. He enrolled in the master’s program at Louisiana State University in August 2009 in the Manship School of Mass Communication. He will complete his degree in May 2011. Following graduation, Jeremy will pursue a doctoral degree in communication at Florida State University.