

# The Impact of Fantasy Football on the NFL Fan: Exploring Differences between the Fantasy Football Participant and the Traditional Fan

**Stefan Sleep**

*Georgia Gwinnett College*

**Scott Thompson**

*St. Louis University*

**Michael L. Thomas**

*Georgia Southern University*

## ABSTRACT

Fans of the National Football League (NFL) often identify themselves not only with a specific team but also in terms of a broader social group, fantasy football participant. This research utilizes a social identity perspective and data collected from an online context to compare those fans with a team-specific identity to those who also actively participate in fantasy football. Our results show that fans often form a dual identity with the league and the team. This is an important consideration for managers, because while previous research shows that fantasy football participants may attend more games, social identity theory suggests that fan behavior may change. A dual identity can have a negative impact on local teams as fans may increasingly adopt the low cost superordinate identity, watching league games at home, versus the high cost subordinate identity, watching games in the stadium.

## ABOUT THE AUTHORS

Dr. Stefan Sleep is an assistant professor of marketing at Georgia Gwinnett College. He earned his doctorate in Marketing from the University of Georgia. His research focus is on intra-organizational relationships, sales, and big data. His research has been published in the *Journal of the Academy of Marketing Science* and the *Journal of Service Research*.

Dr. Scott Thompson is an associate professor of marketing at St. Louis University. He earned his doctorate in Marketing from Arizona State University. His research focuses communities, online consumer-to-consumer helping, and the management of brand relationships. His research has been published in the *Journal of Marketing*, *Journal of Marketing Research*, *Journal of the Academy of Marketing Science*, and *Marketing Letters*.

Dr. Michael L. Thomas, is an associate professor and chair, Department of Marketing, at Georgia Southern University. He received his MBA and Ph.D. from Southern Illinois University, Carbondale. His research streams include marketing strategy, cause-related marketing and customer delight.

The Cowboys, the Steelers, the Raiders, all are National Football League (NFL) teams that have a rabid fan base that strongly supports that specific team. Fans close identification with their team has made the teams' parent organization, the NFL, the most popular sports league in the United States. This popularity is reflected in the financial success of the league, where revenues have grown from just over \$2 billion in 1995 to an estimated \$14 billion in 2016 (Marvez 2011; Kaplan 2016).

However, the NFL faces an interesting situation resulting from the league's immense popularity. Fans are becoming more involved with league oriented activities, such as fantasy football, versus team specific activities which causes a dichotomy in league growth. Revenue growth is increasingly being driven by league level activities such as media rights, while overall league attendance fluctuates up and down from year to year (Pro Football Reference 2012 – 2016).

One explanation for the changing nature of the NFL fan can be expressed via fantasy football. Fantasy football consists of a virtual league where each participant 'manages' a team of players selected from all 32 NFL teams. Participants can either draft a single team at the beginning of the season that competes against different opponent each week (traditional fantasy) or select new players each week to face their opponent (daily fantasy). The Fantasy Sports Trade Association (FSTA) projects that in 2017 over 59 million people in the US and Canada participating in fantasy sports (FSTA 2017). Because of the focus on players across the entire league versus individual teams, fans increasingly focus on the league as a whole in addition to a specific team as exhibited through increased ratings for non-home-team games that air in big markets (Collins 2011).

This paper takes a social identity perspective to examine the differences between fans who actively participate in fantasy football in addition to rooting for a specific team. The social identity perspective states that people define and evaluate themselves in terms of the group to which they belong and focuses primarily on intergroup relations (Hogg & Abrams 2003). Superordinate groups occur when multiple subgroups, or subordinate identities, recategorize themselves into a single identity which improves intergroup relations by increasing out-group acceptance (Hogg & Abrams 2003). For the NFL, fans can identify themselves with a specific team or in terms of a broader social group, fantasy football participant. In this scenario, each individual teams serve as a distinct subgroup identity while participate in fantasy football results in a superordinate identity since it includes a league level identity that includes all 32 teams.

Because fantasy football is a social game that is largely tracked and played on-line, we use an online context to evaluate differences between fans of a single team and fans of the team that are also active fantasy football participants. Specifically, we collected message board data from the fan site raiderfans.net, a team specific on-line message board. This enabled us to compare those fans with a team-specific identity to fans who also actively participate in the fantasy football message board. We collected data over a three-year period in order to examine this phenomenon. The research questions this study proposes to answer are: (1) How do the characteristics of the fantasy football fan differ from those of the team fan? (2) What are the specific traits that make a fan more likely to identify with fantasy football? (3) Is fantasy football participation being prioritized over team specific participation?

Our results show that fans are forming a dual identity with the league and the team. This is an important consideration for managers, because while previous research shows that fantasy football participants may attend more games (Nesbit and King 2010), qualitative research (Drayer et al. 2010) and social identity theory suggest that fan behavior may change. A dual identity can have a negative impact on local teams as fans may increasingly adopt the low cost superordinate identity, watching league games at home, versus the high cost subordinate identity, watching games in the stadium. Following is a brief summary of the fantasy football, social identity, and fan identification literature, as well as the summary of results.

## **Literature Review**

### **Social Identity Theory**

Social identity theory provides the overarching theoretical framework for the study, and we briefly cover the basic components of social identity theory, specific literature on sports fan identification, and how superordinate social groups are integrated. Social identity theory has its basis in minimal group experiments that attempted to explain intergroup discrimination (Tajfel 1970; Turner 1975, 1978). The studies found that social categorization in minimal groups creates a social identity for each group member. The social identity captures the idea that an individual's self-concept is based on their group membership and they define themselves in terms of their social group membership, for example, as a fan of specific team. Members will evaluate their team more favorably and the opposing teams more negatively (Hogg & Abrams 2003).

A primary focus of social identity research is to reduce intergroup conflicts. Close identification with a group can lead to conflict with the out-group which ultimately leads to discrimination or hostility toward the out-group. This can be found in the sports arena in the case of heated rivalries and conflicts between opposing fans on game days. One of the solutions proposed to reduce intergroup conflict is to develop an overarching identity that recategorizes in-group and out-group members as part of a superordinate identity that moves members away from sources of intergroup bias and improves intergroup relations (Gaertner et al. 1989). When the superordinate identity becomes salient, group members are less likely to take into account in-group/out-group differences and instead think of themselves as a single group. When the recategorization to a single identity is successful, in-group loyalties are transferred from the original subgroup to the new social category (Brewer 1996). In the fantasy football scenario, fans would increase their identification with the NFL which would reduce conflict with fans of opposing teams.

Since the superordinate identity is not always desirable, since it may require participants to abandon their former identity, Anastasio et al. (1997) propose that individuals can form dual identities with both the subgroup and superordinate group. Dual identity largely occurs in situations where there is contact between the in-group and out-group and the interaction results in the overturning of perceived stereotypes. Fantasy football players may fear that they will lose some of the distinctiveness and traditions of their team specific fandom by embracing the league identity, so they retain both identities.

### **Sports Fan Identification**

Sports fans provide a prime example of social identity theory and the individual's willingness to define their identity in terms of a group. Previous research shows that avocations, such as being a fan, are an important part of social identity (Deaux et al. 1995). More specifically, social identity theory is applicable to understanding fan behavior because it involves interpersonal and group relationships, distinctions between opposing groups, and is heavily affected by level of identification with a team.

Fans view themselves as members of a group which manifests itself via social identity theory as personal commitment and emotional attachment with a sports organization (Sutton et al. 1997). By developing a specific identity, it allows the individual to associate with others who share the same identity and build an affiliation with the social group (Holt 1995; Underwood et al. 2001). In fact, fans that are highly involved with a team can hold the team as central to their identity and will associate with other fans through interest, appearance, and behavior to enhance their prestige and increase self-esteem, a central component of social identity theory (Sutton et al. 1997). Finally, there is a clear distinction between in-group, the individual's team, and out-group, all other teams.

### **Fantasy Football Literature**

There have been several studies to determine the impact of fantasy football on consumption of the NFL product. Based on social identity theory, identification with the NFL should increase television consumption since fans are following more teams and will be more likely to watch not only their other team but other teams based on their association with the NFL. Studies by Nesbit and King (2010), Dwyer (2011), and Karg and McDonald (2010) all find that fantasy sports players are likely to increase television consumption of live sports. Several of these studies also note increased in-person game attendance as well (Karg and McDonald 2011; Nesbit & King 2010). However, a qualitative study conducted by Drayer et al. (2010) found that fantasy football involvement did have a negative impact on game attendance for some participants. Overall, while fantasy football participants retain their commitment to their favorite team, it is possible that their dedication to the support as a whole may reduce the commitment to a particular team (Nesbit and King 2010). This provides an opportunity to further explore how dedicated fans of single teams are responding to fantasy football.

### **Hypotheses - Application to Fan Identification**

Since being an avid fan and playing fantasy football are complementary characteristics (Nesbit and King 2010), we expect that fans will generally support a specific team prior to participating in fantasy football. Individual interests are largely associated with a single team and over time these interest broaden to include more players on more teams (Drayer et al. 2010). As a result, members that develop a superordinate identity as a fantasy football participant will in general have a longer tenure and be more involved with the team than those fans that just follow the team. These differences in member characteristics between the two groups show that the superordinate, fantasy football identity is distinct from the team identity.

**H1:** Fans that participate in fantasy football will have been more involved with the team for a longer period of time than fans of individual teams

One of the key aspects of fantasy football participation is the interaction, talking and socializing with other players (Dwyer 2011; Karg and McDonald 2011). A large portion of being a part of the fantasy football community is information sharing, whether it is about roster moves, injuries, or line-up changes. Because of the fostering of reciprocal behaviors and cooperative responding through a more exclusive superordinate identity, more social and involved sports fans should increasingly participate in the superordinate group (Dovidio et al. 1997; Kramer & Brewer 1984). Overall, the reduction in intergroup conflict increases identification fantasy football, increases information sharing, and provides access to a larger in-group that increases access to a common resource, knowledge of football, than can be found as a fan of a single team.

**H2:** Individuals who are more involved with the team and are more social are more likely to participate in the superordinate, fantasy football group.

As fans increasingly participate as both fans and fantasy football participants, there is a conflict between being a fan of a single team and the treatment of all other teams as out-groups, versus involvement in a fantasy football team which improves attitudes towards other teams and reduces conflict. Because of the reduction in intergroup conflict within the superordinate group, fans may begin to identify more closely with their fantasy team than the actual team (Drayer et al. 2010). However, recent research has found that highly involved fans will not abandon their team, but instead identify with both their team and as a fantasy football participant. As a result, we expect many fans to develop a dual identity with both teams.

**H3:** With the increasing popularity of fantasy football, fans will develop a dual identity with both the superordinate group (fantasy football) and the subgroup (individual teams).

## **Research Design and Methodology**

### **Data Collection**

This research uses postings from on-line team related discussion boards to capture team (subgroup) and fantasy football (superordinate) identification. Algesheimer et al (2005) found that members of brand communities develop an identity based on the community. Additionally, brand communities enhance the loyalty of members and also increase oppositional loyalty toward competing brands, once again indicating a strong in-group/out-group distinction in brand communities (Muniz & O'Guinn 2001). As a result, the identification previously found in sports fans should also be found in the internet discussion boards.

Specifically, this study captures data from a heavily trafficked fan site, raiderfans.net, which includes a large number of postings in two distinct forums: one that discusses the team and one that discusses fantasy football. Posts from the team specific forum serve as a proxy for identification with the team. The fantasy football forum serves as a proxy for the superordinate identity. We collected three years of threads from each forum which captures information on individual users and their activity across the two forums.

Because of the depth of data available and the different way each of the forums are used, data was aggregated at the thread level. Within the team level message board, there are significantly

more messages posted per topic especially during game days and significant team events, such as injury or acquisition of a new player midseason. The team forum averages 23 messages per thread compared to 5 per thread for the fantasy forum, so the thread level provides a more consistent measure of usage across forums. Summary statistics on each forum can be found in table 1.

**TABLE 1**  
**Summary Statistics**

	<b>Raiders</b>	<b>Fantasy</b>
<b>Unique Members</b>	2,277	90
<b>Threads</b>	20,218	130
<b>Messages</b>	469,332	648
<b>Messages per Thread</b>	23.21	4.98

### **Methodology and Analysis**

To test hypothesis 1, we compare the descriptive statistics of the unique members of the team forum and the fantasy football forum. We capture duration of membership as the time from first joining the group until the most recent activity on the site. Number of posts captures total activity across all forums which exhibit not only joining but active participation in the community. We also compare three additional variables which capture user activity and social status, the number of ‘likes’ given, ‘likes’ received and the average number of threads started by each unique user. ‘Likes’ are used by the community to show appreciation for particularly helpful or useful information or amusing comments and are given at the thread level.

To test hypothesis two, we identified variables that capture the level of participation and social status for each unique user in the team forum. We capture participation by the length of active membership in the forum and the number of posts by each unique user. These two factors demonstrate a belonging to the community in terms of both relating to the members of the group via posts and a commitment to the group over time. We use two measures, ‘likes’ received and rank, to capture social status. The ‘likes’ received captures the number of times that an individual posts something that the community as a whole enjoys. The larger the number of ‘likes’ received the greater the social status of the member. We also capture member rank as a measure of social status. Within the raiderfans.net community each individual is assigned a rank which captures their contribution and level of respect from the community. The higher the member’s rank the greater social status the member has. This is best exemplified by the Chairman of the Board rank which also serves as a board moderator who enforces norms and assists other members.

Each of the variables above was collected for each unique member of the team forum and used in a binary logistic regression. The dependent variable was participation in the fantasy football forum. The participation and social status variables were used as independent variables. The overall predictive ability of the model and the significance of each variable in determining participation in the fantasy forum were examined to determine the factors that drive superordinate participation.

Finally, hypothesis three was tested by comparing the growth rate of the two forums over a three-year period of time. Data on the number of threads and messages posted was collected on a month-by-month basis for three years. A linear trendline was fitted to each data plot and the slopes were compared to determine the growth rate of each forum.

## Results

The descriptive statistics in Table 2 provide the basis to determine if there are differences in the user profile of participants in the team forum versus those in the fantasy forum. The data shows that the participants in the fantasy forum have a greater level of membership duration and activity across all of the relevant categories. The average membership duration of a user in the fantasy forum is almost an entire year longer than in the team forum (4.32 vs. 3.44). Additionally, as a measure of activity across forums, the number of unique posts per user across all of the forums is almost three times higher for the participant in the fantasy forum versus that in the team forum (2,580.27 vs. 927.29). The supplementary categories such as ‘likes received’, ‘likes given’, and rank, that also measure activity within the forum, are also much higher for individuals in the fantasy forum.

**TABLE 2**  
**Descriptive Statistics**

	Team (n=2,271)		Fantasy (n=90)		T-test
	Mean	SD	Mean	SD	
<b>Posts (across all forums)</b>	927.29	3149.91	2580.27**	514.76	4.98, p<.01
<b>Member Duration</b>	3.44	2.78	4.32	2.82	2.94, p<.01
<b>Likes Received</b>	6.51	35.61	27.98	71.82	5.31, p<.01
<b>Likes Given</b>	6.61	54.81	17.69	52.50	1.88, p<.10
<b>Threads Started</b>	9.01	23.68	1.44	1.13	3.03, P<.01
<b>Rank (% of Users)</b>					
<b>Bench Warmer</b>	716 (31.4%)		15 (16.7%)		
<b>Rookie</b>	421 (18.5%)		9 (10.0%)		
<b>Starter</b>	239 (10.5%)		3 (3.3%)		
<b>Veteran</b>	127 (5.6%)		5 (5.6%)		
<b>Pro Bowler</b>	93 (4.1%)		7 (7.8%)		
<b>All-Pro</b>	311 (13.7%)		9 (10.0%)		
<b>Hall of Fame</b>	325 (14.3%)		36 (40.0%)		
<b>Chairman of the Board</b>	44 (1.9%)		6 (6.7%)		

Rank is especially interesting as the number of Bench Warmers, participants who are less established and less active, is highest in the team forum (31.7%) while Hall of Famers, who are more established and more active, are the largest participants in the fantasy forum (40.0%). Those most engaged in the website as a whole and with a higher social status comprise a larger portion of the fantasy football identity. The number of threads started is lower in the fantasy forum than in the team forum but this is a result of the volume of postings of in the team versus

fantasy forum. The results support hypothesis 1 that members of the fantasy forum will have longer membership duration and higher levels of activity than the team forum because they originally established their identity with the team and then moved on to fantasy football.

Next, we examined the impact of brand community characteristics on participation in the fantasy football forum using binary logistic regression. As table 3 shows. There are a number of brand community characteristics that can be used to determine participation in the fantasy football forum. These factors include member duration which is negative ( $\beta = -0.299, p < .05$ ), and likes received ( $\beta = .176, p < .01$ ) and rank (categorical,  $p < .001$ ) which are positive. Within the rank category, ranks lower in social status, such as Bench Warmer ( $\beta = -2.76, p < .001$ ) and Rookie ( $\beta = -1.44, p < .001$ ), have significant negative impacts on predicting participation while higher social status ranks, such as Hall of Famer ( $\beta = .633, p < .10$ ) and Chairman ( $\beta = 1.168, p < .11$ ) have a positive effect on predictive ability. Overall, the level of social status plays an important role in determining participation in the fantasy forum.

**TABLE 3**  
**Logistic Regression Results - Fantasy Forum Participation as Dependent Variable**

	B	S.E.	Wald	df	Sig.	Exp(B)
Posts	.075	.105	.508	1	.476	1.078
Member	-.299	.127	5.542	1	.019	.742
LikesReceived	.176	.062	7.997	1	.005	1.192
ThreadsStarted	.004	.002	2.708	1	.100	1.004
<b>Rank</b>			72.162	7	.000	
Bench Warmer	-2.759	.512	29.051	1	.000	.063
Rookie	-1.440	.422	11.654	1	.001	.237
Starter	-1.793	.546	10.785	1	.001	.167
Veteran	-1.351	.410	10.848	1	.001	.259
Pro Bowler	.173	.430	.162	1	.687	1.189
All-Pro	-.734	.388	3.574	1	.059	.480
Hall of Famer	.633	.341	3.436	1	.064	1.883
Chairman	1.168	.717	2.652	1	.103	3.217

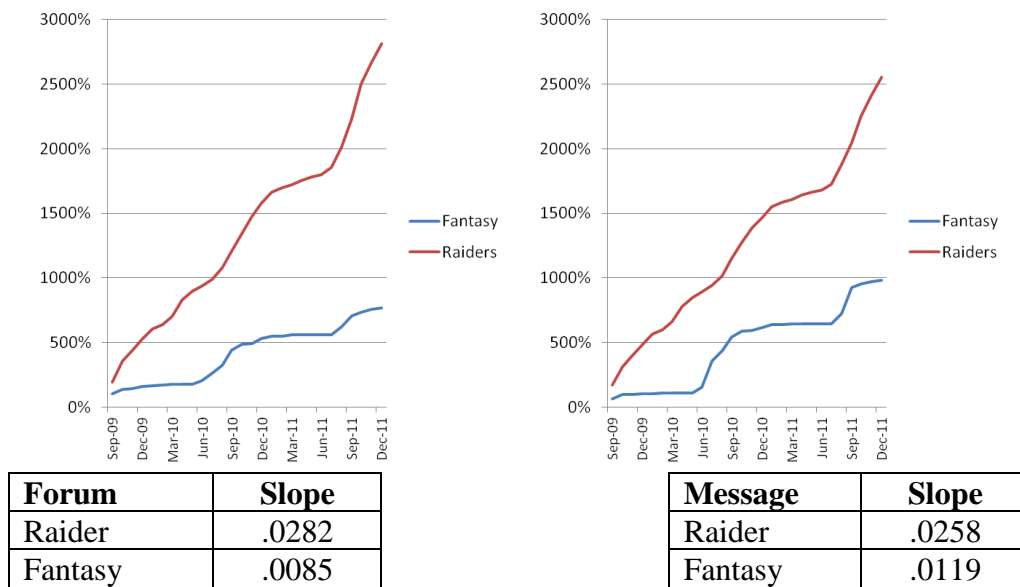
The negative coefficient on membership duration was interesting because one would expect it to be positively linked to fantasy forum participation because of the higher average member duration in the forum. One potential reason for the difference is that the large number of new members may negatively influence the average duration of members in the team forum. Another explanation for the negative sign may be that social status is a more important determinant of participation in the fantasy forum than just belonging to the group. Social status is a significant factor in determining participation in the fantasy forum, as shown by the positive coefficient for likes received and the rank of Hall of Famer. The results partially support hypothesis two since



social status appears to increase participation in the fantasy subgroup, but level of participation has a negative (duration of membership) or insignificant (number of posts) impact.

Finally, we looked at the growth rate across the two forums to determine if growth in the fantasy forum increased faster than in the team forum. The results do not support hypothesis 3 that participants are migrating from the team forum to the fantasy forum. As can be seen in Chart 1, there is significantly more growth in the team forum over the past three years than there has been in the fantasy forum at both the forum and message levels. The slope of the trendline for the team forum is more than double that of the fantasy forum at both the forum (.028 vs. .009) and message (.026 vs. .011) levels.

**Figure 1**  
**Comparison of Growth Curves**



However, there are a couple of important observations when the chart is explored further. First, the shape of the forum growth for the team versus fantasy forum is very different indicating that growth in the fantasy forum is not simply correlated with an overall increase in site traffic. Secondly, a majority of fantasy forum activity occurs at the beginning of the season in the months of August through October resulting in large spikes in thread and message. The activity then becomes almost flat for the rest of the year. These large spikes may indicate that there is growing interest in the fantasy forum, but as the season progresses and individuals who play fantasy football become more familiar with their team or become less competitive in their league there is less need to consult the message board for support and advice.

### Discussion

The results are mixed on the role of the superordinate identity in the NFL, as captured by participation in team versus fantasy football community message boards. The higher level of posts and membership duration in the fantasy football versus team message board indicate that there are a number of participants that establish themselves in the subgroup and then participate

in the larger superordinate group. This follows the expected pattern of individuals who are members of a superordinate identity which indicates the fantasy forum has the necessary traits of a superordinate identity and participants are willing to participate in that overarching identity.

Those most likely to join the superordinate group are those who have high social status in the subgroup. These results indicate that there is less out-group bias between the team subgroup and the superordinate group than there is between the subgroup and other subgroups. Individuals who are high in social status are more likely to participate in the fantasy forum. Additionally, fantasy football itself can be considered a social game among football fans and thus results in an easy transition from the team to the fantasy football forum. Finally, those with high social status are more willing to provide information and helping behavior which is a key need for the superordinate community. These commonalities across groups increase acceptance of the superordinate identity.

The results of the difference in growth rates indicate that individuals are not abandoning their original identity in order to join the superordinate group, but may instead be forming a dual identity. In the case of a dual identity, the individual is not required to forgo their original group identity and may conceive themselves simultaneously as a member of two groups simultaneously (Anastasio et al. 1997). The results show that participants are actively participating in both groups and that the most active members of the team community are more likely to become involved in the superordinate forum. The dual identity provides a way for participants to remain loyal to their team while also identifying with members of the larger fantasy football community.

In the case of the NFL, a dual identity may be just as detrimental as losing the team identity completely. In the case of the dual identity, the fantasy football identity can be satisfied at no or minimal cost through television or technology because multiple games can be followed at the same time while connecting with other members of the in-group. On the other hand, the team identity still requires a commitment to spending significant amounts of money to attend a game in person. For example, in 2014 the average cost to take a family of four to an NFL game was \$479.11 (Greenberg 2014). This results in competition between the needs of the two social identities. The competing interests, and costs, between the dual identities makes the decision to attend a game in person just that much more difficult, especially since a decision between identities must be made for the same point in time, usually a Sunday afternoon. Increasing membership in the superordinate identity may influence the decision over which identity to satisfy. Selecting the superordinate identity will result in a desire to follow all NFL teams versus a specific team which decreases the interest in attending games in person.

### **Limitations and Suggestions for Future Research**

This paper provides interesting insights into the changing nature of NFL fan identity and how fantasy football participation impacts team versus league identity. Additionally, this research is grounded in accepted theory. However, there are limitations present that should be explored further. First, fantasy football has recently morphed into two different areas: the traditional league format discussed in this paper, and more recent daily and week-by-week leagues that are more gambling oriented. Sites, such as Draft Kings.com, have become both highly popular and

controversial due to the gambling element. Future research should explore what impact this new format has on both traditional fantasy football participation and fan identity.

Second, fantasy football participation is not the only variable impacting NFL game attendance. Attending a game is expensive. Ticket prices, concessions and parking prices are high and continue to rise. High-definition and affordable big-screen televisions and surround sound have made the home experience much better than in the past. Also, the DirecTV NFL package which allows customers to receive every game at home further enhances watching games at home. This package also offers the Red Zone channel which has non-stop, commercial free highlights and live statistics that are specifically geared towards the fantasy participant. Future research should investigate the mediating role these elements have on game attendance and also fantasy participation and therefore identity.

Finally, recent developments may impact not just fantasy football participation, but also the popularity of the NFL and football in general. The concussion issue has some NFL players retiring early, has cost the NFL a large financial settlement, and has many parents debating whether or not they will allow their children to play football. Other issues, such as, player national anthem protests and arrests for off-field transgressions have turned-off some fans. Future research should investigate what, if any, impact these developments have on the NFL, fantasy activity and fan identity.

## **References**

- Algesheimer, R., Dholakia, U.M., & Herrmann, A. (2005). The social influence of brand community: Evidence from European car clubs. *The Journal of Marketing*, 69(3), 19–34
- Anastasio, P., Bachman, B., Gaertner, S., & Dovidio, J. (1997). Categorization, recategorization, and common ingroup identity. *The Social Psychology of Stereotyping and Group Life*, Spears, Oakes, Ellemers, & Haslam, eds., 236–256
- Brewer, M.B. (1996). When contact is not enough: Social identity and intergroup cooperation. *International Journal of Intercultural Relations*, 20 (3/4), 291–303
- Brown, R. (2000). Social identity theory: Past achievements, current problems, and future challenges. *European Journal of Social Psychology*, 30(6), 745–778
- Collins, S. (2011). Fantasy boosts reality: NFL tv ratings hit a record this year thanks in part to fantasy football leagues. *Los Angeles Times*, Retrieved from <http://articles.latimes.com/2010/dec/19/entertainment/la-et-1219-nfl-fantasy-20101219>
- Crupi, A. (2011). Billion dollar draft. *Adweek*, Retrieved from <http://www.adweek.com/news/advertising-branding/billion-dollar-draft-136370>
- Deaux, K., Reid, A., Mizrahi, K., & Ethier, K. A. (1995). Parameters of social identity. *Journal of Personality and Social Psychology*, 68(2), 280–291.
- Donovan, D. T., Carlson, B. D., & Zimmerman, M. (2005). The influence of personality traits on sports fan identification. *Sports Marketing Quarterly*, 14(1), 31–42.
- Dovidio J. F., Kawakami K., Johnson, C., Johnson, B., & Howard, A., (1997). The nature of prejudice: Automatic and controlled processes. *Journal of Experimental Social Psychology*, 33, 510–40.
- Drayer, J., Shapiro, S. L., Dwyer, B., Morse, A. L., & White, J. (2010). The effects of fantasy football participation on NFL consumption: A qualitative analysis. *Sport Management Review*, 13(2), 129-141.
- Dwyer, B. (2011). Divided loyalty? An analysis of fantasy football involvement and fan loyalty to individual National Football League (NFL) teams. *Journal of Sport Management*, 25(5), 445-457.
- Dwyer, B. (2011). The impact of fantasy football involvement on intentions to watch National Football League games on television. *International Journal of Sport Communication*, 4(3), 375-396.
- Ellemers, N., Spears, R., & Doosje, N. (2002). Self and social identity. *Annual Review of Psychology*, 53, 161–86.
- Gaertner, S. L., Dovidio, J. F., Anastasio, P. A., Bachman, B. A., & Rust, M. C., (1993). The common ingroup identity model: Recategorization and the reduction of intergroup bias. *European Review of Social Psychology*, Vol 4, Wolfgang Stroebe and Miles Hewstone, eds. New York: John Wiley and Sons, 1–26.
- Gaertner, S. L., Mann, J. A., Murrell, A. J., & Dovidio, J. F., (1989), Reducing intergroup bias: The benefits of recategorization. *Journal of Personality and Social Psychology*, 57 (2), 0022–3514.
- Gaertner, S. L., Mann, J. A., Dovidio, J. F., Murrell, A. J., & Pomare, M., (1990). How does cooperation reduce intergroup bias? *Journal of Personality and Social Psychology*, 59(4), 692–704.
- Gaines, C. (2011). The nfl is heading toward an attendance crisis and here's why. *Business Insider*, Retrieved from <http://www.businessinsider.com/nfl-attendance-crisis-2011-11#nfl-attendance-is-down-four-straight-years-1>

- Greenberg, J., (2014). 2014 nfl fan cost index. Retrieved from <https://www.teammarketing.com/tmr/66>
- Gwinner, K., & Swanson, S.R., (2003). A model of fan identification: Antecedents and sponsorship outcomes, *Journal of Services Marketing*, 17(3), 275–294.
- Hogg, M. A., & Abrams, D., (2003). Intergroup behavior and social identity. in *The Sage Handbook of Social Identity*, Michael A. Hogg and Joel Cooper, eds. London: Sage Publications, 407–422.
- Holt, D.B. (1995). How consumers consume: A typology of consumption practices. *Journal of Consumer Research*, 22(1), 1–16.
- Industry Demographics. (2016). <http://www.fsta.org/research/industry-demographics/>.
- Kaplan, D. (2017). NFL revenue reaches \$14B, fueled by media. *Sports Business Journal*, Retrieved from, <http://www.sportsbusinessdaily.com/Journal/Issues/2017/03/06/Leagues-and-Governing-Bodies/NFL-revenue.aspx>
- Kramer, R. M. & Brewer, M. (1984). Effects of group identity on resource use in a simulated commons dilemma. *Journal of Personality and Social Psychology*, 46(5), 1044–57.
- Marvez, A. (2011). Rapid growth reason for nfl labor war. *Fox Sports*, Retrieved from <http://msn.foxsports.com/nfl/story/Revenue-sharing-NFL-key-reason-for-labor-drama-061611>
- Mummendey A., & Wenzel, M. (1999). Social discrimination and tolerance in intergroup Relations. *Personality and Social Psychology Review*, 3, 158–174.
- Muniz, Jr., A. M., & O’Guinn, T. C. (2001). Brand Community. *Journal of Consumer Research*, 27(4), 412–432.
- Nesbit, T. M., & King, K. A. (2010). The impact of fantasy football participation on NFL attendance. *Atlantic Economic Journal*, 38(1), 95-108.
- Pro Football Reference (2012 - 2016), Retrieved from <https://www.pro-football-reference.com/years/2012/attendance.htm>
- Steinberg, L. (2014). The Fantasy Football Explosion. *Forbes*, Retrieved from <http://www.onforb.es/1nKns3>.
- Sutton, W. A., McDonald, M. A., & Milne, G. R. (1997). Creating and fostering fan identification in professional sports. *Sport Marketing Quarterly*, 6(1), 15–22.
- Tajfel, H. (1970). Experiments in intergroup discrimination. *Scientific America*, 223, 96–102.
- Turner, J. C. (1978). Social comparison, similarity and in-group favouritism. in *Differentiation between social groups: Studies in the social psychology of intergroup relations*, H. Tajfel (Ed.), London: Academic Press, 235–250.
- Turner, J. C. (1975). Social comparison and social identity: Some prospects for intergroup behaviour. *European Journal of Social Psychology*, 5, 5–34.
- Turner, J. C., Brown, R. J., & Tajfel, H. (1979). Social comparison and group interest in in-group favouritism. *European Journal of Social Psychology*, 9, 187–204.
- Underwood, R., Bond, E., & Baer, R. (2001). Building service brands via social identity. *Journal of Marketing Theory and Practice*, 9(1), 1–13.
- Wann, D. L., & Branscombe, N. R. (1993). Sport fans: Meaning of the degree of identification with their team. *International Journal of Sport Psychology*, 24, 1–17.