

Fantasy Sport Consumer Segmentation: An Investigation into the Differing Consumption Modes of Fantasy Football Participants

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Abstract

Sport fandom is one of the preeminent leisure activities in our society, and contemporary sport consumption has evolved to a point wherein it includes several activities such as event attendance, television viewership, and publication subscriptions, both online and in print. Among these means of sport fan consumption is fantasy sport participation. While the activity has grown immensely within the past few decades, relatively little is known about who participates and what impact participation has on the consumption of sport products and services. Thus, the aim of this study was to investigate the differing modes of sport consumption exhibited by fantasy sport participants. Employing an orthogonal research design, the study uncovered four distinct consumption modes, each with differing patterns of behavior. Discussed are the theoretical results with regard to player attachment and psychological commitment to team as well as practical implications for sport marketers looking to utilize fantasy sport participation as an enhanced marketing communication tool.

Introduction

Sport fandom is one of the preeminent leisure activities in our society today. However, the sport marketplace has grown to a point wherein sport fans have numerous opportunities and outlets in which to spend their limited amounts of time and money. As a result, contemporary sport consumption has evolved to include several activities including event attendance, television viewership, and publication subscriptions, both online and in print. Among these means of sport consumption is fantasy sport participation.

Defined as an ancillary sport service heavily associated with real-world sport statistics, fantasy sport participation is primarily an online activity that is completely customizable, interactive, and involves nearly every major professional sport, from the National Football League (NFL) to NASCAR. Recently, the pastime has grown into a highly popular activity for all types of

sport fans. According to the Fantasy Sport Trade Association (FSTA, 2008), nearly 30 million people over the age of 12 play fantasy sports within the United States and Canada. In addition, the FSTA estimates \$800 million is spent directly on fantasy sports products and services each year while an additional \$3.5 billion is spent on media products and services related to the activity.

For sport marketing researchers, fantasy sport participation also has the potential to influence several well-researched constructs within sport consumer behavior inquiry. That is, while the majority of previous research has focused on an individual's favorite or most-preferred team (Mahony & Howard, 1998; Mahony & Moorman, 1999; Mahony, Madrigal, & Howard, 2000; Trail & James, 2001), fantasy sport participation has the potential to add another layer to contemporary sport consumption due to its enhanced

focus on individual players and statistics. For instance, a typical fantasy football owner manages 10 to 12 heterogeneous NFL players. Each week this owner competes against an additional 8 to 10 players. As a result of these combined competitive interests, this participant may have a curiosity in nearly every NFL game played each weekend. This phenomenon has the potential to create a psychological paradox for individuals with a vested interest in their favorite NFL team. That is, with a limited amount of time and money to consume NFL football, the widened scope of fantasy football participation has the potential to dilute one's attachment to their favorite team. Given this intriguing circumstance, the aim of this study was to investigate the differing modes of sport consumption exhibited by fantasy sport participants.

As an activity, however, fantasy sport relies heavily on sport media consumption as opposed to traditional forms of sport consumption (i.e., event attendance, merchandise acquisition, etc.). While the traditional forms still account for a considerable amount of a sport organization's income, the significance of sport media as a revenue stream should not be underestimated. In fact, "trends of escalating consumption via media continue to indicate attendance is becoming less central to an organization's profitability" (Pritchard & Funk, 2006, p. 316). Moreover, the gargantuan amount of revenue generated from television rights fees have driven teams to continually focus on generating large, committed television audiences. As a result, quickly evolving technological trends such as high definition televisions, surround sound stereo, and slow-motion replays have created a mediated sport product that rivals an in-stadium experience. For fantasy sport participants, up-to-the-minute scores and statistics, comprehensive pre-game news and analysis, and league-wide, on-demand network services such as DirecTV's NFL Sunday Ticket and Major League Baseball's MLB.TV also add to the allure of mediated sport consumption.

Thus, to account for the aggressive media consumption habits of fantasy sport participants (Comeau, 2007; Woodward, 2006) and the possibility of behavioral changes with regard to a participant's favorite team, the current study investigated the relationship between favorite team-specific and fantasy team-specific media consumption. Fantasy football participants were examined due to the game's popularity and its designation as the gateway activity to all fantasy sports (FSTA, 2008). A framework was proposed with four modes of behavior (see Figure 1): (a) light consumption, (b) favorite team-dominant consumption, (c) fantasy team-dominant consumption, and (d) heavy consumption. Each mode holds a different pattern of

NFL media consumption, and in order to validate this proposed framework and investigate unique differences and similarities in NFL-related product usage, this study performed group contrasts of related factors of sport fandom and fantasy participation to determine if the consumption modes were theoretically distinct. Specifically, the following two research questions were developed:

RQ1: Among fantasy football participants, do differing high/low mixes of fantasy team and favorite NFL team consumption identify distinct modes of NFL media consumption behavior?

RQ2: Based on these modes of behavior, are there any social, attitudinal, or additional consumption behaviors (attendance-related and mediated) that differ significantly across the modes?

In addition to answering the research questions, the current article provides theoretical and practical implications for sport marketers with respect to the consumption behavior of fantasy sport participants. Initially, however, the concepts of contemporary sport consumption, sport media consumption, and fantasy sports are discussed to lay the groundwork for this study's data analysis and results. The current study looked to extend and confirm these findings with a larger sample of fantasy football participants.

Review of Literature

Contemporary Sport Consumption

Previous sport management literature has categorized sport consumption into participation in competitive, nature-related, and fitness activities as well as spectatorship in the form of event attendance, television viewership, and reading of sport publications (Shohlan & Kahle, 1996). The distinction between the various forms of spectatorship is important as some of the most highly involved sport fans rarely attend games. Given the enhanced accessibility via televisual and electronic media communication, these fans continue to practice the traditions associated with being an avid supporter, and, thus, require the same amount of attention as event attendees.

In addition, within the last two decades, the amount of televised and new media sport programming has exploded. For instance, in Bryant, Brown, and Cummins' (2004) week-long analysis of broadcast and basic cable programming during June 2004, 532 sports programs were listed, adding up to 38,675 minutes, or nearly 645 hours, of sport content. Given that there are only 168 hours in a week, it is safe to say that sport consumers have numerous viewing choices. In addition, the recent flood of sports-related websites epitomizes the legitimacy of sport in the realm of new media

services (Boyle & Haynes, 2003). After search engines, the most frequently visited sites on the web were those that offered some kind of entertainment and sports (Ferguson & Perce, 2000). Furthermore, online betting and fantasy sports are two of the fastest growing areas in terms of interactivity, sports, and the Internet (Boyle & Haynes, 2003). Interestingly, previous definitions of sport consumption have failed to include any form of interaction with sport as a component of consumption, and with the sudden increase in social media applications such as Facebook, message boards, Twitter, and blogs, sports fans have the ability to actively interact with sport products at a level unknown to them just a decade ago (Seo & Green, 2008). Fantasy sport participation, though not defined as a social media activity, contains a strong social component (Farquhar & Meeds, 2007), and, thus, should be added to this group of interactive forms of sport consumption.

Overall, the rapid growth of televised and new media sport content has created several additional means for sport consumption (Sullivan, 2006). For sport marketers and consumer behaviorists, this has created an additional avenue to forecast sport consumer behavior through highly developed attitudes. In 2006, researchers Pritchard and Funk investigated the symbiotic and substitution relationship between media use and event attendance. According to the authors, the most interesting facet of the study was the information provided about the media-dominant consumer stating that these patrons are "more likely to purchase team-related merchandise, view media advertising and promotions, and are as involved with the sport as the 'heavy' consumer" (p. 316). Given the previously mentioned connection between fantasy sports and media, the current study aimed to examine an important portion of the media-dominant sport population.

Fantasy Sport Participation

What was once considered a niche hobby for statistical fanatics, the activity of fantasy sport participation has blossomed into a lucrative and highly influential industry that has encapsulated the most active of sport fans. For instance, a recent survey of participants conducted by Ipsos Public Affairs indicated that fantasy players are stronger consumers of the major product and service categories than the average sport fan and the general population, as a whole (Fisher, 2008). In addition to this robust consumption behavior, the average fantasy participant continually represents corporate America's most-coveted demographic (Fisher, 2008; FSTA, 2008). As a result, the industry has come to demand serious consideration from sport marketing practitioners and researchers, alike.

Unfortunately, the scholarly literature in the area of fantasy sports is still underdeveloped (Lomax, 2006). Previous studies have examined gambling associations, masculinity issues, and communication (Bernhard & Eade, 2005; Davis & Duncan, 2006; Shipman, 2001). In 2007, researchers Farquhar and Meeds identified the following motivational factors for fantasy sport participation: surveillance, arousal, entertainment, escape, and social interaction. The study concluded that two perceived gratifications of participating in fantasy sports, arousal and surveillance, led highly involved participants to believe they "got more out of fantasy sports when they put in more time and money" (Farquhar & Meeds, p. 1217).

Researchers Drayer, Shapiro, Dwyer, Morse, and White (2010) examined the relationship between fantasy football participation and the consumption of NFL products and services. Following a theoretical framework focused on the attitude and behavior relationship, the authors proposed that fantasy participants created new perceptions of the NFL through fantasy football. The redefined NFL broadened their consumption behavior of associated products and services, and the continually evolving outcomes of NFL competition influenced both a participant's favorite team norms and fantasy-specific perceptions. In all, the authors determined that fantasy sport participation has created a new, highly engaged sport fan with a redefined interest in professional football. In addition, fantasy sport-related consumption behavior has the potential to be more diverse and league-wide as opposed to singularly team-specific (Drayer et al., 2010).

Methods

Survey Development and Research Design

Survey items were developed based on a comprehensive literature review of consumer behavior antecedents, media consumption, and fantasy sport research, namely the qualitative results from Drayer et al. (2010). After items were created, the questionnaire was analyzed by three independent investigators. These evaluators, from a mid-sized university in the southern United States, suggested minor alterations to wording and question order. In all, the instrument was deemed satisfactory and suitable for the intended inquiry. The following sections highlight the selection of items and rationale for inclusion.

Media consumption measures: Fantasy team and favorite NFL team. In line with previous leisure research (Backman & Crompton, 1991; Pritchard & Funk, 2006), this study employed an orthogonal research design. That is, this framework proposes four types of

media consumption formed as a function of two factors—fantasy team and favorite team media consumption. Six statements regarding the frequency of sport media consumption relative to both one's fantasy team and favorite team were used to assess an individual's behavior. Given the breadth of NFL programming and based on previous sport media consumption studies (Drayer et al., 2010; Pritchard & Funk, 2006), respondents were asked to indicate the number of hours per week, from zero to more than 20, spent following both teams through several mediums, including newspapers, magazines, the Internet, radio, event programming, and sport journalism programming.

Based on the results of these 12 questions, a principal component analysis (PCA) with promax rotation was implemented in order to determine the number of dimensions and obtain a more complete understanding of the underlying structure of the data. A PCA is generally used when the research purpose is data reduction (Tabachnick & Fidell, 2007). Thus, the analysis was run to refine the 12 items, provide parsimony, and validate the proposed framework by establishing two distinct factors. Once again in unison with previous media and consumption studies (Backman & Crompton, 1991; Pritchard & Funk, 2006), median scores for each factor were then used to construct the four groups of differing consumption.

Other contrast measures. After constructing the four different modes of consumption, three group contrasts (ANOVA, MANOVA, chi-squared tests) were instituted to determine the distinctiveness of each mode. First, a refined version of Mahony, Madrigal, and Howard's (2000) Psychological Commitment to Team (PCT) scale was used to assess a participant's loyalty toward their favorite NFL team. The concept of psychological commitment commonly represents the attitudinal component of loyalty (Backman & Crompton, 1991; Pritchard, Havitz, & Howard, 1999). The PCT is a psychometrically sound instrument that specifically emphasizes the resistance of changing preference toward a particular professional sport team (Mahony et al., 2000). Given a fantasy participant's enhanced focus on a group of heterogeneous individual NFL players and limited amount of time and money to consume sport, it was logical to assume differing levels of fantasy football consumption may affect one's loyalty to their favorite team. Thus, the PCT scale was added to compare and contrast team loyalty differences between the four distinct consumption modes and to provide additional validation of the proposed framework.

Next, five statements evaluating interest in the individual players that make up the respondent's fantasy team were used to measure fantasy player attachment. Attachment is a well-established and heavily researched

antecedent of sport consumption (Robinson & Trail, 2005). However, the majority of previous sport spectator research with regard to attachment has primarily focused on teams, not individual players. Therefore, five statements were derived to measure attachment to individual fantasy football players. The five statements were developed following a review of attachment literature and based on the Drayer et al. (2010) results. Given that this was the initial use of this scale, the dimensionality, internal consistency, and convergent validity were assessed. Similar to the inclusion of the PCT scale, the distinctiveness of each consumption mode with regard to this construct provided further attitudinal contrasts between groups and validation of the proposed framework.

Ten items were then used to assess the frequency of NFL gameday consumption. The findings of Drayer et al. (2010) suggested that fantasy football participation resulted in enhanced mediated sport consumption through a redefined NFL where individual player statistics via real-time updates were as important as traditional game outcomes. In addition, previous research with regard to fantasy sport motives indicated that social interaction and the need to communicate with competitors was a significant connection point (Farquhar & Meeds, 2007). Therefore, respondents were asked to indicate, on a five-point Likert-type scale, the frequency in which they consume the following products and services on gamedays: (1) pre-game shows, (2) post-game shows, (3) Monday Night Football (MNF), (4) Sunday Night Football (SNF), and (5) other sport journalism shows. In addition, participants were asked to reveal the frequency in which they: (6) attended a game, (7) went to a bar/restaurant to specifically follow the NFL, (8) checked the Internet for scores and statistics, and (9) used a cell phone to communicate with fantasy league members, including the use of (10) text messaging services. Lastly, demographic contrasts such as age, income, education, and years participated were interpreted through a chi-squared analysis. Ultimately, these items were analyzed in order to discover the distinctiveness of each consumption mode and validate the proposed framework.

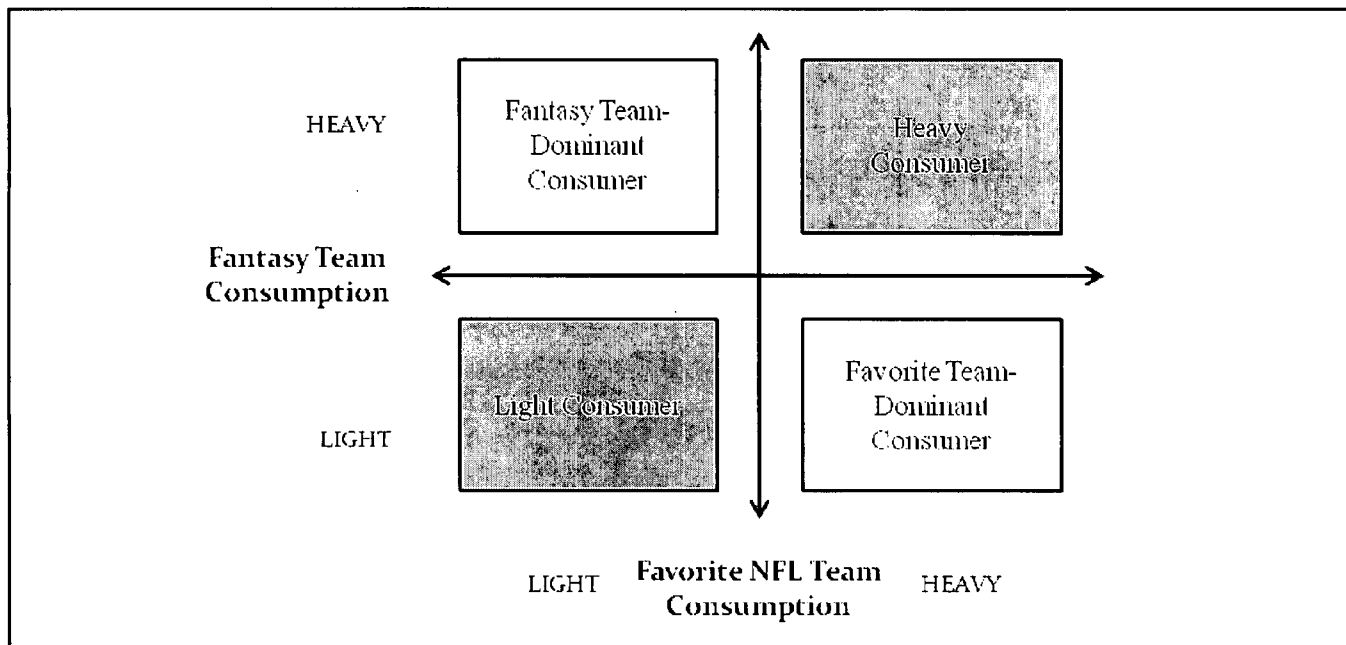
Participants and Procedures

Data were collected online from individuals who visited two popular fantasy sports web sites (ESPN.com and CBSsports.com). These sites were selected due to their popularity and level of interaction between participants. Currently, ESPN.com and CBSsports.com rank second and third in terms of unique fantasy football users with 3.37 million and 3.24 million participants, respectively (Nielsen Media, 2006). Fantasy football participants were surveyed due to the game's popularity and its des-

Table 1.
Demographic Characteristics of the Study Sample (N=306)

Variable	% of Respondents	Variable	% of Respondents
Gender		Education	
Male	95.1%	Less than High School	3.9%
Female	4.9%	High School Graduate	12.1%
Age		Some College	31.4%
18-24	34.0%	College Graduate	33.7%
25-34	37.9%	Technical School	3.6%
35-44	19.9%	Graduate School	10.5%
Over 44	8.2%	Rather Not Say	1.6%
		Other	3.3%
Ethnicity		Income	
African American	1.3%	Less than \$25,000	11.4%
Asian	2.9%	\$25,000 - \$49,999	20.6%
Caucasian	88.9%	\$50,000 - \$74,999	19.3%
Hispanic	2.6%	\$75,000 - \$99,999	17.3%
Multiracial	2.0%	\$100,000 or more	16.0%
Rather Not Say	1.0%	Rather Not Say	15.4%
Other	1.3%		

Figure 1.
Models of NFL Media Consumption & Proposed Types of Consumers



ignation as the gateway activity to all fantasy sports (FSTA, 2008). Specifically, fantasy football message boards were utilized to attract respondents.

Of the 2,536 individuals who viewed the initial postings, 509 began the survey. Of these, 36 were excluded from analyses because they indicated that they were less than 18 years old, and 167 were excluded because they failed to complete the questionnaire. The 306

respondents who remained represented a 12.1% completion rate. The sample examined in this study was younger than previously studied samples, but was still representative of the fantasy sport demographic with regard to gender, education, income, and ethnicity (FSTA, 2008). In addition, the use of message boards to solicit participants may be considered a limitation of the study due to the type of participant that uses these

platforms. That is, while previous research has determined that self-selected respondents participate because of ease, accessibility, and online status (Walsh, Kiesler, Sproull, & Hesse, 1992), the perception of highly involved users may represent a sampling bias. Further research into the exact typology is required and additional research on fantasy football participants should utilize other solicitation means. Demographic characteristics are depicted in Table 1.

Analysis and Results

Using the responses from the 306 fantasy football participants, a principal component PCA with promax rotation was performed on the 12 mediated sport consumption items. In line with our hypothesis, two factors, favorite team (factor 1) and fantasy team consumption (factor 2), were retained based on a variety of criteria. Specifically, the Kaiser criterion, which considers all eigenvalues greater than one as common factors (Table 2; Kaiser, 1970), a Scree-Plot test, and interpretability suggested two factors (Tabachnick & Fidell, 2007). However, following scale refinement procedure and consistent with previous research (Tabachnick & Fidell, 2007; Drayer et al., 2010), six items were removed due to poor factor loadings (≤ 0.3). The items were newspaper, magazine, and radio consumption for both fantasy team and favorite team. Item deletion improved the internal consistency of the model evident with the strong alpha coefficients for both factors (favorite team, $\alpha = 0.83$; fantasy team, $\alpha = 0.85$). The item deletion, however, may signify an interesting finding for sport marketers and media companies. According to the FSTA (2008), over 98% of all fantasy sport leagues reside completely online, and it appears this residency has kept participants online. That is, the inconsistent consumption rates of print publications (e.g., magazines and newspapers) may suggest fantasy participants are consuming the sizeable amount of fantasy sport content currently available on the web in a more consistent manner. Similarly, the industries of radio broadcasting and newspapers, in general, have struggled since the late 1990s and the rapid ascent of Internet usage (Freire, 2007; Morton, 2007). This may explain some of these unanticipated results. Regardless, the remaining items and factors, including loadings and alphas, are detailed in Table 2. With reliable factors in hand, the next step was to identify the (high/low mix) modes proposed in Figure 1.

Research Question 1

Each of the four modes of consumption was produced as a function of the two factors (Tabachnick & Fidell, 2007). Similar to previous orthogonal research and

work on consumer patronage (Backman & Crompton, 1991; Mahony et al., 2000; Pritchard & Funk, 2006), four modes of consumption were plotted. Median factor scores for fantasy-dominant and favorite team-dominant media usage identified high- and low-consumption mixes for each mode.

Once the modes were identified, the next step determined whether they constituted the four unique forms of consumption proposed in the framework displayed in Figure 1. To begin with, MANOVA results shown in Table 3 examined whether the median-mix procedure formed distinct behavioral groupings. Previous consumer behavior studies have used a similar median-mix approach to understand consumption (Backman & Shinew, 1994; Pritchard & Funk, 2006; Warrington & Shim, 2000), and this procedure was performed as an internal validity check of the proposed framework. The results suggest average fantasy team media usage for light consumption and favorite team-dominant spectators ranged from less than one hour to two hours per week, which was significantly less ($F = 68.8$, $p < .001$) than heavy and fantasy-dominant fans (3 to 12 hours). Favorite team media use also differed across the groups ($F = 130.1$, $p < .001$), with follow-up Scheffe *t* tests demonstrating that the favorite team-dominant and heavy groups consistently reported greater media use with respect to the participant's favorite NFL team. In addition, the results indicated consumption of televised programming, both event and sport journalism, were significantly different for individual groups as well. Ultimately, the results in Table 3 show that the high/low median mix did generate forms of consumption consistent with Figure 1.

Research Question 2

Next, a series of analyses were conducted to determine if any social, theoretical, or gameday consumption behaviors differed across the groups mentioned above. Previous research has suggested that fantasy participants show a level of attachment to the heterogeneous group of players that make up their fantasy team (Drayer et al., in press; Farquhar & Meeds, 2007). Consequently, a measure of player attachment was used to compare the modes of consumption (see Table 4). However, factorial validity, consistency, and convergent validity were assessed first. In order to investigate the dimensionality of the construct, a PCA was conducted on the attachment scores. One factor was discovered with factor loadings greater than .70 for each of the five items. In addition, the attachment construct scores were deemed internally consistent with an Alpha coefficient of .78 and convergently valid with an Average Variance Extracted (AVE) score of .56. With respect to research question two, mean scores for the

Table 2.
Factor Analytic Results of the Consumption Measures (N=306)

Dimensions of Mediated Sport Consumption	Factor 1	Factor 2
Fantasy Team Measures ($\alpha = 0.85$)		
# of hours following fantasy team via the Internet	0.125	0.870
# of hours following fantasy team's live games	0.143	0.874
# of hours following fantasy team via televised programming	0.395	0.763
Favorite Team Measures ($\alpha = 0.83$)		
# of hours watching favorite team's live games	0.766	0.230
# of hours following favorite team via televised programming	0.906	0.200
# of hours following favorite team via the Internet	0.879	0.139
Eigenvalue	3.311	1.276
% Variance Explained	55.191	21.274

Table 3.
Modes of Behavior (N=306)

Consumption Behavior (hrs/week)	Light Consumption (n=79)	Fantasy Dominant (n=93)	Favorite Team Dominant (n=55)	Heavy Consumption (n=79)	F	p	
Favorite NFL Team*						130.148	.001
Live Games	1.4 ^{cd}	1.8 ^{cd}	4.8 ^{abd}	6.6 ^{abc}	47.193	.001	
Televised Programming	0.4 ^{cd}	0.7 ^{cd}	4.8 ^{abd}	7.0 ^{abc}	138.289	.001	
Internet	0.8 ^{cd}	0.8 ^{cd}	6.2 ^{ab}	8.8 ^{ab}	133.476	.001	
Fantasy Team*						68.771	.001
Live Games	1.8 ^{bd}	7.6 ^{ac}	2.0 ^{bd}	10.0 ^{ac}	83.663	.001	
Televised Programming	0.4 ^{bcd}	2.8 ^{acd}	1.2 ^{abd}	8.2 ^{abc}	96.105	.001	
Internet	2.2 ^{bd}	7.6 ^{acd}	1.8 ^{bd}	11.8 ^{abc}	80.148	.001	

Post hoc Scheffe tests: ^adifferent ($p < .05$) from light group mean, ^bdifferent ($p < .05$) from fantasy-dominant group mean, ^cdifferent ($p < .05$) from favorite team-group mean, and ^ddifferent ($p < .05$) from heavy group mean.

*Main effects MANOVA design, with follow-up ANOVA tests.

attachment construct indicated differences across the groups and further validate the proposed framework. Specifically, fantasy-dominant consumers indicated stronger levels of attachment to individual players than light and favorite team-dominant participants ($F = 9.9$, $p < .001$). While the results are theoretically valid and reliable, this was the first use of the scale; therefore, it may be a potential limitation of the study and further research is required in this area.

With respect to team loyalty, the mean commitment scores of Mahony et al.'s (2000) PCT scale were examined, and the results showed significant differences across the groups. Favorite team-dominant and heavy consumers indicated higher levels of psychological com-

mitment toward their favorite NFL team than fantasy-dominant and light participants ($F = 11.1$, $p < .001$).

In addition to the theoretical measures applied above, a series of gameday behaviors were analyzed to determine any differences among fantasy participants. The results indicated that 9 of the 11 consumption activities examined were significantly different between fantasy-dominant/heavy consumers and favorite team-dominant/light consumers. To illustrate, fantasy-dominant/heavy consumers indicated watching a significantly greater amount of the five televised programs examined (pre- and post-game shows, SNF, MNF, and cable sports channels). Additionally, these same consumers signified going to a restaurant or bar

Table 4.
Attitudinal and Behavioral Contrasts (N=306)

Consumption Behavior (frequency, 1-5)	Light Consumption (n=79)	Fantasy Dominant (n=93)	Favorite Team Dominant (n=55)	Heavy Consumption (n=79)	F	p
Attachment to Players	3 ^b	3.5 ^{ac}	2.9 ^b	3.2	9.795	.001
Psychological Commitment to Team	3.7 ^{cd}	3.6 ^{cd}	4.0 ^{ab}	4.0 ^{ab}	11.055	.001
Gameday Consumption						
Pre-Game Shows	3.2 ^{bd}	4.1 ^{ac}	3.3 ^{bd}	4.4 ^{ac}	20.072	.001
Post-Game Shows	3.0 ^{bd}	3.8 ^{ac}	3.2 ^{bd}	3.9 ^{ac}	10.863	.001
Sunday Night Football	3.9 ^{bd}	4.6 ^{ac}	4.1 ^{bd}	4.6 ^{ac}	10.232	.001
Monday Night Football	4.1 ^{bd}	4.6 ^{ac}	4.1 ^{bd}	4.6 ^{ac}	7.245	.001
Sports News Channels	3.2 ^{bd}	4.1 ^{ac}	3.3 ^{bd}	4.3 ^{ac}	16.935	.001
Event Attendance	1.4	1.6	1.9	1.6	3.678	.167
Bar	2.0 ^{bd}	3.3 ^{ac}	2.4 ^{bd}	3.4 ^{ac}	23.156	.001
Internet	4.1 ^{bd}	4.7 ^{ac}	4.2 ^{bd}	4.7 ^{ac}	10.739	.001
Phone Calls	2.0 ^{bd}	2.9 ^{ac}	2.1 ^{bd}	3.0 ^{ac}	12.665	.001
Text Messaging	1.7 ^{bd}	2.7 ^{ac}	1.8 ^{bd}	3.0 ^{ac}	18.231	.001

Post hoc Scheffe tests: ^adifferent ($p < .05$) from light group mean, ^bdifferent ($p < .05$) from fantasy-dominant group mean, ^cdifferent ($p < .05$) from favorite team-group mean, and ^ddifferent ($p < .05$) from heavy group mean.

more often to watch NFL games and spent more time communicating with league members via phone calls and text messaging. Lastly and similar with previous research (Drayer et al., 2010, the results indicated that there were no significant differences across the groups with regard to event attendance ($F = 3.7, p = .167$).

Finally, even though the attitudinal contrasts characterized the modes in a theoretically consistent manner, further descriptive contrasts were conducted.

Demographic accounts are displayed in Table 5.

Results here note no significant difference across the groups in terms of age of the participants ($F = 2.2, p < .086$), level of education ($\chi^2[21] = 20.9, p = .464$), and household income ($\chi^2[15] = 20.1, p = .168$). However, an important discovery indicates that heavy and fantasy-dominant consumers have more years of experience playing fantasy football ($F = 8.2, p < .001$). Given the consumptive behavior of these two groups, this finding may speak to the potential of fantasy football as a predictor of NFL consumption, for it appears league-related consumption increases with years of experience.

Discussion

Due to the interactive qualities of fantasy sport and its place within an online environment, fantasy sport users represent an important portion of the media-

dominant sport consumer population. However, even within this population, it appears that fantasy participants differ significantly in terms of product usage and media consumption. The present study provided an in-depth look into the differences (as well as the similarities) among fantasy sport participants based on varying levels of consumption and has provided sport marketers with important information about this lucrative segment of consumers. The following section details some of the key discoveries and provides insight for future studies in this area.

Managerial Implications

Not surprisingly, favorite team-dominant participants indicated that their psychological commitment remained with their favorite team. They supported their team by spending time watching more programming related to their favorite team instead of their fantasy team. However, an important finding in this study is that participants that were considered heavy users maintained their commitment to their favorite team as opposed to the players on their fantasy team. They spent more time watching programming related to their favorite team and reported higher levels of psychological commitment to their favorite team than fantasy-dominant participants. In other words, when

Table 5.
Demographic Contrasts (N=306)

Demographic Factors	Light Consumption (n=79)	Fantasy Dominant (n=93)	Favorite Team Dominant (n=55)	Heavy Consumption (n=79)	F; χ^2 (df)	p
Age (Years)	32.1	29.8	28.7	28.4	2.221	.086
Number of Years Played	4.3 ^{bd}	6.7 ^{ac}	4.3 ^{bd}	6.3 ^{ac}	8.197	.001
Education*					20.924 (21)	.464
Less than High School	5 (3)	3 (4)	1 (2)	3 (3)		
High School Graduate	6 (10)	14 (11)	6 (7)	11 (9)		
Some College	28 (25)	20 (30)	18 (17)	30 (24)		
College Graduate	25 (27)	37 (32)	18 (18)	23 (26)		
Technical School	2 (3)	5 (3)	1 (2)	3 (3)		
Graduate School	9 (8)	11 (10)	8 (6)	4 (8)		
Income*					20.109 (15)	.168
Less than \$25,000	10 (9)	9 (11)	7 (6)	9 (9)		
\$25,000 - \$49,999	18 (15)	15 (20)	8 (11)	22 (17)		
\$50,000 - \$74,999	13 (14)	19 (19)	12 (10)	15 (15)		
\$75,000 - \$99,999	8 (13)	20 (17)	9 (9)	16 (14)		
\$100,000 or more	14 (12)	21 (16)	8 (8)	6 (13)		

Post hoc Scheffe tests: ^adifferent ($p < .05$) from light group mean, ^bdifferent ($p < .05$) from fantasy-dominant group mean, ^cdifferent ($p < .05$) from favorite team-group mean, and ^ddifferent ($p < .05$) from heavy group mean.

*Cross-tabulated actual and (expected) counts shown: likelihood ratios reported for χ^2 tests.

given a choice, heavy consumers will still choose to associate most strongly with their favorite team instead of their fantasy team. This result, combined with the finding that each type of consumer has similar levels of event attendance, should reassure the NFL and its teams that fantasy football is not negatively impacting fans' attitudes toward their favorite team.

Additionally, the findings of the current study suggest that fans who are more engaged in fantasy football watch more NFL games. While the favorite-team dominant consumer may only watch for a single three-hour block on Sunday afternoon, the fantasy-dominant consumer has an interest in games throughout the league and therefore watches significantly more NFL programming (see Table 3). Therefore, not only is fantasy football not negatively impacting fans' attitudes toward their favorite team, but it also serves as a tool to increase television viewership, which should incentivize the NFL to promote fantasy football participation to its fans.

An intriguing outcome of the current study centers on the similarities between groups with regard to gameday consumption habits. That is, with respect to television viewership and Internet and telecommunications usage, the fantasy-dominant consumer is highly

similar to the heavy consumer. The group contrast results for nearly each form of gameday consumption classified these two consumer segments together. Interestingly, the favorite team-dominant and light consumers were also often grouped together. This, perhaps, indicates the importance of fantasy football participation as an advanced marketing vehicle for the NFL. An enhanced interest in a group of NFL players as opposed to a singular team appears to increase media consumption on a variety of levels. Specifically, the findings of the current study should incentivize the NFL to utilize different means of communicating with its fan base, particularly the most highly dedicated fans and the fantasy-dominant consumers.

However, as mentioned previously, there is a tendency for fantasy-dominant consumers to have stronger levels of attachment to individual players as opposed to their favorite team. While this group of consumers is still in the minority, the results also showed that fantasy-dominant consumers have played fantasy football for more years than favorite team-dominant consumers. Perhaps as consumers play fantasy football, they are slowly and continuously redefining how they consume the NFL toward a fantasy-dominant perspective. A longitudinal study is needed to examine

whether or not psychological commitment and consumption shifts over time from favorite team-dominant to fantasy-dominant. In the end, the NFL should embrace both populations as they each show a strong tendency to consume at high levels.

The fantasy-dominant consumer should also be more attractive to restaurants, bars, football-related websites, and cellular phone providers due their significantly higher levels of consumption. Businesses in these industries should consider catering their message to the fantasy-dominant consumer. While this study focused only on mediated consumption, future studies should examine the differences in consumption of other products and services to see if potential exists to market specifically toward one group of consumers over the other. The qualitative study by Drayer et al. (2010) suggested that fantasy participation does not lead to purchases of NFL-related products. Thus, there is potential for practitioners to bridge the gap between fantasy sport participation and other forms of traditional sport consumption. However, additional research with regard to this specific population of sport fans is required.

Ultimately, this study shows that the advent of fantasy football has created distinct groups of NFL fans that have vastly differently attitudes and behaviors. The NFL and its constituents would be wise to try to understand these populations as well as they can in order to maximize the profit-potential of each group. Finally, this study also focused specifically on existing fantasy players. Future research should examine the attitudes and behaviors of these distinct groups of fantasy players with NFL fans that do not play fantasy football.

References

- Backman, S. J., & Crompton, J. L. (1991). Using a loyalty matrix to differentiate between high, spurious, latent and low loyalty participants in two leisure services. *Journal of Park and Recreation Administration*, 9(2), 1-17.
- Comeau, T. O. (2007). Fantasy football participation and media usage. Unpublished doctoral dissertation, University of Missouri – Columbia.
- 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, 129-141.
- Fantasy Sports Trade Association. (2008, July 7). Fantasy sports industry grows to an \$800 million industry with 29.9 million players. Chicago: Jeff Thomas. Retrieved July 8, 2008, from <http://www.fsta.org/news/pressreleases/>
- Farquhar, L. K., & Meeds, R. (2007). Types of fantasy sports users and their motivations. *Journal of Computer-Mediated Communication*, 12, 1208-1228.
- Fisher, E., (2008, November 17). Study: Fantasy players spend big. *Street & Smith's SportsBusiness Journal*, 11(29), 1-2. Retrieved from <http://www.sportsbusinessjournal.com/article/60598>
- Freire, A. (2007). Remediating radio: Audio streaming, music recommendation and the discourse of radioness. *Radio Journal: International Studies in Broadcast & Audio Media*, 5(2/3), 97-112.
- Fullerton, S., & Dodge, R. H. (1995). An application of market segmentation in a sports marketing arena: We all can't be Greg Norman. *Sport Marketing Quarterly*, 4(3), 43-61.
- Haley, R. I. (1968). Benefit segmentation: A decision-oriented research tool. *Journal of Marketing*, 32, 30-35.
- Kaiser, H. (1970). A second generation little jiffy. *Psychometrika*, 35(4), 401-415.
- Mahony, D. F., & Howard, D. R. (1998). The impact of attitudes on the behavioral intentions of sport spectators. *International Sports Journal*, 2(2), 96-110.
- Mahony, D. F., & Moorman, A. M. (1999). The impact of attitudes on intentions to watch professional basketball teams on television. *Sport Management Review*, 2, 43-66.
- Mahony, D. F., & Moorman, A. M. (2000). The relationship between the attitudes of professional sport fans and their intentions to watch televised games. *Sport Marketing Quarterly*, 9(3), 131-139.
- Mahony, D. F., Madrigal, R., & Howard, D. R. (2000). Using the Psychological Commitment to Team (PCT) scale to segment customers based on loyalty. *Sport Marketing Quarterly*, 9(1), 15-25.
- Morton, J. (2007). Facing the future. *American Journalism Review*, 29(2), 68. Retrieved from Academic Search Complete database.
- Mullin, B. J., Hardy, S., & Sutton, W. A. (2007). *Sport marketing*. Champaign, IL: Human Kinetics.
- Nielsen Media (2006). Nielsen net ratings usage analysis. Retrieved from the Fantasy Sport Association's Fantasy Football Market Report.
- Peterson, R. A., & Sharpe, L. K. (1973). Market segmentation: Product usage patterns and psychographic configurations. *Journal of Business Research*, 1(1), 11-20.
- Pritchard, M. P., & Funk D. C. (2006). Symbiosis and substitution in spectator sport. *Journal of Sport Management*, 20, 299-321.
- Pritchard, M. P., Havitz, M. E., & Howard, D. R. (1999). Analyzing the commitment loyalty link in service contexts. *Journal of the Academy of Marketing Science*, 27(3), 333-348.
- Robinson, M. J., & Trail, G. T. (2005). Relationships among spectator gender, motives, points of attachment, and sport preference. *Journal of Sport Management*, 19(1), 58-80.
- Seo, W. J., & Green, B. C. (2008). Development of the motivation scale for sport online consumption. *Journal of Sport Management*, 22(1), 82-109.
- Shohlan, A., & Kahle, L. (1996). Spectators, viewers, readers: Communication and consumption in sport marketing. *Sport Marketing Quarterly*, 5(2), 11-20.
- Smith, W. R. (1956). Product differentiation and market segmentation as alternative marketing strategies. *Journal of Marketing*, 21, 3-8.
- Sutton, W. A., McDonald, M. A., & Milne, G. R. (1997). Escalating your fan base. *Athletic Management, February/March*, 3-5.
- Tabachnick, B.G., & Fidell, L.S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Pearson Education.
- Trail, G. T., & James, J. D. (2001). The motivation scale for sport consumption: Assessment of the scale's psychometric properties. *Journal of Sport Behavior*, 24(1), 108-127.
- Walsh, J., Hesse, B., Kiesler, S., & Sproull, L. (1992). Self-selected and randomly selected respondents in a computer network survey. *Public Opinion Quarterly*, 56, 241-244.
- Wind, Y. (1978). Issues and advances in segmentation research. *Journal of Marketing Research*, 15, 317-337.
- Woodward, D. (2005). A whole new ballgame: How fantasy sports has evolved in the mass media. Unpublished doctoral dissertation, University of Texas at Arlington.

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