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Divided Loyalty? An Analysis of Fantasy Football Involvement and Fan Loyalty to Individual National Football League (NFL) Teams

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Fantasy football participation is an extremely-popular, yet unique online activity that combines traditional sport fandom with interactive components to enhance a fan's overall sport experience. The player-specific concentration of the game, however, has the potential to alter traditional team-focused loyalties that have driven sport consumer behavior inquiry for decades. Due to this intriguing circumstance, this study investigated the relationship between fantasy football involvement and traditional NFL fan loyalty. In addition, given the varying levels of fantasy participation, this study examined factors that predict differing levels of involvement among fantasy owners. The results suggest a positive relationship between involvement and attitudinal loyalty and a nonstandard relationship between a highly-involved fantasy football participant's attitudes and behaviors, especially with regard to team loyalty. Discussed are the theoretical repercussions of this conceptual disconnect, the potential for future research, and practical implications for the future marketing of individual teams, leagues, and fantasy-related applications.

Fantasy sport participation is a unique activity that combines traditional sport fandom with interactive components to enhance a sport consumer's overall experience. However, the distinct features of fantasy sport participation also have the potential to alter traditional team-focused loyalties that have driven sport consumer behavior inquiry for decades (Funk & Pastore, 2000; Kolbe & James, 2000; Mahony, Madrigal, & Howard, 2000; Wakefield & Sloan, 1995). According to Funk and James (2006), contemporary sport consumer behavior "seeks to understand consumer attitudes and behaviors towards teams and sporting events in order to enable sport managers to effectively package and deliver the sport product" (p. 189). Interestingly, despite the prevalence of televised sport and the Internet in our society, much of the discussion about sport consumer behavior has ignored sport media use as a viable area for study. However, as sport media consumption continues to escalate, "attendance is becoming less central to an organization's profitability" (Pritchard & Funk, 2006, p. 316). Thus, the need for additional research investigating the distinct attitudes and behaviors of one of professional sports' most substantial fan segments, the media-dominant sport fan, has recently garnered more attention (Mahony & Moorman, 1999; 2000; Pritchard & Funk, 2006). In fact,

according to Mahony and Moorman (1999), examining sport television viewership, as opposed to event attendance, is more representative of a consumer's attitude toward a sport object because several unrelated factors could affect game attendance (e.g., weather, location of facility, cost of tickets, quality of location).

Fantasy sport participants represent a sizeable portion of the media-dominant sport fan population. Fueled by robust purchasing behavior (Fisher, 2008), this group of sport fans also embodies corporate America's most highly-coveted collection of consumers as will be discussed in the following section. Driven by the competitive, interactive, and social qualities of fantasy sport (Farquhar & Meeds, 2007; Spinda & Haridakis, 2008), fantasy participants have transformed the activity into a major player within the sport industry (Leporini, 2006). Currently, the business of fantasy sport is estimated to generate over \$800 million annually, and includes over 32 million unique participants over the age of 12 in North America (Fantasy Sports Trade Association [FSTA], 2008c; FSTA, 2011).

Despite its enormous popularity, there is a considerable lack of in-depth information about this influential group of sport consumers. Recent research has found that fantasy sport has created a new, more diverse sport fan with a significant interest in a group of heterogeneous players in addition to their favorite team (Drayer, Shapiro, Dwyer, Morse, & White, 2010; Farquhar & Meeds, 2007; Shipman, 2001). For example, a typical fantasy football participant manages up to fifteen players on

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his/her own fantasy team. Each week, this participant competes against another fantasy football team with an average of eight different activated players. As a result, a certain level of attraction is awarded to the participant's players as well as an awareness of the players on his/her opponent's team. The combination of these untraditional interests can ultimately result in a competitive curiosity in nearly every National Football League (NFL) game played each weekend.

In the NFL, fan loyalty has historically been reserved for one, individual team formed through strong geographical and/or social affiliations (Gladden & Funk, 2001; Kolbe & James, 2000); however, as noted above, the advent of fantasy football has enhanced the visibility and importance of individual players on different teams. These added points of interest have the potential to diminish a fan's highly-developed attitudes and behaviors toward their favorite team, and ultimately, force sport practitioners to alter marketing communication strategies to account for it. Due to this intriguing circumstance, this study investigated the relationship between fantasy football involvement and traditional NFL fan loyalty. In addition, given the varying levels of fantasy participation, this study examined factors that predict differing levels of involvement within fantasy football. To examine these issues and guide the investigation, the following research questions were developed:

- Q1 To what extent is the level of fantasy football involvement related to a participant's loyalty to their favorite NFL team?
- Q2 What explanatory variables predict a participant's level of fantasy football involvement?

The following section further establishes a need for this investigation through a comprehensive review of fantasy sports, fan loyalty, and consumer involvement literature. At which point, the methodology for the current study is discussed followed by the results and a discussion of the implications including limitations and future considerations for research.

Review of Literature

The Fantasy Sports Phenomenon

The premise of fantasy sports allows individual participants to act as general managers or owners of their own sports team. Typically, participants compete weekly against other fantasy team owners in a league-style format. This competition usually lasts throughout the regular season and is directly associated with real-world professional sports and the statistical output of athletic performance. The game is primarily an online service that is completely customizable, interactive, and involves nearly every major professional sport, from the NFL to bass fishing. In addition, fantasy sport allows fans to simultaneously follow their favorite sports while actively competing and interacting with family, friends, and acquaintances (Farquhar & Meeds, 2007).

According to the American Marketing Association, fantasy sport has emerged as an easy, cost-effective means of reaching an engaged and loyal group of consumers (Leporini, 2006). For instance, the average fantasy sport participant (38-year-old Caucasian male with a Bachelor's Degree & a \$75,000 income) is a highly-sought consumer (FSTA, 2008b). Further, fantasy participants are, on average, much stronger consumers of the leading product categories than general sports fans and the general population (Fisher 2008). As a result, this group of consumers is intensely targeted by the corporate sponsors, advertisers, merchandisers, media partners, in addition to individual teams and leagues.

Unfortunately, scholarly literature in the area of fantasy sports is limited (Lomax, 2006). Previous studies examined gambling concerns associated with fantasy sports, masculinity issues, and communication (Bernhard & Eade, 2005; Davis & Duncan, 2006; Shipman, 2001). Recently, however, researchers have begun to explore certain aspects of fantasy sport and consumer behavior. For instance, in an attempt to determine types of online fantasy sports players based on motivational factors, Farquhar and Meeds (2007) identified a set of common underlying dimensions of motivations for fantasy sport league participation derived from motives associated with sports consumption and Internet usage. The study found the following five primary motives for fantasy sports participation: surveillance, arousal, entertainment, escape, and social interaction. The study also indicated that two perceived gratifications of participating in fantasy sports, arousal and surveillance, led to significant differences among fantasy sport users. Researchers Spinda and Haridakis (2008), on the other hand, identified the following six motives for fantasy sport participation: ownership, achievement/self esteem, escape/pass time, socialization, bragging rights, and amusement. Despite differing motivational factors, both studies highlighted fantasy sport participation as a distinct, purposive, and interactive endeavor (Farquhar & Meeds, 2007; Spinda & Haridakis, 2008).

Recently, researchers Drayer et al. (2010) investigated the consumption habits of fantasy football participants with regard to NFL products and services. In doing so, the authors provided the following propositions: (1) participants created new perceptions of the NFL through fantasy football; (2) at which point, the redefined NFL broadened their consumption behavior of associated products and services, and (3) NFL outcomes influenced both a participant's favorite team norms and fantasy-specific perceptions.

While the amount of information regarding the consumer behavior of fantasy participants is limited, previous research in the areas of sport consumption and sport consumer behavior has underscored the importance of understanding the psychological, sociological, and behavioral intentions of sport consumers (Dietz-Uhler & Murrell, 1999; End, 2001; Funk & James, 2006; Melnick, 1993; Sloan, 1989; Trail, Fink, & Anderson, 2003). For the contemporary manager "understanding

and adapting to consumer motivation and behavior is not an option – it is an absolute necessity for competitive survival” (Blackwell, Miniard, and Engel, 2005, p. 12). Within this burgeoning area of study, the constructs of consumer loyalty and involvement have been proven to assist marketing segmentation strategies (Backman & Crompton, 1991b; Funk, Ridinger, & Moorman, 2004; Park, 1996; Pritchard, Havitz, & Howard, 1999), yet the application of these theories to a population of fantasy sports participants has not been attempted.

Fan Loyalty

A loyal consumer displays intense recurring behavior and a strong, positive attitude toward a product (Jacoby, 1971). Early research into the consumer loyalty paradigm, however, focused primarily on behavioral responses for measuring loyalty, and failed to explain *why* individuals repeatedly purchase particular brands. In its infancy of study, consumer behavior researchers sought to explain how and why loyalty was developed within a consumer. It was determined, according to researchers Day (1969) and Jacoby and Chestnut (1978), that characterizing brand loyalty solely on the basis of behavioral responses was not enough. Based on these arguments, loyalty definitions quickly adapted a two-dimensional model that explained both attitudinal and behavioral constructs. As a result, over the span of four decades, several consumer loyalty measures were developed (Backman & Crompton, 1991b; Dick & Basu, 1994; Jarvis & Wilcox, 1976; Rundle-Thiele & Mackay, 2001).

Stemming from this research, sport fan loyalty is viewed as a two dimensional paradigm involving both a fan’s attitudes and behaviors. Previous research has determined that neither construct is mutually exclusive or more important than the other, but fan loyalty cannot be sufficiently explained without understanding the relationship between the two components (Backman & Crompton, 1991b; Gladden & Funk, 2001; Mahony et al., 2000). Nevertheless, for decades, sport management, sport sociology, and sport psychology researchers have focused primarily on behavioral indicators of fan loyalty, such as spectator attendance figures and sport merchandise purchases (Hill & Green, 2000; Kwon & Armstrong, 2004; Kwon, Trail, & James, 2007). However, similar to traditional consumer loyalty, sport fan loyalty requires investigation beyond behavioral characteristics. That is, sports fans can also be segmented by their degree of attachment to a team or event, which is conceptualized as an individual’s highly-developed attitude toward the sport product.

Psychological Commitment. To best explain this attitudinal component of loyalty, researchers used the construct of psychological commitment (Backman & Crompton, 1991a; Iwasaki & Havitz, 2004; Mahony et al., 2000; Pritchard, 1991; Pritchard et al., 1999). Defined initially as a decision-making process that results in the tendency or unwillingness to change one’s preference,

psychological commitment has evolved into a heavily researched area in the fields of sport and leisure. Given its contextual significance, the following section reviews the evolution of psychological commitment as it represents the attitudinal component of sport fan loyalty.

According to previous consumer behavior research, psychological commitment is defined many ways. It has been defined as an individual’s: attitude strength (Robertson, 1976), “tendency to resist change in preference in response to conflicting information or experience” (p. 414, Crosby & Taylor, 1983), and attachment to an object that results recurring behavior and infers “a rejection of alternative behaviors” (p. 403, Buchanan, 1985).

In 1999, researchers Pritchard et al. developed a psychological commitment instrument that was the culmination of previous attitudinal loyalty research (Gahwiler & Havitz, 1998; James, 1997). The authors derived a five dimensional construct that included the following five sources of psychological commitment: cognitive complexity, cognitive consistency, confidence, position involvement, and volitional choice. Researchers Iwasaki and Havitz (2004) added to these previous findings by defining resistance to change as an “individual’s unwillingness to change his/her preferences toward, important associations with, and/or beliefs about a product or an agency” (p. 50).

Psychological Commitment to Team. Mahony et al. (2000) looked to extend the work of Pritchard et al. (1999) and introduce psychological commitment to the spectator sport paradigm. In doing so, the authors developed the Psychological Commitment to Team scale. The instrument specifically emphasized the resistance of changing preference toward a particular professional sport team. However, researchers attacked the scale’s poor construct validity and unidimensional nature (Kwon & Trail, 2003).

More recently, heeding the suggestions of Kwon and Trail (2003), researchers Heere and Dickson (2008) proposed separating the terms commitment and loyalty to successfully construct a valid and reliable one-dimensional scale to measure the attitudinal component of loyalty. In all, the authors termed attitudinal loyalty to be a guide to behavior stemming from the interaction between negative external factors and an individual’s highly-developed attitudes toward a team. The resulting Attitudinal Loyalty to Team Scale (ALTS) streamlined the previous association work of Gladden and Funk (2002), the attitudinal results of Funk and Pastore (2000), and psychological commitment findings of Mahony et al. (2000) and arrived at a valid and reliable scoring scale that adequately represented attitudinal loyalty. Given these parsimonious and psychometrically sound results, the current study used the ALTS to measure a fantasy participant’s attitudinal loyalty to their favorite NFL team.

Divided Loyalty. Despite extensive research by sport consumer behaviorists regarding the construct of loyalty, the notion of divided fan loyalty has yet to be addressed.

It has been found in other product and service categories, however, that consumers are becoming less loyal to one specific brand and embracing several acceptable brands that meet their needs (Thompson, 1996; Ehrenberg, Uncles, & Goodhardt, 2004; Yim & Kannan, 1999). In fact, researchers with a behavioral focus of loyalty suggest that most consumers have split-loyalty portfolios of habitually-consumed brands, and for highly-demanded, yet similar products and services, such as sports teams and sports programming, consumption behavior is often dictated by opportunity and accessibility (Ehrenberg & Scriven, 1999; Uncles, Dowling, & Hammond, 2003).

While sport team loyalty is much more complex than traditional consumer loyalty, the opportunities for sport fan consumption are abundant especially via media. Thus, it is understandable that sport fans to select products and services based on their specific needs as opposed to strictly on a loyal basis. With regard to fantasy sports, researchers have suggested participants partake in the activity to meet needs and desires above and beyond traditional sport fandom motives (Spinda & Harikakis, 2008). That is, with additional competitive, socially-interactive, and entertainment-based outcomes, it would be intuitive to think fantasy football participants have several similar opportunities to consume the NFL beyond their favorite team each weekend. As a result of this circumstance, the current study addresses the relationship between fantasy football participation and traditional NFL team loyalty.

While divided loyalty is a relatively new topic, the relationship between attitudinal loyalty and consumer involvement has become critical in predicting consumer behavior (Iwaski & Havitz, 1998; Park, 1996). For instance, Park concluded that the concepts of involvement and attitudinal loyalty are distinct but highly intercorrelated, and in terms of guiding behavioral loyalty, involvement explains short-term usage while attitudinal loyalty describes long-term practice. Furthermore, the author suggested that future investigation into the relationship of these two constructs "would be a fruitful line of research" (p. 247). The following section highlights consumer involvement and its relationship with sport fandom. As stated by Park, the concepts of loyalty and involvement are highly similar; thus, it is important to note that for the purposes of this study, involvement is investigated as a function of fantasy football participation and loyalty as a function of one's favorite NFL team.

Consumer Involvement

The concept of involvement has evolved considerably since the 1960s. Derived from social judgment theory (Sherif & Hoveland, 1961), it is now heavily-used in both consumer behavior and leisure research to help understand purchase behavior of consumer goods and services (Zaichkowsky, 1986). In 1985, Zaichkowsky developed the Personal Involvement Inventory (PII) to measure product involvement. The author specifically identified three antecedents of involvement: characteristics of the

person, characteristics of the product, and characteristics of the situation. These factors trigger different types of involvement (product, purchase decision, and advertising) that can produce differing results or consequences. In 1994, however, Zaichkowsky simplified and updated the PII to eliminate item redundancy. The resulting scale was reduced to ten total items with two dimensions (affective and cognitive). Overall, the application of the scale to marketing and advertising samples resulted in strong scores that were both reliable and valid.

Service Involvement. Celuch and Taylor (1999) extended Zaichkowsky's (1994) PII to the service industry. At that point, the PII had been appropriately applied to products, advertisements, and purchases, but there was limited investigation in relation to services. Therefore, in an effort to validate the scale within the service industry, the authors replicated the PII across multiple services. Similar to Zaichkowsky's findings, the modified instrument captured both cognitive and affective factors identified in previous research. However, the results indicated the need for further instrument reduction. Thus, an eight item version of the PII inventory was deemed most appropriate, as the instrument provided valid and reliable scores across the service settings examined.

In all, the level of involvement has been shown to be an important consumer indicator in the fields of marketing, advertising, and leisure behavior. In addition, recent research in the area of sport spectators has provided utility of the involvement construct to better understand consumer motives in a diverse and competitive sport industry (Funk et al., 2004). However, there is limited research on involvement with an ancillary sport service such as fantasy sport. In-depth information regarding a sport consumer's level of fantasy football involvement will aid sport marketers in their understanding of this group of media-dominant sport fans. Furthermore, determining demographic and social variables that predict fantasy involvement levels will help practitioners properly segment the market and foster increased sport consumption.

Method

Sample

The target population for the current study was individual fantasy football participants over the age of 18 whom currently participate in the activity. Fantasy football was selected as the activity of choice due to its enormous popularity and its status as the gateway activity to other fantasy sports (FSTA, 2008a). Potential respondents were selected randomly from a pool of 5,000 FSTA member participants (50% pay-to-play; 50% play-for-free). The FSTA represents more than 125 member companies in the fantasy sports industry, and has an estimated five to seven million unique participants. Out of this pool of 5,000 FSTA member participants, 1,600 potential respondents were randomly selected for participation in this study.

This sample frame was influenced by the sample size requirements of both logistic regression analysis and dichotomization procedures. That is, small samples may accumulate high standard errors, and if there are too few responses in relation to the number of variables, it may be impossible to converge on a solution (Nurošis, 2006). As a rule of thumb, Green (1991) recommended a sample size for regression analysis should equal $N \geq 50 + 8m$, where m is the total number of predictor variables in the model. This study proposed nine predictor variables in the logistic regression analysis; thus, a sample size of at least 122 ($50 + 8[9]$) participants was advised.

A dichotomization procedure divides a sample into three parts based on the participant's score on a given variable (25%, 50%, & 25%). At which point, the middle 50% of the initial sample is eliminated from further analysis. Previous research has frequently used this method to eliminate respondents who were relatively neutral on a variable of interest (Darley & Lim, 1992; Haugtvedt, Petty, & Cacioppo, 1992; Mahony & Moorman, 1999). Research in the social sciences has shown that the response rate for web-based surveys typically ranges from 15% to 73%, depending on the means of communication, incentive structure, and the visibility of the survey (Birnholtz, Horn, Finholt, & Bae, 2004; Gosling, Vazire, Srivastava, & John, 2004; Krantz & Dalal, 2000). The FSTA (2008a; 2008b) has received the range of response rates from 26% to 42% for their previous fantasy sport survey research. Given this information, the sample size requirements stated above, and adding a conservative "cushion" for missing data, 1,600 potential respondents were contacted ($\approx 244 / 15\%$).

Instrumentation

The survey used in this study contained six major parts with a total of 26 items. First, Celuch and Taylor's (1999) modification of Zaichkowsky's (1994) PII was used to measure the extent of personal involvement with one's fantasy football based on the inherent needs and interests of the participant. Second, Heere and Dickson's (2008) Attitudinal Loyalty to Team Scale (ALTS) was used to assess a participant's attitudinal loyalty to their favorite NFL team. This instrument was selected because it was the most recent contribution to the literature and produced both valid and reliable scores. However, due to perceived social desirability concerns that occurred during the pilot examination, the austerity of the four ALTS items were softened to elicit greater variability. Finally, in an attempt to understand specific characteristics that predict fantasy football involvement, basic demographic and fantasy football-related information were collected.

The potential predictor variables were selected following a comprehensive literature review that included controlled information obtained from the FSTA. As a result, the following variables were included in the model: (1) the total number of years participated, (2) the total number of fantasy football teams owned, (3) the total number of friends, family, and/or coworkers

participating against, (4) the self-reported level of skill perceived in fantasy football, (5) the amount of money spent to participate, (6) the total ALTS score, (7) the likelihood of watching either their best fantasy player's NFL team or their favorite NFL team given the two teams were playing at the same time on different channels, (8) the total number of hours spent on the Internet per day, and (9) the participants age. Each item is operationally defined below.

Given that years of experience tend to affect an individual's behavior, respondents were asked to recall the total number of years they have played fantasy football. In addition, fantasy sport's reliance upon Internet technology requires individual participants to belong to one or more fantasy provider platforms (i.e., CBSsports.com or Yahoo.com). Therefore, in an attempt to examine online behavior associated with fantasy sports, participants were asked the amount of time spent online per day. Given that the investment of resources is often tied to involvement (Zaichkowsky, 1986), participants were also asked to report all money expended to participate in their most preferred league. Pilot analysis determined that the amount of money spent is highly-correlated with the amount of money at stake ($r = .897$). Thus, this variable also indirectly examined the significance of gambling as a predictor of fantasy football involvement.

Due to the prevalence of free fantasy football leagues, participants are able to compete in as many leagues as they see fit. As a result, the total number of teams owned by a participant was included as a potential predictor. In addition, researchers Farquhar and Meeds (2007) identified social interaction as a significant motivating factor for fantasy football participation. Therefore, the total number of friends, family, and/or coworkers that a participant competed against in their most preferred fantasy football league was investigated.

As mentioned in the review of literature, researchers Farquhar and Meeds (2007) determined that the classification of chance or skill resulted in two different types of fantasy participants: those motivated by surveillance and those driven by arousal. Interestingly, the individuals motivated by surveillance tended to be more involved in fantasy sports as they believed they "got more out of fantasy sports when they put in more time and money" (p. 1217). Thus, the current study's respondents were asked how much skill and/or chance they believe was required for fantasy football success.

In accordance with the initial research question, the total ALTS total score was included as a potential predictor of fantasy football involvement. Given that fan loyalty is defined as a two-dimensional construct, an additional question was included to address a participant's behavioral loyalty with regard to their favorite NFL team. According to Homburg and Giering (1999), behavioral loyalty includes past behavior and behavioral intentions. Thus, a question asking the likelihood of a fantasy participant watching their best fantasy player's team instead of their favorite team if both teams were playing at the same time was added to compare the attitudinal component of

loyalty with the behavioral aspect while also potentially predicting involvement level. Lastly, a participant's age was examined to determine any correlation between age and involvement.

Procedures and Data Analysis

Data collection for this study took place for 37 days. Following Dillman's (2000) web-based survey protocol, each selected participant was sent an introductory e-mail with an official notice describing the purpose of the study, contact information, anticipated time required, a paragraph detailing the participant's informed consent, and ultimately, an embedded link to the survey. A follow-up e-mail was sent two weeks later to increase the response rate.

Before data analysis, the final sample underwent the dichotomizing procedure with regard to the fantasy football involvement variable. Previous involvement research has contrasted differing levels of consumer involvement (i.e., high & low), and studied its effect on decision making, information gathering, and information sources (Bienstock & Stafford, 2006). Therefore, total scores for respondents in the top 25% and bottom 25% of the adapted PII were kept for the further analysis while the middle 50% were discarded.

Research question 1: An independent-samples *t* test was conducted to examine the relationship between fantasy football involvement and a participant's attitudinal loyalty to his or her favorite NFL team. The *t* value was computed to interpret significance of the mean difference in attitudinal loyalty between high and low involved participants using an alpha of .05. Before the *t* test analysis, exploratory factor analysis and Cronbach's alpha were performed to validate dimensionality and measure the internal consistency of scores on the PII and ALTS.

Research question 2: A logistic regression was conducted to determine which variables predict a participant's level of fantasy football involvement. Using a logistic regression model, a researcher can directly estimate the probability that one of two events will happen (Nurušis, 2006). In this case, the dichotomous nature of the fantasy football involvement groups (high or low) reaffirmed the use of logistic regression model as the most appropriate statistical procedure for this research question.

Results

A total of 367 participants began the survey with 325 completing it. This resulted in a response rate of 21.5%. Similar to the FSTA's (2008a) demographic findings, the average participant in this study was a Caucasian (95% male (93%) with at least a bachelor's degree (49%). However, the average age (37) was lower than the FSTA's finding (41). Marital status (55% married) and annual household income (56% with at least \$75,000) were also slightly lower than previous FSTA's results. For a more comprehensive look at this sample's demographics refer to Table 1.

The participants surveyed averaged 7 years (*SD* = 4.91) of fantasy football experience and owned an average of 4 teams (*SD* = 4.21) per NFL season. In addition, 57% respondents indicated participating against seven or more friends, family members, and/or coworkers including 37% participating against ten or more. Thirty-one percent of respondents stated that fantasy football success required more skill than chance while 51% believed it involved equal amounts of both aspects. Sixty-six percent of participants indicated that they spent more than two hours on the Internet per day. Eighteen percent declared that they spent no money to participate while 36% admitted to spending at least \$100 including 4%

Table 1 Demographics of the Current Sample (n = 325)

Ethnicity	n	%	Education	N	%	Income	n	%
Asian	5	2%	High School	96	30%	Less than \$50,000	69	22%
Black	4	1%	Associates Degree	48	15%	\$50,000-\$74,999	73	23%
Caucasian	298	93%	Bachelors Degree	109	34%	\$75,000-\$99,999	59	18%
Hispanic	9	3%	Masters Degree	40	12%	\$100,000-\$124,999	35	11%
Other	5	2%	Other	29	9%	Over \$125,000	40	12%
						Rather not say	47	14%
Marital Status	n	%	Gender	N	&	Age		
Married	176	55%	Male	308	95%	Mean		36.67
Separated	2	1%	Female	16	5%	St Dev		14.35
Divorced	14	4%				Median		34
Single	114	35%				Range		18-81
Other	16	5%						

that spent more than \$500. Finally, 61% of respondents would mainly watch their favorite NFL team instead of their best fantasy player's NFL team while 17% would watch both teams equally, 14% would mainly watch their best fantasy player's NFL team, and 3% would only watch their fantasy player's NFL team.

Before running the statistical procedures to answer the research questions, the factorial validity and reliability of the involvement scale scores were tested. Analogous with prior research (Bienstock & Stafford, 2006; Celuch & Taylor, 1999; Zaichkowsky, 1994), the adapted PII scores for this study resulted in a two-dimensional construct with four items loading on each factor (affective [*eigenvalue* = 4.733] and cognitive [*eigenvalue* = 1.293]). Each factor also resulted in reliable scores according to Cronbach's alpha, $\alpha = .901$ and $\alpha = .871$, respectively. Furthermore, Cronbach's alpha for the entire 8-item scale ($\alpha = .896$) signified that the adapted PII scores for this sample were internally consistent.

Respondents were then split into three groups based on their total score on the adapted PII. Respondents with total scores on the instrument that were approximately in the top 25% of the sample (52 and higher) were labeled as being high involved participants ($n = 81$) and those who were approximately in the bottom 25% (40 and lower) were labeled as being low involved participants ($n = 80$). Respondents with scores in the middle (from 41 to 51) were eliminated from further analysis. The remaining 161 respondents had an average age of 37.43 ($SD = 14.704$) and included 149 males and 12 females.

Research Question 1

To examine the relationship between fantasy football involvement and fan loyalty, an independent samples *t* test was interpreted. However, once again, Cronbach's alpha was examined for the ALTS to ensure reliability of the scale scores. The results indicated that the scores were internally consistent, $\alpha = .886$. The results of the independent samples *t* test indicated that despite a participant's enhanced interest in a group of heterogeneous NFL players on several different NFL teams, fantasy football involvement was positively related to an individual's attitudinal loyalty to their favorite NFL team, $t(147.477) = -2.707, p = .008$ (See Table 2). That is,

participants who were highly involved in fantasy football also indicated greater attitudinal loyalty to their favorite NFL team at a statistically significant level. As noted above, with additional fan orientations related to fantasy football and several high-quality options with which to consume the NFL, the enduring strong attitudinal loyalty result is a bit counter-intuitive. In addition, out of a possible score of 28, both groups indicated relatively high levels of attitudinal loyalty perhaps speaking to the ubiquitous popularity of the NFL or the strength of individual team brands.

Research Question 2

To assess predictors of fantasy football involvement, a logistic regression was performed. The omnibus results indicated that the regression model successfully predicted a participant's fantasy football involvement level, $\chi^2(9, 161) = 108.286, p < .001$. In addition, the model classified 85.9% of the participants into the correct group and accounted for 66.7% of the variance. Lastly, as shown in Table 3, five variables were significant predictors of fantasy football involvement while the remaining four variables were not.

To fully-understand the meaning of the significant predictors, the odds ratios were interpreted. With regard to the perceived level of skill involved in fantasy football, an increase of one on the skill/chance scale (5 point Likert-type scale) toward fantasy football being primarily a game of skill increased the odds of a participant being highly-involved by 378%. Similarly, for every additional year played, additional friend, family, or coworker played against, and additional point on a participant's total ALTS score the odds of a participant being highly-involved increased by 26%, 263%, and 24%, respectively. Lastly, while the total ALTS score was positively related to fantasy football involvement and a significant predictor of highly-involved participants, the likelihood of participants watching their best fantasy player's NFL team instead of their favorite NFL team was also a significant predictor. That is, for an increase of one on the likelihood scale (5 point Likert-type scale) toward solely watching their best fantasy player's NFL team the odds of a participant being highly-involved increased by 292%.

Table 2 Mean Score Differences on the ALTS for Fantasy Football Participants

	Fantasy Football Involvement				<i>t</i> test
	Low Involved Participants		High Involved Participants		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Attitudinal Loyalty to Team Scale Score	23.857	5.248	25.949	4.353	0.008

Note. Mean scores are based on the sum of four Likert-type scales of 1 (strongly disagree) to 7 (strongly agree); higher scores indicate higher loyalty to one's favorite NFL team.

Table 3 Individual Predictor Results for Logistic Regression Model

Predictor Variables	β	S.E.	Wald	df	Sig.	Exp(β)
Total number of years played*	.233	.073	10.203	1	.001	1.263
Total number of teams owned	-.050	.060	.696	1	.404	.952
Total number of friends, family & coworkers*	.968	.221	19.214	1	.000	2.632
Level of skill perceived in fantasy football*	1.331	.425	9.794	1	.002	3.783
Amount of money spent to participate	.083	.269	.094	1	.759	1.086
ALTS total score*	.217	.066	10.779	1	.001	1.242
Likelihood to watch fantasy over favorite*	1.071	.386	7.724	1	.005	2.92
Total number of hours on the Internet / day	.071	.172	.167	1	.682	1.073
Age	-.026	.019	1.74	1	.187	.975
Constant	-16.227	3.165	26.285	1	.000	.000

* Significant at a Bonferonni-Adjusted $p \leq .005$

Discussion

Divided Loyalty?

Previous research has primarily focused on exclusive loyalty to an alternative, not many researchers have focused on “divided” loyalty (Yim & Kannan, 1999). However, it is certainly possible that the concept of fan loyalty could incorporate more than one alternative (divided) and that actual time and money spent are part of the necessary and sufficient conditions to support this behavior. With regard to the current study, the findings provide interesting, yet contradictory outcomes for the relationship between fan loyalty and differing levels of fantasy football involvement. Specifically, the t test results suggest a positive relationship between attitudinal loyalty and involvement while the logistic regression results indicate an inconsistency between a highly-involved participant’s attitudinal loyalty to their favorite NFL team and the intended behavior of watching that same NFL team on television. Thus, based on these correlations, it appears a highly-involved fantasy football participant reveals lower levels of behavioral loyalty toward their favorite NFL team, yet indicates higher levels of the attitudinal component of loyalty. Theoretically, these results raise intriguing questions about the distinct attitudes and behaviors of fantasy participants. For instance, Heere and Dickson (2008) defined attitudinal loyalty as a “guide to behavior” (p. 233); however, the results of the current study may indicate a disconnect between these two well-researched components of consumer loyalty.

Perhaps the results underscore the paradox of fantasy football participation from a traditional fan perspective. Historically, NFL fans have been known for their fierce loyalty to their favorite NFL team (Gladden & Funk, 2001; Kolbe & James, 2000). However, the current study’s results indicate that despite a strong attitudinal willingness to maintain their commitment to their favorite NFL team, the intended behavioral response of strictly watching that same NFL team does not match the

attitudinal motivation. It appears enhanced involvement in fantasy football has provided additional viewing opportunities for this group of consumers that break down the connection between a participant’s attitudes and behaviors. Given a sports fan’s discretionary amount of time to consume sport and limited schedule of broadcasted NFL games, it is logical to see how a highly-involved fantasy participant would be conflicted between watching their favorite NFL team or their best fantasy player’s NFL team. In that case, fantasy football participation may represent a negative external change that divides the two components of team loyalty. On one hand, fantasy football appears not to affect the highly-developed attitudes toward one’s favorite team, and on the other hand, it appears to redistribute the traditional, singular team-centric behavior throughout the entire league via lower level commitments. Ultimately, while this result is not analogous with previous consumer behavior research, this nonlinear attitude-behavior relationship speaks to the uniqueness of sport fandom and particularly fantasy sport participation. That is, similar to the emotional and unconventional nature of religiously supporting one’s favorite team, it appears fantasy football participation is yet another means for sport fans to act unpredictably.

With regard to the positive t test result, it was hypothesized that the relationship between attitudinal loyalty to one’s favorite NFL team and fantasy football involvement would be negative. That is, given an increased involvement with fantasy football, one’s loyalty to their favorite team would suffer. With interests spread to several different players on several different teams and the additional competitive and interactive outcomes with regard to fantasy football, it was suspected that one’s attitudinal loyalty toward their favorite NFL team would be less simply because of the additional opportunities for interaction with the NFL. Intuitively, it would make sense that a consumer with several high-quality and entertaining options would be less loyal to one object. Not to mention the added personal nature of fantasy football, where one’s competitive pride is on the line with friends and family to

witness. Given this hypothesis, a result of no significant difference between attitudinal loyalty to team and fantasy football involvement would have been intriguing, much less the result of a positive relationship, which was both unexpected and surprising. Future research in this area is advised.

For sport marketers and managers, the implications of these findings are noteworthy. Despite the perceived paradox of fantasy football participation with regard to traditional NFL fandom, previous research has determined that the activity is extremely popular, for it significantly enhances a fan's spectator experience by providing a more interactive product that combines competition, social interaction, and skill (Drayer et al., 2010; Farquhar & Meeds, 2007; FSTA, 2008a; Shipman, 2001; Spinda & Haridakis, 2008). Furthermore, the unique nature of the activity provides participants with a competitive interest in nearly every game played. The results of this study indicate that this enhanced interest has the potential to strengthen the overall league brand without weakening individual team brands. According to Yost (2006), fantasy football has been one of the best brand-building tools for the league during the past decade, for fans around the world are watching the NFL more intently than ever, and the continued growth of fantasy football translates into very real advertising and merchandising dollars for the league.

In addition, following the suggestions of Park (1996), it appears the NFL substantially benefits from highly-involved fantasy football participants. The author concluded that as a guide to behavioral loyalty increased involvement leads to short-term usage and heightened attitudinal loyalty cues long-term practice. Thus, the positive relationship between fantasy football involvement and attitudinal loyalty to team established in this study suggests that the promotion of increased involvement with fantasy football will provide the NFL with sustained consumption through both short-term and long-term usage. As a result, league administrators looking to grow the overall popularity of a sport should endorse the sport's fantasy equivalent as a cost-effective promotional vehicle.

A potential threat may exist, however, as the results suggest a potential trend of highly-involved fantasy participants switching back and forth between several games each Sunday. The nature of professional football lends itself to a lot of dead time during a game. In fact, according to a recent Wall Street Journal study of four 2009 NFL broadcasts, there are only 11 min of actual playing time, 17 min of replays, and over 67 min of players standing around (Biderman, 2010). As a result, advertisers, corporate partners, and TV networks pay large sums of money to fill the 3-hr broadcasts with content. The results of this study may suggest a growing trend of switching between games to catch the elusive 11 min of actual playing time due to the interaction of an individual's loyalty to their favorite team and an enhanced interest in several different teams due to fantasy football participation. This is noteworthy for league marketers and sponsors looking

to balance in-game sponsorship with traditional forms of television advertisement.

For individual teams, the results of this study also indicate an opportunity to extend fan loyalty programs beyond the traditional geographical base. According to Yim and Kannan (1999), sport managers should know (1) the detailed compositions of the loyalty base of their brands, (2) the potential drivers of their customers' divided loyalty, and (3) possible marketing actions that they can take to maintain and enhance customers' loyalty toward their brands. As mentioned above, fantasy football participation extends traditional team-focused loyalties to individual player attraction and awareness in an unprecedented fashion. Therefore, perhaps loyalty programs and other strategic marketing actions that seek to move fantasy players along an escalator such as Funk and James' (2001; 2006) Psychological Continuum Model (PCM) from awareness and attraction to attachment and allegiance would be beneficial for individual NFL teams looking to penetrate and retain new markets. According to the authors, movement along the PCM toward fan allegiance provides outcomes that are more durable and impactful for individual sport organizations.

Involvement Implications

This study confirmed previous research of consumers with respect to the PII. Overall, fantasy sports participants with differing levels of involvement (high and low) had distinct experiences, attitudes, and behaviors (Zaichkowsky, 1985). For instance, the significant positive predictor, total number of years played, indicates that as participants become more experienced with fantasy football the more involved they become. Not only is this an important finding for sport practitioners associated with professional sports, but it is also a vital discovery for fantasy sports providers. According to the FSTA (2008b), vertical growth among fantasy football consumers is maturing. However, drop-out rates remain very low (3.4%), and more importantly, fantasy football is reported as the portal for the entire fantasy industry (FSTA; Leporini, 2006). Thus, as the growth of football steadily matures, the growth of the other sports, such as baseball, basketball, hockey, NASCAR, and golf is accelerating. Fantasy NASCAR, for example, witnessed an unprecedented 18% growth in participation in 2007 following years of 4% and 11% growth in 2005 and 2006 (FSTA). The current study's results indicate that as fantasy football participation thrives in correlation with years of experience, technology continues to advance, and drop-out rates remain minimal, it appears the potential for future growth within the fantasy sport industry is inevitable.

The social interaction associated with fantasy sports also appears to spur greater levels of involvement as the total number of friends, family, and coworkers played against was a significant predictor variable. This confirms previous fantasy sports motivation research that found social interaction to be a significant motivator for fantasy sports participation (Cooper, 2007; Farquhar &

Meeds, 2007). Further, the results from this study support previous findings that 75% of participants play with individuals within their social circle (FSTA, 2008b). Specifically, these social interaction-related results lead to speculation about social context of fantasy sports play in which participants interact with and sustain friendship with other players. Given that the Internet has become the preeminent route to being involved in groups and pursuing interests with like-minded individuals (Quan-Haase & Wellman, 2004), it seems likely that fantasy sport players are seeking personal gratification of developing and maintaining social relationships through fantasy sports. Perhaps more significantly, interaction with family, friends, and acquaintances seems to influence the level of involvement with fantasy sports.

Similar to the social interaction component, the skill/chance findings also validate previous research. That is, the relationship between a participant's perception of skill within fantasy football and their level of involvement correlates well with Farquhar and Meeds' (2007) fantasy sports user typology. According to the authors, two types of participants comprised the majority of the population, those individuals driven by arousal and those motivated by surveillance. The prime determinant distinguishing the two groups was the classification of fantasy sports as either a game of skill (surveillance) or game of chance (arousal). Interestingly, users driven by surveillance consumed more sport products through skill-based research on fantasy-related websites, TV broadcasts, and other sport media sources. With regard to the current study, the more perceived skill required to be successful in fantasy football, the more involved the respondents were in the activity.

Thus, sport managers and marketers should continue to facilitate the perception that fantasy sports are skill-based activities that require keen judgment and sound research. Promoting these types of aptitudes will support and foster an experience that encourages participants to spend more time and money focused on the sport products and services associated with the fantasy sports league. For instance, team depth charts, insider strategy details, injury reports, and even weather updates are examples of information craved by skill-focused fantasy participants. Already, the rapid growth in fantasy sports has been credited with causing the soaring popularity of several television endeavors such as Fox NFL Sunday, ESPN's Baseball Tonight, and DirecTV NFL Sunday Ticket (Ballard, 2004). Therefore, sport marketers and managers should initiate additional skill-focused marketing campaigns to further engage this group of sport consumers already known for their avid purchasing behavior.

Perhaps more telling than the significant variables were the predictors that were not significant. For instance, while the total number of years played was a significant predictor, the age of the participant and total number of fantasy football teams owned per season were not. The ability to join free fantasy leagues is abundant; however, the current study's findings suggest that this opportunity is not related to one's level of involvement. Thus, while

one participant may own up to 30 different fantasy football teams, she is no more or less involved than the individual who owns just one team. Interestingly, the amount of time spent on the Internet per day was also not a significant predictor of differing involvement levels. The combination of these three results may suggest to practitioners that the profile of highly-involved fantasy participants is not limited to young, heavy online users with several fantasy teams.

Surprisingly, the amount of money spent to participate was also not a significant predictor of fantasy football involvement. According to Dr. Kim Beason of the FSTA (2008a), the average participant spends just over \$100 to play in one fantasy sports league. This total includes, but is not limited to entry fees, computer software, league commissioner services, transaction fees, printed magazines, draft kits, online updates, and roster predictions. Perhaps most notably, of the nearly 1,500 participants surveyed by Beason since 2003, not one participant indicated playing completely free (FSTA). This is indicative of the significant economic possibilities available through fantasy sports participation. The current study found that the average participants spent \$83 to participate in fantasy football. However, the current study's findings appear to indicate that the amount of money invested to participate does not predict differences in involvement level.

Given the high-correlation between the amount of money spent and the amount of money at stake ($r = .899$ [current study]), this finding may also dampen the gambling-related associations that have plagued the fantasy sport industry. Since its inception in the mid-1950s, fantasy sports leagues have been associated with sports wagering. Given that sport performance is unpredictable and league winners are traditionally compensated via league entry fees, it is understandable how these gambling associations were derived. However, recent Federal legislation and legal analyses have characterized fantasy sports as a legitimate, skill-based activity that is exempt from the legal scrutiny afforded to other forms of sports gambling (Boswell, 2008; Holleman, 2006). Nevertheless, the uncertainty of sports is a significant connection point for sports fans, and the debate over its legality lingers. However, the current study's results appear to validate previous legal research, as the amount of money spent was not a significant predictor of fantasy football involvement.

These findings are noteworthy for sport managers, corporate sponsors, and league administrators seeking to align their product or service with fantasy sports. Despite the highly-coveted and lucrative demographic of consumers participating in the activity, companies have been reticent to embrace fantasy sports as a legitimate activity. The results of this study combined with the legislative exemption provided by Congress may provide the boost necessary to remove the negative stigma of gambling from this popular activity.

In conclusion, the results of this study provide important theoretical information regarding the interaction between fantasy football involvement and fan loyalty.

Both constructs have been heavily-researched and well-documented as vital determinants of sport consumer behavior (Backman & Crompton, 1991b; Funk & James, 2006; Funk et al., 2004; Park, 1997; Pritchard et al., 1999); however, neither had been examined in the context of fantasy sports. According to this study's findings, the unique nature of fantasy sport participation alters the relationship between fan attitudes and behaviors, especially with regard to fan loyalty. In addition to the theoretical gain, the predictors of involvement provide practical implications for the future marketing of individual teams, leagues, and fantasy-related applications.

Limitations and Future Research

While this study was grounded in well-established theory, the findings are at best preliminary. For instance, the construct of loyalty is highly complex; thus, the fan loyalty paradigm is constantly being updated and improved. Depending on your source for the definition of the attitudinal component of loyalty the results of this study may vary. As a result, an extension of this study to include differing loyalty constructs is advised. In addition, either all fantasy football participants are highly-loyal to their favorite NFL team, or the instrument used assess attitudinal loyalty to team (ALTS) may have some social desirability issues. As mentioned above, the austerity of the four ALTS items was softened to elicit greater variability, but the results still lacked sufficient variance among both groups of fantasy football participants. Thus, the future application of this instrument may require a social desirability scale to off-set these potential concerns.

In addition, this study used the service-adapted version of Zaichkowsky's (1994) PII to explain fantasy football involvement. While this construct is widely-used, it is not the only option for assessing involvement. For instance, sport and leisure researchers have developed numerous involvement constructs that consist of several field-specific dimensions. Thus, an intriguing extension of this study would include a different construct for measuring involvement.

With regard to fantasy sport, the opportunity for further investigation into this activity is abundant given its relative novelty and enormous popularity. Possible research agendas include tangible consumption studies that investigate well-researched behaviors of sport spectators, such as event attendance, merchandise acquisition, and televised viewership. In addition, the in-depth examination of other fantasy sports, such as baseball, basketball, hockey, golf, or NASCAR would be interesting, as these sports do not have the enormous fan following of the NFL. Finally, an investigation into a possible fantasy sport continuum would be noteworthy. Currently, fantasy football is reported as the gateway activity to all fantasy sport participation. Thus, a detailed inquiry into attitudes, behaviors, and outcomes associated with such a continuum would provide vital information for sport practitioners and fantasy sport providers.

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