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The Impact of Motivational Factors on Daily Fantasy Sports Participation

Brendan Phelan
bmn66@wildcats.unh.edu

Matthew O'Hern
matthew.ohern@unh.edu

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The Impact of Motivational Factors on Daily Fantasy Sports Participation

**Honors Thesis Submitted to the Peter T. Paul
School of Business and Economics**

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By

Brendan Phelan

Thesis Advisor: Matthew O' Hern, Ph.D.

Author Note: Correspondence concerning this article should be addressed to
Brendan M. Phelan, University of New Hampshire, Durham, NH, 03824. Email:
bmn66@wildcats.unh.edu

Abstract

Since the passing of the Unlawful Internet Gambling Act (UIGEA) in 2006, the fantasy sports world has had a tumultuous decade. Shortly after the passing of UIGEA, daily fantasy sports became marketable, and saw several years of tremendous growth. However, recent legal issues have clouded the industry, and lawmakers have questioned whether daily fantasy sports indeed fall under the exception granted by UIGEA as a “game of skill”, or whether the games are illegal gambling. This study is meant to look at what motivates fantasy sports participants, especially through this time of turmoil in the industry. It specifically looks at how players’ competitive, knowledge-seeking, or social tendencies affect their participation habits. Additionally, this thesis explores the effect that marketing messaging that portrays a daily fantasy sports website as a perfect place to satisfy these individual traits has on player participation. Finally, this study investigates the role that a sense of fairness plays in shaping players’ perceptions of these websites. To study these things, we began by looking at previous studies that focus on competition, knowledge, and social factors, both in the fantasy sports field and elsewhere, and creating a literature review. Following the literature review, an experiment was created, which tested these three scales as well as the perception of fairness, using a fictitious fantasy sports site, Fantasyland. The results obtained from this experiment indicate that those with competitive or social dispositions are the most likely to try fantasy sports. Additionally, it was found that those who are socially motivated are more likely to recommend a fantasy sports site to friends or strangers. Lastly, the perception of fairness did not have a direct effect of

participants, although in one case, it did positively impact an individual's willingness to try a daily sports website. These results and their implications as well as future research directions are outlined in the concluding discussion section.

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Market Overview and Introduction

Not too long ago, the idea of fantasy sports existed only in the minds of a handful of hardcore sports fans who scoured box scores in newspapers and kept track of scoring by hand. These “leagues” consisted of a couple of friends, due to the time consuming nature and limited reach of the hobby. With the advancement of the Internet, fantasy sports participation has skyrocketed. The Fantasy Sports Trade Association (FSTA) captures the demographics of the industry, and claims that almost 57 million Americans and Canadians have played fantasy sports in the last year. This is up from 41.5 million the year before, and far surpasses the 32 million players who participated in 2010. The FSTA says that among that population, the majority are middle-aged males, who make over \$75k a year and hold a college education (FSTA, Industry Demographics, 2015). Additionally, a *Forbes* article states that the amount of money Americans are spending on fantasy sports is up 389% in the last three years, from \$95 to a remarkable \$465 a year per participant (Biers, 2015). With this type of growth, the sky is the limit for fantasy sports companies in our media driven world, especially with the shift from season-long leagues toward daily fantasy games.

The arms race between industry leaders DraftKings and FanDuel has increased in recent years, with both companies cashing in on consumer’s preferences for daily fantasy games. Until recently, the industry consisted almost exclusively of season-long leagues. However, the industry has since undergone a drastic change after listening to consumers’ outcries for daily or weekly based games. The result was exponential growth in the market. In a classic Boston versus

New York matchup, two rivals have gone back and forth in a series of massive seed funding rounds, with each receiving tens of millions of dollars apiece from high-profile investors (Heitner, 2014). Most recently, Disney invested a quarter of a billion dollars into DraftKings, and both companies received market valuations of close to a billion dollars (Ramachandran & Sharma, 2015). This growth has been appealing to the professional sports leagues themselves, and each side has had its share of successes. For professional sports leagues, fantasy sports provide additional reasons for fans to pay attention to games. Instead of simply following their hometown team, fantasy enthusiasts are constantly watching different games to check on the performances of their players, and going to league's websites to check statistics. For the fantasy sports companies, having the backing of these powerful entities provides them with incredible marketing power. Fanduel struck a partnership with the National Basketball Association, as well as some NFL teams, most notably the Washington Redskins. Not to be outdone, DraftKings has responded with multiple big-league partnerships of their own, including deals with the National Hockey League, Major League Baseball, ESPN, and the Ultimate Fighting Championship to name a few.

A logical question might be just how far can this market grow? A handful of competitors have joined the industry to try and challenge Draftkings and Fanduel. Additionally, Yahoo, a longtime participant in the industry that has yet to offer pay-to-play games to its consumers, is rumored to be entering the daily fantasy market. Until recently, there seemed to be no answer to this question, although legal issues have slowed down the rise of these websites substantially. The issue of legality

relates to the fact that in the United States, gambling in general (and sports betting in particular) is tightly regulated. In fact, some states have begun the legal process of banning daily fantasy sports (Bogdanich, et. al, 2015).

The argument among attorneys and fantasy sports executives is based around the Unlawful Internet Gambling Enforcement Act (UIGEA) signed into law by George W. Bush in 2006. UIGEA banned all forms of Internet gambling, but left an exemption for fantasy sports. Due to the nature of the games, they have been considered “a game of skill”, based on the premise that participants are predicting the performance of more than one game or individual and following the assumption that the outcome is (at least to some degree) dependent on an individual’s knowledge of the players in the game (Kim, 2015). However, daily fantasy sports did not exist in 2006, which is why the question of whether or not they should be considered gambling is such a hot topic today. To date, eight states, including New York, Texas, and Illinois, have declared daily fantasy games illegal. Nevada is among the eight, although DraftKings and FanDuel would be allowed to operate there if they could obtain the proper license. In addition, sixteen more states have litigation currently ongoing. These states include Massachusetts, Vermont, and California (Breslow, et. al, 2016). Despite the ongoing legal trouble, the companies maintain the belief that their products are games of skill.

Although the industry is in turmoil, daily fantasy sports continue to be wildly popular. It also seems likely that the industry will explore certain areas of growth in the future. The most notable way to expand the industry is to try and reach new target markets. An attempt to attract women into the male-dominated market is one

of the more interesting strategies for expanding the reach of fantasy sports. Femi Wasserman, Vice President of Communications for DraftKings, believes that “the female demographic is going to be extremely meaningful for continued and sustained growth, not just on a company level, but for the [professional] leagues” (Schrotenboer, 2015). Additionally, industry leaders will be taking a hard look at what motivates their participants, both male and female, to play their games. In short, whichever firm can pinpoint which motivations are the most powerful for their different consumer segments will give themselves a competitive advantage in the marketplace.

Literature Overview

Even in such a nascent industry, there have been some researchers who have conducted studies on fantasy sports leagues. Many of these studies have explored fantasy players’ motivations to participate in fantasy sports leagues. The majority of these analyses have involved surveys that have collected participants’ demographic data and preferences, and have used this data to identify the main factors that influence why people participate in fantasy sports. This type of research is not completely new, as many researchers have looked into what makes fantasy sports appealing for viewers and spectators. As predicted, certain themes have come from this research, and three factors have received more attention than the others. Specifically, the recurring motivations that have emerged from the research on fantasy sports consumption, as well as general sports consumption, include competition, knowledge (through surveillance and fanship), and social interaction.

Sports of any type are competitive. Typically, most games have a clear winner and a loser, with teams or individuals battling each other for supremacy. Fantasy sports are no different, and competition has long been considered one of the top reasons people play fantasy contests. Whether one is playing for money or bragging rights, not many people enjoy the feeling of losing. Dwyer and Kim (2011) explored this idea in their research “For Love or Money: Developing and Validating a Motivational Scale for Fantasy Football Participation”. In their paper, they saw competitors as having two motivations, both participating to win each week as well as having a need to be the best in the eyes of their competitors. This belief is not uncommon, as those driven by competition are psychologically wired to try and be the best. Dwyer and Kim found competition in fantasy sports to be very similar to traditional sports. Their conclusion that, “...the competition motive identified in the current study is very similar to that found in the actual sports participation complex.” is somewhat surprising. Despite not necessarily knowing who they are going up against in the competition, fantasy sports participants see their game in the same light as the players in the actual game.

Competition was seen a bit differently in Galen Trial and Jeffrey James’ research “The Motivation Scale for Sport Consumption: Assessment of the Scale’s Psychometric Properties” (2001). Trial and James focused more on other areas of sports consumption, most notably they mention the need for “Achievement” while only briefly mentioning competition. However, this is among the first times competition is mentioned in research regarding sports’ consumption. Existing research also suggests that competition can have an effect on the consumption of

sports media and the time spent on fantasy sports contests. One of the findings in “The effect of fantasy football participation on NFL consumption: A qualitative analysis” (Drayer, et. al, 2010) was that “most participants indicated that they would dissociate with an unsuccessful fantasy team”. This is an after-effect of fantasy sports players being competitive. If they saw fantasy contests as simply a means of escape, their teams’ performance would be irrelevant. However, seeing a correlation between performance of a team and time spent determining rosters indicates the importance of competition as a motivator.

Another one of the main reasons for consumers to play fantasy sports is the knowledge that comes along with picking players for their teams. Many people are strongly motivated to want to be on top of what’s going on, especially in the sports world, where one night’s highlights are the next day’s water cooler talk. Thus, it makes perfect sense that sports fans are turning to fantasy games as a way to keep up with their favorite players and teams. This motivation is known as *surveillance* in the research world, but plays heavily into the bigger motivation of knowledge and learning. Youngjin Hur, Yong Jae Ko, and Joseph Valacich, in their paper, “Motivations and Concerns for Online Sport Consumption” (2007), explored the notion of surveillance and its importance in the context of fantasy sports. These researchers took a narrow approach to the knowledge motivation by choosing to research surveillance instead. Their research led them to the belief that “...the results of this study show that online sport consumers are motivated to seek convenient, up-to-date information.” (Hur, et al., 2007, p. 536). These results were based upon the results from over two hundred questionnaires, where the authors

developed their own scale to measure the motivations, and determine different motivational factors. Likewise, Lee Farquhar and Robert Meed's (2007) paper "Types of Fantasy Sports Users and Their Motivations" highlights the importance of knowledge, through surveillance, as one of the primary motivating factors among members of the fantasy sports community. Indeed, these authors classified fantasy sports consumers as strategists who, "...enjoyed working with statistics and often formed strategies about creating the most efficient and productive teams". They also remarked that those motivated by surveillance clearly viewed fantasy sports as games of skill (Farquhar & Meed, 2007). Undoubtedly, many consumers are attracted to fantasy sports because of the strategy that underlies them and the wide range of data about player and team performance that is now available. This data analysis aspect (i.e., "stat-crunching", is an important aspect of fantasy sports and the desire to acquire new and relevant information to enhance one's performance in fantasy sports leagues closely corresponds to the motivation of surveillance. Many hardcore sports fans view information gathering and data analysis as critically important activities and are thus motivated to systematically gather information on their favorite players and on their fellow consumers (e.g., the popularity of various players across multiple fantasy sports leagues) in order to further develop their sports knowledge and enhance their fantasy sports performance.

In addition, another part of knowledge comes in the form of fanship. Simply stated, sometimes watching games in-person and surfing the Internet for game highlights isn't enough for every sports fan. Since the beginning of professional sports, different types of passionate fans (e.g., armchair executives, Monday-

morning quarterbacks) have second-guessed the decisions of their favorite teams' owners, coaches, and players. Fantasy sports let consumers demonstrate their acumen and essentially put their money where their mouth is. The fanship portion of knowledge is probably the most apparent, as this is where the roots of the industry originate. A significant amount of research has been done on fanship, as this is one of the most important concepts related to consumer's interest in a wide variety of sports (e.g., sports at the professional, amateur, college, and high school levels). Won Seo and Christine Green define fanship as the "reason that one considers oneself a huge fan of particular sports and teams" (Seo, Green, 2008) in their research "Development of the motivational scale for sport online consumption" (2008). Their research concluded that fanship, among other dimensions, identify as key motives for consumption of sports' media. According to them, fantasy sports participants certainly use the contests as another medium to keep up with their favorite players. Moreover, they can express their passion for a player or team by selecting them for their fantasy team. The scale for Seo and Green's research came from Daniel Funk, Lynn Ridinger, and Anita Moorman's research "Exploring Origins of Involvement: Understanding the Relationship Between Consumer Motives and Involvement with Professional Sports Teams" (2004). The main finding from their experiment was that consumers feel a connection to their sport's teams through Attraction, Self-Expression, Centrality to Lifestyle, and Risk. Indeed, the authors report that these are the measures that drive what we know as fanship. However, there has been very little research that explores how fanship directly relates to fantasy sports participation. In "Why We

Watch, Why We Play: The Relationship Between Fantasy Sport and Fanship

Motivations”, Billings and Ruihley (2013) explore the connection between being a fan of “real” sports and being a fan of fantasy sports. Through their survey, they were able to collect statistical data that lead them to conclude “that although people can be traditional sports fans without playing fantasy sport, the inverse does not appear to typically be true. Indeed, it appears sports fanship is an essential element (i.e., a gateway drug of sorts) to entering the fantasy sport world (Billings & Ruihley, 2013). This is not a surprising finding, but it is an important motivation to note, as a consumer’s level of interest in a particular sport appears to be an important antecedent to fantasy sports participation.

Finally, consumers’ need for *social interaction* is an important motivation that helps drive in fantasy sports. Research shows that many people participate in games as a way to fit in, and become part of a group. In other words, the camaraderie and connection to others that fantasy sports provides can be more important to some consumers than their actual performance in these leagues or their desire to express their love for a particular team or player. Dwyer and Kim specifically mention this in their research, noting “...the motivational dimension of social interaction substantiated the concept that participants use fantasy football as a means to stay in contact and/or connect with family, friends, and coworkers.” (Dwyer & Kim, 2011, p. 80). This idea is a familiar one, as many fantasy sports leagues and office pools are created as a way to bring families and coworkers together. Sports in itself is a social gathering, and fantasy sports is no different, as it creates a common ground for all those involved. In fact, even when family or friends

aren't directly involved in their leagues, fantasy sports have the potential to create meaningful social interactions that can lead to interpersonal relationships and can fulfill humans' need to bond and socialize. Sonja Utz looked at the impact socializing has in online communities in her research "Social identification and interpersonal attraction in MUDs". Her research looked at how online communities could aid socialization among strangers, and form bonds. What she found was that people in virtual groups did in fact feel an identification with the group and have some interpersonal attraction. This correlates well with fantasy sports, as members of that community immediately have a bond. Other research looked at these connections relating to fantasy sports in more detail. For instance, in a series of interviews conducted with fantasy sports consumers, Howie and Campbell (2015) found that "fantasy sports provide a way (for consumers) to maintain close friendships with people with whom otherwise an enduring friendship or association would be unlikely." (Howie & Perri, 2015, p. 69). This theme underlines the social interaction motivation that fantasy sports provide for consumers and highlights the important role that fantasy sports plays in fostering new relationships and maintaining existing relationships that would be likely to vanish in the absence of shared consumption context. An interesting part of these authors' research is that both the fantasy sports participants echoed this message. Most mentioned that without their fantasy leagues, they would likely lose contact with many of the other league members. In the conclusion of their research, Howie and Perri (2015) stressed the importance of social interactions by noting, "fantasy sports are definitively a social activity" (Howie and Perri, 2015, p. 73). Hence, social

interaction can clearly be seen as a primary motivator of consumers in the fantasy sports industry.

Given the rise in fantasy sports participation, particularly in daily fantasy games, the importance of gaining an edge in one's league is crucial. This study will attempt to build upon previous research, and look at how competitive, knowledge, and social factors influence fantasy sports participation. Through an analytical process, this study will explore the relative impact of various core motivations (i.e., knowledge acquisition, socialization, and competitiveness) on participants' self-reported likelihood to engage in daily fantasy sports.

Experimental Design

The primary research conducted to look at fantasy player's motivations was an experiment followed by a short survey. The survey was designed to test respondent's reactions to a fictitious fantasy football site. First, participants were exposed to one of three scenarios. In each scenario, Fantasyland was described as a perfect forum for building knowledge, socializing, or engaging in competition with other customers. In addition, each participant was also exposed to information about Fantasyland that was designed to explore the extent to which fairness influences consumers' intentions to patronize and promote this website in the future. This manipulation was accomplished by providing two different sets of information about Fantasyland to participants in the study. More specifically, participants in the first condition were asked to read a short excerpt from a *Washington Post* article, which stated that the top one percent of fantasy sports

players (classified as “sharks”) win ninety-one percent of the profits. In contrast, participants in the second condition were asked to read a short excerpt that indicated that the world of fantasy sports is quickly expanding, to cover more non-traditional sports. The purpose of this is to see if the idea of fairness plays a factor in how often a person plays or recommends a fantasy site. Additionally, each respondent was measured in the three factors based on proven scales for each. Each question was based on a scale, to allow respondents to accurately define their motivations behind playing fantasy sports. It should also be noted that the selection process for determining which stimuli participants received was completely random.

Individual Difference Measures

Competition

The short survey that followed the experimental stimuli contained a number of questions that were designed to identify relevant individual difference measures that might influence participants’ willingness to participate in and promote a daily fantasy sports website. The first set of questions measuring participants’ competitive nature, is based on numerous scales from prior research papers. Someone who is competitive is “driven by the need to be the best in the eyes of [his/her] competitors” (Dwyer and Kim, 2011). The competition scale in this paper consists of seven statements, each based around one’s desire to win that were slightly modified to fit the topic of fantasy sports. For example, respondents were asked whether it is important for them to win in their league, whether or not they

care about being beaten, etc. Again, these are items that have been used before in prior research and have been shown to be reliable.

Knowledge

Knowledge acquisition is the second motivational element that was examined. Like competition, the scale is derived from previous research papers, and is a combination of fanship and surveillance. Fanship revolves around the idea that participants of fantasy sports games do so to in order to show support for their favorite teams and players. Similarly, surveillance is based on the idea of using fantasy sports to stay up-to-date and remain well informed about what is going on in professional sports leagues. Together, these two concepts form the knowledge factor. Respondents were scored on this scale based on how strongly they agreed with a series of statements about the degree to which fantasy sports act as a way to keep one well informed about player and team statistics. This scale was based on previous research including “Types of Fantasy Sports Users and Their Motivations” (Meed, 2007) and “Why We Watch, Why We Play: The Relationship Between Fantasy Sport and Fanship Motivations” (Billings, 2013).

Social

The last factor that was examined is the impact that social motivations may have on participants’ participation in fantasy sports. Put simply, the social scale measures whether or not participants use fantasy sports as a means to keep in touch with friends and family, to interact with coworkers, etc. This is a factor that is often overlooked by fantasy sports sites and is not typically a focus in their advertising. This scale, like the others, was based on existing research and was altered to fit the

theme of fantasy sports. This social motives had previously been researched in “Fantasy Sports: Socialization and Gender Relations” (Howie, 2015) and “For Love or Money: Developing and Validating a Motivational Scale for Fantasy Football Participation” (Dwyer and Kim, 2011).

Methods

Participants

This original experiment and the short survey that followed it were distributed through two specific methods, which resulted in 175 respondents. The first method of distribution was social media, which resulted in approximately twenty percent of the respondents. The demographics of this group varied greatly, with half of this group being under the age of twenty-five, while the other half were over twenty-six, with the majority being over forty. The other way respondents were reached was through the Paul College Behavioral Lab located on the campus of the University of New Hampshire. These responses accounted for eighty percent of the total, and each respondent in the group was an undergraduate student.

Procedure

The survey was created and distributed through Qualtrics, an online survey software system. All respondents were given the same background on the fictional fantasy sport company Fantasyland to begin the survey. Then, participants were exposed to a short passage that described Fantasyland’s primary benefit (i.e., knowledge acquisition, socializing, or competing with others). This was followed by one of two short passages that provided information about the fantasy sports industry. This set of stimuli was used to manipulate perceived fairness in the

context of playing daily fantasy sports. Like the motivational manipulation described above, this fairness manipulation was also randomly assigned. These scenarios were then followed by a series of questions that were used to construct the individual difference measure scales. More specifically, this section consisted of eighteen questions, of which seven measured competitiveness, six measured social motivation, and five determined knowledge motivation. These scales were followed by five dependent variables, which measured participant's behavioral intentions (e.g., their likelihood to try, recommend, or deposit money on Fantasyland. Lastly, respondents answered demographic questions, which included questions on age, gender, and their past behavior in terms of playing fantasy sports. The entire survey can be found in the Appendix.

Results and Discussion

The data from the experiment was analyzed through SPSS, a software package for statistical analysis offered by IBM. While there were many tests run on the data, not all results were significant compared to a baseline significance level of .05. The following results were taken from the significant results, done using regression analysis and logit models. Due to the fact that three individual difference measures are being compared along with the fairness factor and the manipulated social, competitive, and knowledge motivations, the results are reported in terms of three different contrasts, which will be described in the following paragraphs. For each contrast, two of the manipulated motivational factors are pitted against each other. In addition, the interactions between these contrasts and fairness is also

tested as are the interactions between the social and competitive individual difference measures and fairness.

The first contrast, Contrast A, was between the manipulated social and knowledge motivational measures. While the overall model was significant, the only factors that fell below the .05 significance threshold were the competitive and social individual difference measures. Specifically, the main effects of social ($\beta = .619$, $p < .05$) and competitiveness ($\beta = .551$, $p < .05$) were significant for the dependent variable found in question DV1, which asked respondents how likely they were to try Fantasyland. These results show that those with a high social or competitive motivation were more likely to try Fantasyland.

In addition, the results showed a main effect for the social individual difference measure only ($\beta = .523$, $p < .05$) when respondents were asked whether or not they would recommend Fantasyland to a friend. This makes intuitive sense, as those who play fantasy sports for the social aspect are doing so to connect with friends and family and thus may be especially likely to recommend the website to others. Moreover, a main effect for the social individual difference measure ($\beta = .440$, $p < .05$) was also found when respondents were asked if they would be likely to recommend Fantasyland to a stranger, as seen in question DV3. Interestingly, when combining fairness with the social individual difference measure, the results of this interaction term were nearly significant ($\beta = .269$, $p = .054$). Although, strictly speaking, this result is not significant, it does provide evidence that those who perceive Fantasyland as fair and are also socially inclined are more likely to recommend the site to a stranger. Interestingly, the same does not hold true in

terms of recommending the product to a friend, suggesting that fairness has a more pronounced impact on the propensity to recommend the website when recommendations are being made to strangers vs. to friends. Lastly, those motivated by competitiveness saw a main effect for DV5, which asked respondents how often they would play games on Fantasyland ($\beta = .193, p < .05$). This is giving us the same result as DV1 (i.e., willingness to try Fantasyland) for Contrast A, which determined that those who are competitive are more likely to try fantasy sports.

Contrast B, which compared competitive and knowledge motivations, yielded a very similar pattern of results compared to Contrast A. When looking at question DV1, (i.e., willingness to try Fantasyland), we can see main effects for the competitiveness ($\beta = .536, p < .05$) and social individual difference measures ($\beta = .614, p < .05$). Thus, as was the case in the Contrast A equation, those who are innately more social or competitive were more likely to try out daily fantasy sports. Again, similar to the Contrast A results, in terms of DV2 (recommending the website to a friend), only the social individual difference measure ($\beta = .521, p < .05$) was significant. However, in terms of DV3 (recommending Fantasyland to strangers), the perception of fairness combined with social was significant ($\beta = .275, p < .05$), unlike in Contrast A, where the p-value was slight above the .05 threshold. Not surprisingly, the social individual difference measure on its own was also significant for this dependent variable ($\beta = .440, p < .05$). Lastly, question DV5 (estimated number of games played) produced a main effect for competitiveness ($\beta = .19, p < .05$).

The last of the Contrasts, Contrast C, pitted the manipulated competitive motivation against the social motivation. As expected, the results of this regression were found to be quite similar to those in Contrast A and B. Again, the main effect of competition ($\beta = .534, p < .05$) and social ($\beta = .620, p < .05$) were found for question DV1 (try Fantasyland). This shows that participants with stronger competitive or social tendencies are more likely to try out Fantasyland, compared with those who are motivated by knowledge. The competitiveness instinct ($\beta = .183, p < .05$) was also shown to be significant in DV5 (estimated number of games played). In terms of recommending Fantasyland to friends and strangers, we again saw the influence of social factors. In terms of DV2 (recommending to a friend), only the social individual difference measure was significant ($\beta = .506, p < .05$). However, in a similar vein to Contrast A, DV3 (recommending to a stranger) produced not only a main effect of social ($\beta = .437, p < .05$), but almost had a significant effect when combining the perception of fairness with the social measure ($\beta = .264, p = .06$).

The results from all three contrasts produced similar results with some key takeaways. First, on a basic level, the competitiveness individual difference measure seemed to predict a respondent's willingness to try Fantasyland, as it was significant across all three contrasts. This isn't necessarily a surprising finding, as it makes intuitive sense that people who have a more competitive disposition are more willing to try a daily fantasy sports website. Perhaps more surprising is the insight that the social individual difference measure appears to be equally effective in stimulating product trial as the competitiveness measure. This suggests that both consumers who are innately more socially minded as well as those who are more

competitive are more likely to try daily fantasy sports websites more than those who are fundamentally interested in knowledge acquisition. This insight may be an important one in that it suggests that daily fantasy websites might be well served to alter their advertising strategy and adjust the content of their marketing messages to better appeal to the segment of consumers who are more socially minded.

Another interesting result is the lack of a main effect of fairness on people's willingness to participate in daily fantasy sports (and on all of the other outcome measures as well). Prior to running this experiment, it was assumed that people's willingness to play fantasy sports would be strongly influenced by whether or not they perceived the games as fair. However, fairness was never seen as a significant factor for any of the dependent variables in any of the three contrast models that were run. This is likely due to weak stimuli, or the fact that fantasy players may have been unaware that the odds were stacked against them in games. This is something that could be emphasized in future research.

Another intriguing finding relates to people's tendency to recommend Fantasyland to friends vs. strangers. In both contexts, social factors were significant in determining whether or not someone is likely to recommend Fantasyland. This is backed by intuition, as someone who plays fantasy sports for a social connection should be trying to attract friends, family, and others to play with them. The difference between the two measures was seen in the effect of fairness. Unlike the results for DV1 (try Fantasyland) and DV5 (estimated number of games played), fairness did play a role in terms of recommending Fantasyland, but only when the participant imagined making a recommendation to a stranger. This suggests that

highly social people care much more about the perception of fairness when trying to convince someone they didn't know to try a fantasy site. In one sense, this result is counterintuitive in that it suggests that consumers care less about fairness when the target of communication is a friend vs. a stranger. Perhaps this relates to the roles that individuals take on when they make recommendations to friends and to strangers. In the former case, individuals might simply be likely to state a personal preference. In the latter case, however, when recommending a product to strangers, consumers might be more likely to adopt the perspective of an unbiased expert and be more likely to consider the underlying fairness of a daily fantasy website. This, however, is only one hypothesis, and clearly more research needs to be done to explore this issue.

Overall, the regression analyses backed some of our intuition regarding individual difference measures and fantasy sports participation, while disproving others. Unfortunately, none of the manipulated variables depicting the benefits of Fantasyland in terms of the three factors of interest (social, competitive, knowledge) were significant in any of the models that were run. One possible explanation for this is that in future research, these stimuli, along with the perception of fairness, may need to be strengthened in order to track their effects on fantasy sports players' self-reported behaviors. This could be done by exposing survey participants to customer reviews or by relying on more visual vs. text-based content in the stimuli. Making these changes might better highlight the three manipulated motivational factors presented to participants.

As a follow-up to these results, a second set of analyses examined how individual difference measures, as well as gender influenced whether participants had played or bet on fantasy sports in the past. These analyses were done using two separate logit models. The first dependent variable in this analysis asked respondents “Have you ever played daily fantasy sports”. This analysis yielded some significant results, as it showed both a main effect of gender ($z= 4.51, p< .05$) as well as a main effect of competitiveness ($z= 2.56, p< .05$). These results show that both gender and being competitive by nature are good predictors of participants’ past experience playing fantasy sports. This thought is logical, as most current fantasy sports players are male, and fantasy sports are competitive in nature. This proved true in the survey results, where ninety-six percent of respondents who had previously played fantasy sports were male. Next, the same analysis was run for the question ‘Bet’, which had respondents self-report their past betting habits. The same pattern of results was found, as a main effect was shown for gender ($z= 4.51, p< .05$) and competitiveness ($z= 2.56, p< .05$). This means that males are more likely to bet on fantasy sports than females, and those who are competitive are more likely to bet as well. From a logical standpoint, this also makes sense, as competitive individuals presumably view betting as merely another form of competition and another context in which they can pursue their goal of “winning”. Perhaps more surprising was that the social individual difference measure fell slightly shy of the .05 threshold ($p= .064$). What’s interesting is although the results for social aren’t quite significant, they may suggest that social people are more likely to self-report gambling on fantasy sports. This underscores the notion that fantasy sports do not

take place in a vacuum and are actually highly social endeavors. This interpretation would be highly consistent with my other results that indicate that the social individual difference measure is often as useful a predictor of consumers' participation behavior as the competitiveness measure and in some cases is even a more powerful predictor.

Overall, the logit models provide some clear insights. The primary takeaway from the results was that gender and a competitive disposition have a positive effect on predicting whether participants had played or bet on fantasy sports. In terms of gender, males are far more likely to play or bet on fantasy games. This is not surprising, due to the fact that males make up the majority of the fantasy industry currently. Additionally, the perception is that gambling is done more by males, so that isn't too surprising either. In regards to individual difference measures, only competitiveness was deemed significant. This tells us that those who described themselves as competitive, regardless of gender, had a higher tendency of playing or betting on fantasy sports. This follows our intuition, as each game is a competition, and for many participants, it seems that the object is to win. This effect is compounded when betting, as a prize becomes involved. Something that was interesting was the fact that the social factor was almost significant when determining past betting habits. This may indicate that some people see betting as an activity that provides social benefits above and beyond those that can be garnered by simply playing (but not investing money in) fantasy sports. This is an interesting topic that could be something that fantasy sports companies look into more in the future.

General Discussion

The relatively large number of participants in this experiment (175 participants) allows us to make several conclusions regarding people's motivations for playing fantasy sports. First and foremost, among the individual difference measures, the social disposition seems to have been the most impactful. Indeed, while both the social and the competitive individual difference measure predicted participants' willingness to try Fantasyland, when looking at whether respondents would recommend Fantasyland to friends or strangers, only the social individual difference measure was significant. These results are conceptually relevant; as the act of recommending something is an inherently social one. In addition, for at least one of the dependent variables used (DV3), the interaction effect between fairness and the social individual difference measure was also significant. In sum, these results seem to indicate that socially motivated individuals are often as likely to participate in fantasy sports vs. competitive individuals and in some cases are more likely to do so.

Another finding that is important to note was that the perception of fairness was neither significant on its own nor in combination with any of the three contrast variables. In fact, the only time fairness was truly part of a significant effect was when it was combined with the social individual difference measure (in the Contrast B equation) and used to predict the likelihood of the participant recommending Fantasyland to a stranger. In short, the relatively weak effect of fairness is somewhat puzzling and suggests that greater care should be taken in the future to ensure that the fairness manipulation is robust enough. In addition to strengthening

the manipulation as described above, future studies should include manipulation checks to determine if participants really perceive the fantasy sports website as having or lacking fairness.

Overall, the regression analysis showed good results for the individual difference measures, but the manipulated knowledge, social, and competitiveness variables that comprised the contrasts that I used in the analyses did not. Strengthening these manipulations may be necessary in the future and may be required in order to accurately assess how a fantasy sports company's advertising can influence consumer behavior.

Moreover, the logit analyses that examined consumers' past behavior also came up with some conclusive findings. First, the results showed that males were more likely to try fantasy sports or bet on them, which is consistent with the demographics of the industry currently. Additionally, people who considered themselves more competitive were also more likely to try fantasy sports, as well as bet on them. Fantasy games are meant to have a winner or loser, so seeing the effect competitiveness has on self-reported prior behavior is intuitive. Lastly, as noted earlier, the effect of social motivation on betting habits was almost significant, but remained just shy of the .05 threshold. Although it isn't conclusive, it is interesting to consider that social motivation might increase the likelihood that someone would gamble and that gambling on fantasy sports might be regarded as a more socially satisfying act than simply playing them.

Overall, the two types of analyses that I conducted provided some great insights into what drives the behavior of prospective fantasy sports players. For

future research, it will be important to strengthen the manipulated motivational stimuli as well as the fairness stimulus in order to obtain a more accurate picture of how marketing messaging might influence consumers' willingness to try and recommend fantasy sports offerings. As noted previously, this can be done by creating customer testimonials, expanding the backstory behind Fantasyland, or using visual imagery that is more informative and compelling. Finally, competitiveness, as expected, was a major driver for fantasy sports participation, but the extensive impact that the social individual difference measure had on different dependent variables (i.e. recommending and to some extent, betting) was a bit surprising and should definitely be explored and verified in future research.

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Appendix

Survey

Intro The following survey will ask you questions regarding motivations for playing fantasy sports, regardless of whether or not you have experience participating in such games. Participation in this study is strictly voluntary. If you refuse to participate, you will not experience any penalty or negative consequences. If you agree to participate, you may refuse to answer any question and/ or if you change your mind, you may withdraw at any time during the study without penalty or negative consequences. The survey is entirely anonymous, and all data will be analyzed in aggregate. If you have any questions, please contact Brendan Phelan at bmn66@wildcats.unh.edu. By clicking on the next page you are consenting to participate in this survey. Thank you for your time.

Intro 1 Thanks for participating in the consumer survey. Please read all the information provided carefully and answer all questions to the best of your ability.

Intro 2 Imagine that you are participating in a fantasy sports league. On the following page is some information about a league that you are considering. Please read it carefully.

CEO



An avid sports fan, Jamie Smith grew up reading the sports section from cover to cover and arguing with family members about sports. A natural at fantasy sports, it occurred to Jamie during college that the current fantasy sports landscape didn't fit the bill of the typical college student. In response, Jamie and friends created what today is known as Fantasyland. Fantasyland is the new player on the market, challenging how the industry functions. With its unique target market in mind, Fantasyland is for college students, by college students.

ESPN

THE WALL STREET JOURNAL.

Sports Illustrated

About



Fantasyland is the ultimate fantasy sports experience for students. Once dreamed up in a dorm room, the company has now been recognized by *The Wall Street Journal* as one of the fastest-growing student startups in the country. Fantasyland is committed to giving students a unique and exciting fantasy sports experience. Run completely by students, Fantasyland is opening up internships for over 100 positions to put individuals in a position to gain hands-on experience and succeed in their future careers. Join now to see what all the buzz is about.



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FL-Social



Welcome to Fantasyland, the number one social fantasy sports site. With offerings in both daily and season-long leagues, Fantasyland is perfect for those who are looking to interact with friends and coworkers. Bring the water cooler talk everywhere, and talk about the latest news in the fantasy world. Fantasy football brings everyone together, and Fantasyland is the perfect forum for that. Fantasyland is the best excuse for a virtual get-together, and to keep in touch with the ones closest to you. Join Fantasyland today, and start connecting with those around you.



THE WALL STREET JOURNAL.



FL-Know



Does watching reruns of SportsCenter leave you wanting more? Do you scour box scores looking for stats? Do you love learning about sports and knowing everything possible about your favorite teams and players? If this sounds like you, check out Fantasyland, the number one fantasy sport's site for knowledgeable fans. Fantasyland offers week-long and season-long contests, perfect for building your sports intelligence. With the latest in scoring technology and innovative sports dashboard, you will always be privy to the latest statistics. Be sure to stay in the loop, and know exactly what's happening in the league. If you are looking to increase your sports knowledge, look no further than Fantasyland.

FL-Comp



Welcome to Fantasyland, the number one competitive fantasy sports site. Looking to prove your dominance? Look no farther than Fantasyland's daily and season-long games. Outperform the competition by drafting the best team every week. Play against your friends, family, or fantasy gurus to show your prowess. Prove you're the best of the best, and assert your dominance in the fantasy world. You can win some awesome prizes, but only if you come out on top. Be sure to bring you're A game, because only the best of the best play Fantasyland.

Have you ever played daily fantasy sports?

- Yes (1)
- No (2)

Bet Do you bet money on fantasy sports?

- Yes (1)
- No (2)

Gender Gender

- Male (1)
- Female (2)

Age Age

- 15-18 (1)
- 19-25 (2)
- 26-30 (3)
- 31-40 (4)
- 40+ (5)

End Thank you for taking the time to answer these questions. Please click the button one last time to complete the survey.