THE RELATIONSHIP OF FANTASY FOOTBALL PARTICIPATION WITH NFL TELEVISION RATINGS

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Research Problem

The purpose of this study is to examine whether fantasy football participation can serve as an additional motivating factor for fans to watch National Football League (NFL) games on television. This research uses the prime-time games on NBC and ESPN from the 2009 NFL season and reveals some evidence that there is a relationship between NFL players starting in a high percentage of fantasy leagues for that particular week and the television rating for that particular game. Games with more NFL players starting in a high percentage of fans’ fantasy football leagues do have a positive relationship with that game’s television rating in certain circumstances. This study attempts to address two concerns of scholars: the continued study of audience motivations for mass media use and the need for a more extensive examination into the influence of fantasy sports. From a practitioner perspective, this research is useful to networks and leagues in better understanding the influence of fantasy sports as well as assisting in creating the game programming schedule.

Issue

An estimated 30 million people participate in fantasy football leagues and according to Nielsen Media Research more than 1.2 billion minutes were spent on fantasy websites in 2008, yet little academic research has been conducted on this topic. The issue of audience motivations for media use has long been discussed in the study of mass communication. In the specific context of motivation of media use for sports content, researchers have identified the unknown outcome of the game and the desire to see favorite teams and players win and see teams and players they do not like lose as motivating factors that most influence the behavior of watching sports. Researchers, however, were only evaluating fans’ motivations to watch these games based on their results factoring into the actual, real-life sports league standings. The question that this study examines is: couldn’t these same motivations for watching teams and players win or lose extend to the unknown outcome of fans’ games in their fantasy football leagues? Could the unknown outcome of fans’ fantasy team’s games influence the behavior of viewing NFL games on television?

Fans now might be motivated to watch NFL games to root for the players on their fantasy team, or root against an NFL player on a fantasy team that they are competing against that week or root against an NFL player who is on a fantasy team that is in the same division in their fantasy league. It is still the unknown outcome of the game, the concern for seeing how players perform, and the fans’ desire to win that serve as the motivating factors in the media use behavior of the audience. With the popularity of fantasy football, it is valuable to provide some measure of this
relatively new, but increasingly important phenomenon with a traditional measure of sports popularity and a major component of the sports business model, television ratings.

To address the influence of fantasy football participation on television ratings, correlations were conducted between the number of NFL players starting in fantasy football leagues for that particular week and the television rating for that particular game. The NFL games broadcast on NBC’s Sunday Night Football and ESPN’s Monday Night Football during the 2009 regular season are chosen because they are played at a time when there is no competition from other NFL games and these games are televised to the entire country. For each game on NBC and ESPN the percentage of fantasy leagues that the fantasy players were starting in that week on CBS Sportsline was gathered. The number of NFL players starting in greater than 50 percent and 90 percent of the fantasy leagues on CBS Sportsline for that particular week were then correlated with the game’s television rating. Because so many factors influence a television rating, the variables of teams’ combined winning percentage and margin of victory in the game are also analyzed in comparison to the television rating for the NFL games on NBC and ESPN.

Summary

For the NBC sample there was a relationship between games with NFL players starting in greater than 90 percent of fantasy leagues and the television rating for that particular week’s game. There was, however, not a relationship between the games with NFL players starting in greater than 50 percent of fantasy leagues with the television rating for NBC games. For the ESPN sample there was a relationship between both games with NFL players starting in greater than 50 percent and 90 percent of fantasy leagues with the television rating for that particular week’s game.

There was a relationship between teams’ combined winning percentage and television ratings for both the NBC and ESPN samples of games. The results for NBC are, however, skewed because the highest rated game of the season, New York Giants at Dallas Cowboys, 15.1, featured both teams with a perfect record in week two. When removing this game from the sample for the NBC games, there was no longer a relationship between teams’ combined winning percentage and the television ratings.

It is logical to assume that NFL teams with a high winning percentage would be the teams with many players that are starting in a high percentage of fantasy leagues – after all, it is yards gained (passing, running, or receiving), touchdowns, and defensive performance that lead to NFL team success and determine fantasy success. A correlation was thus conducted using teams’ winning percentage and the number of NFL players starting in a high percentage of fantasy leagues for that particular week. For the games on NBC there was a relationship between winning percentage and games with NFL players starting in greater than 90 percent of fantasy leagues, but not a relationship between games on NBC with NFL players starting in greater than 50 percent of fantasy leagues. For ESPN, there was not a relationship between games on ESPN with NFL players starting in greater than 90 percent of fantasy leagues, but there was a relationship between winning percentage and games with NFL players starting in greater than 50 percent of fantasy leagues.

In testing the 2008 teams’ combined winning percentage, often used as a factor by the league and networks in selecting prime-time matchups, with the television rating for the 2009 games there was not a relationship for games on NBC. However, if removing the week seventeen game between the Cincinnati Bengals and the New York Jets where their combined winning percentage for 2008 was 41 percent, there was a relationship. It is important to note that the Bengals at Jets game was one that NBC chose to flex into because of the game’s playoff implications – if the Jets won, they would advance to the NFL playoffs. For ESPN, there was not a relationship between the 2008 teams’ combined winning percentage and the television rating for the 2009 games.

Finally, in testing the margin of victory variable with the television rating, for the games on NBC there was a negative correlation, meaning that the closer the score of the game, the higher the rating. This result was fueled by the highest rated game between the Giants and the Cowboys having a margin of victory of two points, the second highest rated game on NBC between the New England Patriots and the Indianapolis Colts having a one point margin of victory, as well as the third lowest rated game between the Cincinnati Bengals and the New York Jets being a 37 point win for the Jets. For ESPN there was not a relationship between the margin of victory and the television rating when using all games.
Analysis

The results provide some evidence that there is a relationship between NFL players starting in a high percentage of fantasy leagues for that particular week and the television rating for that particular game. Games with more NFL players starting in a high percentage of fans’ fantasy football leagues do have a positive relationship with that game's rating (with variations by NBC or ESPN, and by the threshold of greater than 90 percent or 50 percent).

Some explanation for the difference in results between the NBC and ESPN samples can be provided by examining the specific games. The NBC games only had a relationship for NFL players starting in greater than 90 percent of fantasy leagues when correlated with both rating, and winning percentage. The two games with the highest rating and winning percentage (New York Giants at Dallas Cowboys and New England Patriots at Indianapolis Colts) had the most NFL players starting in greater than 90 of fantasy leagues. This was not the case when applying the measure of NFL players starting in greater than 50 percent of fantasy leagues. Of the three games on NBC with the highest number of NFL players starting in greater than 50 percent of fantasy leagues, only one game was among the top three rated.

For the ESPN games there was more consistency with a statistically significant relationship between the measures of NFL players starting in both of the greater than 90 percent and 50 percent thresholds of fantasy leagues when correlated with both rating, and winning percentage. The two games with the highest rating and winning percentage (Green Bay Packers at Minnesota Vikings and New England Patriots at New Orleans Saints) had the most NFL players starting in both greater than 90 percent and 50 percent of fantasy leagues.

Several factors contribute to the television rating of a sports event. It is certainly not being proffered here that the fantasy football is the only factor influencing the television rating. The evidence here shows that games between teams with higher winning percentages do have a positive relationship with the television rating for both the NBC and ESPN sample. This relationship is not surprising as games between good teams draw the casual fan that is so important for increasing the television rating. It is also not surprising that there is a relationship between team winning percentage and the number of NFL players starting in a high percentage of fantasy leagues as the great players who often score or throw touchdowns that help their NFL teams win are the same players who help fantasy football teams win as well.

Margin of victory is the most difficult variable to predict prior to the game being played, but there was evidence from the NBC games that the closer the score of the game, the higher the game's rating. There was not, however, a relationship between the margin of victory variable and the television rating for the games on ESPN. The margin of victory measure for NFL games might not be as important for some fans who are more concerned with the outcome of their fantasy football game. For example, fans might not care if the New Orleans Saints are beating the New England Patriots by 21 points as they continue to watch to see if Drew Brees, New Orleans Saints quarterback, throws another touchdown pass.

Certain games had the perfect combination of teams with high winning percentages, many players starting in fantasy leagues, and a small margin of victory. For example, the game between the New England Patriots and the Indianapolis Colts on NBC featured seven players starting in greater than 90 percent of fantasy leagues (Colts: Peyton Manning, 97 percent; Reggie Wayne, 99 percent; Dallas Clark, 98 percent. Patriots: Tom Brady, 98 percent; Randy Moss, 100 percent; Wes Welker, 99 percent; Stephen Gotskowski, 97 percent), the teams had a combined winning percentage of 88 percent, and the game was decided by one point. The New England at Indianapolis game had a rating of 13.7, fifteen percent higher than the 11.6 average rating for the games on NBC.
Discussion

For a league that earns $3.75 billion in broadcast revenue per year (the current broadcast contracts expire after the 2013 season) the more people watching and the more motivations that they have to watch the NFL will lead to further economic growth for the league. So while prior to the increase in fantasy football participation researchers identified fans were most motivated by the unknown outcome of the game and to watch their favorite teams win, the motivation to watch the NFL players that help their fantasy team win could now serve as an additional motivation and create an instrumental media use to watch NFL games. This study only samples one season and 33 games so further examination of any fantasy football impact on television ratings needs to be conducted before larger conclusions can be drawn. However, a fan of the Green Bay Packers may not have an intrinsic interest in watching a game between the Indianapolis Colts and the Miami Dolphins as the outcome of the game has no impact on the Packers’ standings. That fan, however, may have Peyton Manning as the starting quarterback in his or her fantasy lineup (or Manning is starting in the opponent’s lineup) and cares if Manning throws a touchdown pass and the amount of passing yardage he compiles.