

The Influence Of Team Performance On Home Attendance In College Sports: A Case Study of NCAA Division I Men’s Basketball

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Abstract

This study aims to understand how performance of a men’s basketball team and a football team affect home attendance of a men’s basketball team in NCAA Division I schools according to the type of subdivision (FBS, FCS, and non-football institutions).

A sample unit of the study was a men’s basketball team and a football team in NCAA Division I. A total of 335 men’s basketball team records and a total of 237 football team records in NCAA Division I schools were collected from university official athletic websites and official NCAA websites. After data collection, data was analyzed using Pearson’s correlation and simple linear regression analysis. The results of the study showed 1) performance of a men’s basketball team significantly predicted home attendance of a men’s basketball, 2) home attendance of a men’s basketball team in FBS schools was more significantly affected by the performance of a men’s basketball team compared to men’s basketball teams in FCS and non-football subdivision schools, and 3) performance of a football team also predicted home attendance of a men’s basketball team.

This study contributes to reconfirming the importance of team performance on home attendance of college sporting events in addition to professional sports. Despite the contribution, this study has limitations in terms of team performance measurement and sample diversity. Thus, future studies will consider more precise team performance measurement (e.g., UPS Team Performance Index) and team performance of men’s basketball teams in Division II and III schools to ensure internal validity of the study.

Keywords: *team performance, home attendance, winning percentage, men’s basketball, football*

INTRODUCTION

National Collegiate Athletic Association (NCAA) sports is one of the most popular sports with major professional sports such as National Football League (NFL), Major League Baseball (MLB), National Basketball League (NBA), and National Hockey League (NHL) in the United States. According to a recent college sports survey conducted by the Harris Interactive, a market research firm, approximately 45 percent of the U.S. population follow college sports and 29 million attended a sporting event associated with NCAA in 2014 (Statistics and facts on college sports, 2014). In particular, NCAA men’s basketball is one of the most popular sports among NCAA sponsored sports. According to NCAA men’s basketball attendance report in 2016, overall attendance of the men’s basketball for the 2015–16 season totaled 32.3 million and was the 10th highest attendance in NCAA history (NCAA.com, 2016).

There have been many studies regarding what factors affect home attendance of college basketball (Choi, Martin, Park, & Yoh, 2013; Fink, Trail, & Anderson, 2002; Pan, Gabert, McGaugh, & Branvold, 1997; Trail, Anderson & Fink, 2002) and home attendance of college football (Brokaw, 2000; Eddy, Rascher, & Stewart, 2016; Fizel & Bennett, 1989; Kaempfer & Pacey, 1986; Mirabile, 2015; Price & Sen, 2003). Previous research (e.g., Shackelford & Greenwell, 2005) demonstrated a variety of factors affect home attendance of college sporting events; environmental factors (e.g., weather, location of opponent), economic factors (e.g., city population, household income, student enrollment, and unemployment rate), sports-context factors (e.g., team performance and number of professional teams), supply capacity (e.g., seating capacity), and consumer preference (e.g., team loyalty). In particular, team performance is one of the most significant factors that affect home attendance of college sporting events (Shackelford & Greenwell, 2005). That is, good performance of a men’s basketball team or a football team (e.g., good previous season records) increases home attendance.

Despite the fact that team performance positively affects home attendance, there has been minimal research regarding how the team performance of college football affects home attendance of a college men’s basketball. In this sense, this study aims to examine 1) whether performance of a college men’s basketball team affects home attendance of a college men’s basketball team, 2) how the effect of performance of a college men’s basketball on home attendance of a college men’s basketball team is different according to level of

subdivisions in NCAA Division I (i.e., Football Bowl Subdivision (FBS), Football Championship Subdivision (FCS), and non-football subdivision), and 3) whether team performance of a college football team affects home attendance of a college men's basketball team.

LITERATURE REVIEW

Expectancy Disconfirmation Theory

Oliver (1977) proposed Expectancy Disconfirmation Theory (EDT), a cognitive theory, to explain how consumers are satisfied with a product or service. According to the theory, a consumer's satisfaction or dissatisfaction with a product or service is determined by comparing consumers' pre-purchase beliefs (e.g., expectations about a product or service) to post-purchase beliefs (e.g., feeling after using a product or service). In other words, consumers are satisfied or dissatisfied with a product or service according to whether their expectations are confirmed or disconfirmed (Oliver, 1977; Westbrook & Reilly, 1983).

In sports, EDT has been extensively applied to sport consumer research to explain how sport consumers are satisfied with sporting events (Madrigal, 1995; Trail, Anderson, & Fink, 2000; Trail, Fink, & Anderson, 2003). Trail et al. (2000) examined sport spectators' consumption behaviors and found that sport spectators' expectancies about team performance significantly affect their consumption behaviors (e.g., season ticket purchase, merchandise purchase).

Sport fans attend sporting events with specific expectations such as good performance of sport teams (Trail et al., 2003). Sport fans' expectancies can be positively confirmed if a team won the game as fans expected. On the other hand, sport fans' expectancies can be positively disconfirmed (e.g., fans expected the team lost, but the team won the game) or negatively disconfirmed (e.g., fans expected the team winning, but the team lost the game) (Madrigal, 1995; Trail et al., 2003). In other words, a sport fan's willingness to attend a sporting event is affected by confirmation or disconfirmation of sport fans' expectancies compared to a team performance. In this sense, home attendance of a sporting event is closely related to a team performance.

Team Performance and Home Attendance in College Sports

There have been many research regarding the relationship between team performance and home attendance in college sports (DeSchrive, 1999; Martinson, Schneider, & McCullough, 2015; Shackelford & Greenwell, 2005; Wells, Southall, & Peng, 2000) as well as professional sports (Branvoid, Pan, & Gaber, 1997; Cebula, 2013; Hansen & Gauthier, 1989; Welki & Zlatoper, 1994; Zhang, Pease, Hui, & Michaud, 1995). In particular, season winning percentage of a sport team has been used for examining the influence of team performance on attendance of sporting events (Shackelford & Greenwell, 2005; Whitney, 1988). For example, Shackelford and Greenwell (2005) examined predictors that affect attendance of women's sporting events in NCAA Division I and found prior season winning percentage was a significant predictor for attendance of women's sporting events. DeSchrive (1999) and Wells et al. (2000) also examined factors that affect spectator attendance in NCAA Division II football and found previous season winning percentage was positively correlated with spectator attendance. Team performance, which was measured by the average margin of victory by the home team was significantly correlated with home attendance and this finding was constant with previous research (Kimble & Cooper, 1992). Based on the review of literature, three hypotheses were created.

H1: Performance of a men's basketball team positively affects home attendance of a men's basketball team

H2: Home attendance of a men's basketball team is more significantly affected by performance of a men's basketball team in FBS schools than FCS and non-football schools

H3: Performance of a football team affects home attendance of a men's basketball team

METHODS

To examine the relationship between team performance and home attendance in NCAA Division I men's basketball, a winning percentage and a home attendance were analyzed based on pre-existing quantitative data. Independent variables included a winning percentage of a men's basketball team, a winning percentage of

a football team, and a type of subdivision in NCAA Division I (FBS, FCS, and non-football schools). A dependent variable was a home attendance of a men's basketball team in NCAA Division I.

A sample unit of the study was a men's basketball team and a football team in NCAA Division I. A total of 335 men's basketball teams and a total of 237 football teams in NCAA Division I schools were analyzed. Specifically, the average winning percentage of each men's basketball team and football team were collected from each university athletic website and NCAA official website. In the case of home attendance of a men's basketball team, average home attendance records between 2007 and 2016 were collected from attendance reports published in NCAA official website. After data collection, data was analyzed using Pearson's correlation and simple linear regression analysis.

RESULTS

Pearson's correlation analysis was performed to assess the relationships among variables used in the study; home attendance of a men's basketball, performance of a men's basketball team, performance of a football team. The results of Pearson correlation analysis showed there was a moderate positive relationship between performance of a men's basketball team and home attendance of men's basketball ($r = .42$, $n = 335$, $p < .01$), and a weak positive relationship between performance of a football team and home attendance of a men's basketball ($r = .19$, $n = 237$, $p < .01$).

Based on the results of correlation, a simple linear regression was calculated to predict home attendance of a men's basketball based on performance of a men's basketball team, and a performance of football team respectively. First, performance of a men's basketball team significantly predicted home attendance of a men's basketball [$\beta = .42$, $t(332) = 8.48$, $p < .05$]. Specifically, performance of a men's basketball team in FBS schools more significantly predicted home attendance [$\beta = .48$, $t(129) = 6.20$, $p < .05$] than performance of a men's basketball team in FCS schools [$\beta = .32$, $t(121) = 3.67$, $p < .05$] and non-football schools [$\beta = .30$, $t(76) = 2.78$, $p < .05$]. Performance of a men's basketball team explained a significant proportion of variance in home attendance of a men's basketball [$R^2 = .18$, $F(1, 332) = 71.97$, $p < .05$]. Finally, performance of a football team also predicted home attendance of a men's basketball [$\beta = .19$, $t(234) = 3.00$, $p < .05$]. Regarding the proportion of variance in home attendance of a men's basketball, 4% was explained by the performance of a football team [$R^2 = .04$, $F(1, 234) = 9.01$, $p < .05$].

DISCUSSION

The purpose of the study was to examine the relationship between the team performance and home attendance of a men's basketball team in NCAA Division I. The results of the study showed performance of a college men's basketball team significantly affected home attendance of a men's basketball teams in NCAA Division I (H1). Specifically, the home attendance of a men's basketball team in FBS schools was more significantly affected by the performance of a men's basketball team compared to men's basketball teams in FCS and non-football Division schools (H2). The home attendance of a men's basketball team was also affected by the performance of a college football team (H3).

As with the previous studies (e.g., DeSchraver, 1999; Martinson et al., 2015; Shackelford & Greenwell, 2005; Wells et al., 2000; Whitney, 1988), the results of the study demonstrated a team performance was a significant factor that affects home attendance of a men's basketball team in NCAA Division I. According to EDT proposed by Oliver (1977), people are satisfied with a product or a service only if the expectation was met or the outcome was better than the expectation. In the same context, sport spectators expect wins of their teams and attend sporting events when sport spectators are satisfied with team performance. In this sense, team performance is an important factor that affects home attendance of a college men's basketball. In particular, the result of study showed that performance of a college football team may affect home attendance of a college men's basketball team. This can be assumed since it is because football and college men's basketball are the most popular and revenue generating athletics in college sports, so college sport fans have similar identification on both college football and college men's basketball enough to attend both sporting events.

The result of the study also demonstrated performance of a men's basketball team and more significantly predicted home attendance of a men's basketball in FBS schools than FCS and non-football schools. This can be interpreted that college sport fans in big schools tend to be identified with a football team or a men's basketball team based on winning games, but college sport fans in small schools are not identified with college sport teams based only on team performance. In other words, college sport fans in small schools tend to be loyal fans regardless of performance of the football team or men's basketball team because those fans love supporting their college's athletic teams. In this sense, the performance of a men's basketball team more significantly predicted home attendance of a men's basketball in FBS schools than FCS schools and non-football schools in NCAA Division I.

This study contributes to reconfirming the importance of team performance on home attendance of college sporting events in addition to professional sports. In particular, this study is meaningful in the sense that the study showed performance of a college football team affects home attendance of a college men's basketball team. Home attendance of college sporting events is closely related to revenues of college athletic departments. In this sense, athletic directors should keep in mind the importance of performance of a men's basketball team and a football team, and should develop a strategic plan to improve team performance of a men's basketball team and a football team.

Despite the contribution, this study has several limitations. First, team performance was analyzed based only on winning percentage of a men's basketball team and football team. In other words, other statistical data such as field goal percentage, rebounding percentage and turnover/game were not considered synthetically. Thus, future studies should consider more precise team performance measurement (e.g., UPS Team Performance Index) to ensure internal validity of the study. Secondly, this study focused only on college men's basketball in NCAA Division I schools. Even though the result of the study demonstrated team performance positively affected home attendance of a college men's basketball team, the result cannot be applied to other basketball teams in Division II and III. In this sense, future studies will consider team performances of men's basketball teams in Division II and III to ensure external validity of the study.

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