Do fans come to watch thugs? An investigation of the relationship between player behaviour and fan attendance in the NFL

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The National Football League (NFL) is the highest revenue generating league in North American professional sports (Plunkett Research, 2011). Currently, four different television networks CBS, NBC, Fox and ESPN are paying 1.9 Billion dollars a year (Brown et al., 2010). The NFL also has its own television network that broadcasts a handful of regular season games per year. In addition, the NFL has an exclusive agreement with Direct TV which allows consumers to purchase a NFL package to view out-of-market football games. The latest contract which runs through 2014 pays the NFL $1 billion per year (Brown et al, 2010).

The sports economics literature includes many attendance demand/attendance activity studies that examines league and team factors that influence attendance at both the season and game level (ex. Rascher & Solmes, 2007; Soebbing, 2008; Tainsky & Winfree, 2010). Recent research on the NFL has examined the effect of domestic migration on television ratings (Tainsky & Stodolska, 2010), the impact of competitive balance on game-day attendance (Coates & Humphreys, 2010), and the impact of winning streaks of betting volume for NFL games (Humphreys et al., 2011).

The proposed research asks the broad question of what is the effect of an NFL team’s quality on its regular season home attendance from the 2000-2001 season until the present. Since NFL fans have to purchase tickets in advance of the regular season, we define team quality as the number of wins and team offensive and defensive rank from the previous season. The key team quality measure in the proposed research is the number of off-the-field player incidents over the past season. Throughout its history, a concern has existed amongst the general public regarding the violence inherent in the game of American Football. Early research on crimes committed by NFL players by Benedict and Yaegar (1998) found that 21 percent of their sample of NFL players in the 1996-1997 season had been either arrested or indicted for what the authors termed as a serious crime. The perception was that little was being done by the league and its member teams in deterring this sort of behavior, which had the potential to damage the reputation of the league and its teams. As Ambrose (2008) stated: "This reluctance to discipline players allowed the NFL to continue to feed the public’s obsession with football by showcasing the best physically skilled players on the field. Feeding this obsession eventually led to the NFL’s emergence as the richest and most profitable sports league in the world (p. 1071)"

The last few years has brought a renewed interest from the commissioner of the professional American football league (NFL) in punishing players who do not conduct themselves in an appropriate manner off the field. This is done to strengthen the NFL’s brand and to form stronger relations with current and potential stakeholders throughout the country and around the world.

The San Diego Union Tribune created and updated a database of all NFL player run-ins with the law (we term incidents) since 2000. The Union Tribune provides the incident date, player name, current team at time of the incident, description of the incident, and what was the resolution if a resolution has occurred from the incident. During the sample period, every NFL team has had at least one player incident with the law. Some teams have as many as eight separate player incidents in one year. This variation in the crime data by season provides an opportunity to see if player incidents affect the regular season attendance activity of NFL teams.

In order to answer the research question, the proposed research will use a Tobit model with the dependent variable being regular season total attendance for team-season observation. The use of the Tobit is necessary for the NFL due to the fact that most NFL games are sold out and that capacity constraint creates censoring (Welki & Zlatoper, 1994; 1999). Not correcting for censoring using a Tobit model and instead running a standard OLS regression would lead to biased estimates (Gujarati, 2003). The independent variables we will use are common independent variables that one would use in attendance demand/attendance activity research such team age, facility age, and other market
We think our findings will have implications for how leagues respond to potential issues by its members. As many leagues face scandals and issues (steroid use in baseball, underage players and impression issues in basketball are issues in the NBA and the MLB), the results of this study could help us to more broadly understand if deviant behavior has a detrimental impact on fans, or if the deviance is mediated by the type of sport; maybe football can survive with violent crimes because the violence taps into notions of aggressive play on the field. The results also have important findings for cities that host NFL teams. With city and state governments providing NFL teams with money to build facilities, the results from this proposed research will help inform public policy makers as to the effect that player behavior as on community members and potentially the reputation of the city which uses its “Major League City” status to attract other business and tourists.