Will the Real Fans Please Remain Seated? Gender and Television Ratings for NCAA Football Pre-Game and Game Broadcasts

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Within the growing body of sport spectators, women make up 32% of NBA, 42% of MLB (Spanberg, 2007) and 45% of NFL fans (McCarthy, 2008). Although these percentages are considerable, the hegemonic masculinity attached to sport (Messner, 1992) would imply that theories and decisions that guide on our understanding of the sport audience are largely based on the male spectator audience. Moreover, the role of gender in sport viewership is often focused on fandom generally as opposed to specific game characteristics (see Farrell, Fink, & Fields, 2011). Thus a comprehensive understanding of what guides viewership may be absent from the literature. As such, we take an econometric approach in considering whether elements of the sporting contest traditionally associated with consumption are indeed so for both male and female NCAA FBS television viewers. Specifically, we explore how (1) economic factors, (2) temporal factors, (3) school and market factors, (4) team quality, (5) game importance, and (6) game competitiveness impact game attractiveness with respect to gender.

Review of Relevant Literature

Hoeber and Kerwin (2011) discussed the hegemonic masculinity associated with the sport fan culture and the struggle for sport identity that women may go through as sport fans. They discussed the impact of the identity struggle on behaviors such as increased search for relevant sport knowledge and explicit effort to prove sport understanding. These behaviors are particularly relevant to pre- and post-game broadcast viewing in that these mediums provide extensive knowledge/news regarding the game, players, and statistically relevant information—information that women may seek to prove their legitimacy as fans (Hoeber & Kerwin, 2011).

The econometric examination of consumer demand for sport has been a popular area of research in sport management; over 60 articles on the subject were cited in Borland and Macdonald’s (2003) critical review with dozens of others published since. However, at the time of writing, not a single econometric study regarding demand has considered market segmentation by gender.

Part of the vast consideration of consumer motivation for sport spectatorship (e.g., Sloan, 1989; Trail, Fink, & Anderson, 2003; Wann, 1995; Wann, Grieve, Zapalac, & Pease, 2008) are a number of studies which segment the fan population by gender (e.g., Fink, Trail & Anderson, 2002; Farrell, Fink & Fields, 2011; James & Ridinger, 2002; Robinson & Trail, 2005), thereby gaining a richer understanding of gendered-differences in consumption patterns for spectator sport. Despite this segmentation, little is known about the factors driving men and women to watch televised sports and the influence of specific, identifiable game characteristics.

Data and Method

The data to be utilized in the proposed study represent all NCAAF BCS games over a five year time series (2006-2010) in all Nielsen Local People Meter (LPM) markets. These were selected to correspond to the increased percentage of females in the NCAAF television audience as documented by the Sports Business Research network (SBR, 2011).

Objective 1: Pre-viewing Behavior. Odds ratios are a measure of relative probability used to compare groups. We compared the quantity of females and males who viewed pre-game and game telecasts. Based on our equations, an odds ratio significantly exceeding one indicates a difference in the composition of pre-game and game viewing...
Objective 2: Demand Estimation with Consideration of Gendered Differences in Expected and Actual Game Competitiveness. Rottenberg’s (1956) seminal work outlined factors affecting attendance for sporting events. We followed Paul and Weinbach’s (2007) adaptation for the television audience. The identical equation was employed for each gender corresponding to the order the factors are listed in the introduction of this Abstract.

\[ \text{Rating}_t = \alpha_0 + \beta_1(\text{Income}) + \beta_2(\text{Time}) + \beta_3(\text{Year Indicators}) + \beta_7(\text{NewYears}) + \beta_8(\text{Weekend}) + \beta_9(\text{Bowl Game Indicators}) + \beta_{12}(\text{NonAQTeams}) + \beta_{13}(\text{Heisman}) + \beta_{14}(\text{MarketToSite}) + \beta_{15}(\text{SchoolToSite}) + \beta_{16}(\text{SchoolToMarket}) + \beta_{17}(\text{SchoolMarketDummy}) + \beta_{18}(\text{BCSChampionship}) + \beta_{19}(\text{RankingAverage}) + \beta_{20}(\text{OverUnder}) + \beta_{21}(\text{AbsSpread}) + \epsilon \]

The influence of expected game competitiveness on males and females was captured via \( \beta_{21} \) from the equation above. Actual game competitiveness was tested via two additional estimations for each gender. Most of the parameters correspond exactly to those in the original estimations. The exceptions related to game competitiveness were HalftimeScoreDifference replaced AbsSpread in our mid-game estimations and FinalScoreDifference replaced the corresponding halftime values in the late-game estimations. Seemingly unrelated regression (SUR) was used to estimate the significance of each of the covariates for each gender at each interval as well as the null hypothesis that \( \beta_{\text{female}} = \beta_{\text{male}} \).

Results and Discussion

Of the 336 game-market observations, 233 were significantly greater than one. The overall odds ratio for all games was 1.1962 (\( p < .0001 \)). Results were further segmented by game and market. Specifically, 22 of 24 games and 22 of 25 markets had an odds ratio significantly greater than one. The exceptional games had scheduling similarities and the exceptional markets geographic ones. The overall and particular results support our hypothesis of increased viewership of pre-game broadcasts by female fans. These results buttress Hoeber and Kerwin’s (2011) statement that female viewers may utilize the pre-game broadcast to prove fan legitimacy.

SUR models for early-, mid- and late-game ratings explained between 52 and 59 percent of the variance in audience. The negative relationship between income and viewership was consistent across all six models as was the premium for the Rose Bowl, BCS championship and schools located in the market area. Expected game closeness was not a significant factor. However, as predicted by the UOH, actual game closeness was significant for both female and male audiences late in games.

Differences between female and male viewing audiences were evident with respect to income and the presence of a local university competing in the game. Regarding income, while the inverse relationship with audience size was evident for both females and males, the effect was significantly larger for the female audience. Similarly, while both female and male audiences were significantly larger when a local school competed in the game, the effect was again larger for the female audience. Our model found no gendered-differences related to expected or actual game competitiveness. Both factors shown to be different for males and females have been found in previous estimations of televised sport (e.g., Tainsky, Xu, & Zhou, 2012). Consequently, the importance vis-à-vis female fans may have been understated in those studies.

This research confirms that televised sport may be very important for all individuals of low SES, and adds the notion that this is particularly vital for lower income female fans. Moreover, the role of local partisanship is very important even in intercollegiate sport and particularly so, it seems, for female fans. Furthermore, none of our paired comparisons of game competitiveness showed differences attributable to gender. This brings into question the notion that competitiveness is more important to male than female fans. These results provide credence to connecting gender-based theories within our econometric models and have implications for sport broadcasters. Further implications for sport management research and practice will be discussed.