

Development of the Spectator Motivation Scale to Measure Factors Affecting Attendance at High School Football Games

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Due to the decrease in federal funding, high school athletic directors are aware of the importance of spectator attendance and ticket sales in financing their sport programs. However, current studies regarding the determinants of spectator attendance pertain only to college athletics (e.g., DeSchriver & Jensen, 2002; James & Ridinger, 2002; Kahle, Kambara, & Rose, 1996; Kwon & Trail, 2001; Laverie & Arnett, 2000; Madrigal, 1995; Wakefield, Blodgett, & Sloan, 1996; Wakefield & Sloan, 1995; Wells, Southall, Peng, 2000), minor league games (e.g., Wakefield, 1995; Wakefield et al., 1996; Zhang et al., 2001), and professional sports (e.g., Hill & Green, 2000; Lascu, Giese, Toolan, Guehring, & Mercer, 1995; Robertson & Pope, 1999). High school sports in general are understudied and little is known about the factors that affect spectators attending the sport programs.

The purpose of this study was to develop the Spectator Motivation Scale (SMS) to measure the determinants affecting attendance at high school football games. The scale development process was based on an extensive review of literature and the input from a panel of experts (N = 18) that included three university professors, three athletic directors, three high school principals, and nine high school head and assistant football coaches. Participants of Study 1 were spectators (N = 467) from three high school football games; whereas participants of Study 2 were high school students (N = 346) from three different high schools. The two samples were combined for data analysis. The Data Reduction (Factor) and Scale (Reliability Analysis) procedures from Version 10.1 of the SPSS for Windows (SPSS, 2000) were used to tabulate the results. The number of factors was identified by alpha extraction (Kaiser & Caffrey, 1965) and promax rotation (Hendrickson & White, 1964). The criterion for retaining the factors was based on the eigenvalue equal to or greater than one (Guttman, 1954). In addition, the scree test (Cattell, 1966) was used as a reference in determining the number of factors. The initial SMS had 48 items, which were phrased into a 7-point Likert scale: 1 (strongly disagree), 2 (disagree), 3 (somewhat disagree), 4 (neutral), 5 (somewhat agree), 6 (agree), and 7 (strongly agree). Based on the results of the exploratory factor analysis, nine items were removed either because of double loading or trivial factor coefficient.

The final version of the SMS had 39 items under nine factors: Residual Preferences-Environment (5 items), Residual Preferences-Facility (3 items), Economics (3 items), Social Aspects (3 items), Enjoyment (3 items), Entertainment (6 items), Game Attractiveness (4 items), Team Attractiveness (3 items), and Team Identification (9 items). The Cronbach's alpha for the above nine factors were .761, .660, .459, .753, .836, .859, .767, .904, and .930, respectively. Except for the Residual Preferences-Facility and Economics factors, the ranges of the alpha reliability coefficients (i.e., from .76 to .93) suggested that all items under each factor were reliable in estimating their respective construct. In conclusion, the SMS provides an important vehicle for high school athletic directors to examine spectator motivation and consumption behaviors. Based on the results of the SMS, athletic directors can market their teams more effectively, provide a more enjoyable atmosphere for the fans, and offer improved services at the stadium.