

A Model of Predictors of Attendance at Major Sporting Events

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Abstract

Sports events represent a major category of event revenue contributing economic benefits to cities and regions. Attendance at sports events is recognised as an important activity (Shamir and Ruskin 1984), but over the past 20 years sports event attendance expenditure has declined (Ross 2006). Consequently, understanding the factors that influence sports event attendance is crucial to the sustainability of these events. This study identifies the antecedents of sports event attendance among 460 respondents who were surveyed in Melbourne, Australia. Structural Equation Modelling was used to test an empirical model of attendance motivations. The model identifies constructs relating to emotional responses and facilities, as the predictors of event attendance.

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Introduction

Attendance at sports events represents a significant revenue stream for sports venues and sporting associations with subsequent economic benefits for cities and regions. High attendance sporting events attract sponsor revenue. Thus, an empirical understanding of the factors that influence sports attendance is important to the long-term viability of these events. Previous studies reveal that attendance motivations are varied and include: economic, geographic and socio-demographic factors as well as accessibility, entertainment, performance, attractiveness of the game, emotion and individual preference for the product (Brokaw 2000; Greenstein and Marcum 1981; Hansen and Gauthier 1989; Robertson and Pope 1999; Schofield 1983). It can be concluded that event attendance motivations involve inherent event characteristics, the stadium or event environment, social experiences and emotions. Consequently, an empirical understanding of attendance motivations would be valuable to sports managers, venue operators, and government administrators. The aim of this study was to develop an empirical model comprised of attitudes, perceptions and emotional responses that provide a conceptual understanding of the significant predictors of event attendance.

Literature Review

A review of literature identified a series of underlying motivations that are essential to the understanding of sports event attendance. These ranged from emotive dimensions to on-site entertainment and the impact of these factors varied among different attendance groups. "True fans", for example, are described as loyal followers prepared to attend every event (Brokaw 2000). Shank (2001) explains that although fan motivation is a multidimensional construct influenced by a variety of variables, true fans are concerned with the enjoyment of the event itself and are not dissuaded from attending by the outcome of the event, the venue, financial considerations, social dimensions or entertainment (Brokaw 2000). These attendees demonstrate the highest degree of attendance loyalty, displaying intense emotional responses towards a sporting individual or sports team. They resist information that may contradict their beliefs or attitudes (Ross 2006) and as frequent patrons, they are essential to the survival of sports teams and venues (Mahony, Madrigal and Howard 2000).

Whilst true fans are the bread and butter of the majority of sports events, the casual fan provides the bulk of attendance revenue. They are influenced by '... various forms of advertising that promote specific attributes of the sport product ...' (Ross, James and Vargas 2006, p. 262) including discounting and promotional inducements (Allen 2007). Casual fans are more likely to attend a sporting event if there are few competing alternatives (Zhang et al. 1997). Such alternatives are not confined to other sporting events; however, as Robertson and Pope (1999) point out 'the consumer's decision to attend a game is typically a choice among entertainment alternatives' (p. 12). This proposition is supported by numerous studies that demonstrate that competition for sporting event attendance can be extensive (Al-Thibiti 2004; Buttle et al. 1995; Dietz-Uhler et al. 2000; Fink et al. 2002; Greenstein and Marcum 1981; Kwon and Trail 2001; Robertson and Pope 1999; Shank 2001; Zhang et al. 1997). Watching a sporting event on television also competes with on site attendance with some preferring to watch an event at home (Dietz-Uhler et al. 2000).

Attendance at sporting events has also been associated with the opportunity to socialise with family and friends (Dietz-Uhler et al. 2000; Fink et al. 2002; Robertson and Pope 1999; Wann et al. 2004). Kahle and Riley (2004) note that sports events provide opportunities for groups

to socialise and that this enhances the overall experience. Their study found that the enjoyment of sport is emotive and often heightened through group interaction. The importance of emotional arousal in experiential consumer behaviour is well-established (Arnould and Price, 1993; Celsi, Rose and Leigh, 1993; Havlena and Holbrook, 1986; Mehrabian and Russell, 1974; Moneta and Csikszentmihalyi, 1996); however, Getz (1997) notes that major events seek specifically to capture and promote this state of excitement. Sirakaya et al. (2004) notes that it is particularly important to understand experiential phenomena, such as emotions, within the context of tourism and leisure, however, very little research has been conducted on the role of emotions within this context (Bigné and Andreu, 2004). Attendees also value the opportunity to disengage from life's routine (Wann 1995; Al-Thibiti 2004) but '... the game itself isn't enough to draw people in [because] people get bored easily and need to be entertained' (Petrecca 2000, p. 3). Kahle and Riley (2004) explain that many attendees '... are less concerned with the outcome of the sporting event than they are with the overall quality of the entertainment experience' (p. 283). This experiential benefit is recognised as a form of escape (Wann 1995), a coping strategy that leads to fulfilment and contentment (Smith 1988; Gladden and Funk 2002).

Entertainment is also valued for its ability to generate atmosphere, which is defined as the subjective excitement level created at an event (Brooks 1994). Atmospheric variables include the quality of service offerings, cleanliness of the venue and the availability of restrooms, food and beverages, and car parking (Wakefield and Blodgett 1996; Wakefield and Sloan 1995). In addition, the sports venue has a powerful influence on attendance and has received considerable attention in the literature (Brokaw 2000; Buttle et al. 1995; Robertson and Pope 1999; Shank 2001; Wakefield and Sloan 1995). These studies confirm that spectators consider issues such as size, seating comfort and access as well as aesthetic qualities of the stadium in their attendance decisions.

Venue characteristics can be classified into front room factors, back room factors and circumstantial factors (Buttle et al. 1995). The front room factor describes aspects of a sports event that impact on attendees' enjoyment of the event experience such as smoke free zones. Back room factors are those factors that contribute to the overall event experience but are amenable to management control including parking, ease of getting a seat and stadium accessibility. The facility factor relates to the facilities available at the event, including design and comfort of the venue, the standard of available food and drinks and seating access.

Clearly, the factors that influence sports attendance are complex and multifarious. Whilst the literature review has identified that attendance at sports events has received academic attention from a variety of perspectives, a model of attendance has yet to emerge. As a result, the aims of this study were to add to the body of work on attendance at sporting events by developing an empirical model of attendance motivations.

Method

The review of literature identified a number of variables that influence attendance at sporting events. In order to gain an understanding of the impact and relevance of these variables to the target population and to identify any other issues that might be influential, a qualitative pilot study was conducted. A non-probability, convenience sample of 50 respondents was obtained. Interviews were conducted using a semi-structured interview schedule that incorporated the themes and topics that were identified as important within the literature. Respondents were asked to discuss the importance of these themes and were also asked a series of questions about their sporting event attendance patterns in the past 12 months. Several insights emerged during this phase. These included aspects relating to the importance

of the emotional impact of the sporting event as well as the level and quality of facilities at the venue. The interviews were coded, transcribed and analysed and the resulting information was merged with the dimensions identified in the review of literature to develop a quantitative questionnaire comprising 77 questions. These were presented as a Likert-type scale where respondents rated each question from 1-6. Response categories were anchored as Not Very Important and Very Important. A number of classificatory and demographic questions were also included.

Thus, while a single particular scale was not used in the development of the questionnaire, a variety of sub-scales and previously validated questions were utilized to represent the various dimensions identified in the review of literature. These included items that were adapted from previous studies by Unger and Kernan (1983), Wakefield and Blodgett (1996), Robertson and Pope (1999), Brokaw (2000) and Wann (2004). A sample of twenty respondents from the Melbourne White Pages telephone directory was obtained to pilot the questionnaire. The questionnaire worked effectively and required only minor modifications. The city and suburbs of Melbourne were selected as the research base because Melbourne is considered to be the sporting capital of Australia (Westerbeek, Turner and Ingerson 2002) and was recognised as the Ultimate Sports City in 2006 and again in 2008 (Church-Sanders 2008). The city has an abundance of world-class facilities and hosts a variety of sports including; football (soccer, rugby, AFL), tennis (The Australian Open Grand Slam), basketball (with two local ABA teams hosting the 2009 final series), swimming (The World Championships), cricket (test, one-day, Twenty20) horseracing (The Melbourne Cup during the spring carnival), athletics (Commonwealth Games) and Formula One motorcar racing (The Australian Grand Prix).

A telephone interview process was employed, with the Melbourne telephone directory as the sampling frame. A systematic random sample procedure was utilized and 460 valid respondents were obtained, which represented 222 (48.3 per cent) female respondents and 238 (51.7 per cent) male respondents. A total of 1,500 households were contacted providing an acceptable response rate of 31 per cent. During the interview initial screening questions were used to obtain valid respondents for the sample (i.e. they had attended a sporting event in the last 12 months).

Analysis and Results

A series of constructs relating to sport event attendance were identified in the literature and the qualitative research. These were developed and tested using confirmatory factor analysis and their relationship with attendance was analysed by using structural equation modelling.

The following is a summary of these constructs.

Emotional Arousal Factor: The arousal of spectator's emotions includes variables such as whether the sports event was found to be astonishing or stirring. **Back Room Factor:** Any factor amenable to management control that contributes to the overall experience this includes parking and ease of getting a seat. **True Fan Factor:** Attendees for whom the enjoyment of the game itself is most important. They are interested in the competitive nature of the event, the process the outcomes and the performance of the team or individual that they support. **Front Room Factor:** Facilities or elements of the event experience that are under the control of management, which include food and drink facilities and general cleanliness. **Social Factor:** The Social Factor considers the importance of friends and family in the enjoyment of the event. **Alternatives Options:** Attendance being influenced by whether the game is to be broadcast on television and the success of the team. Figure 1 following shows a model of attendance motivations at major sporting events.

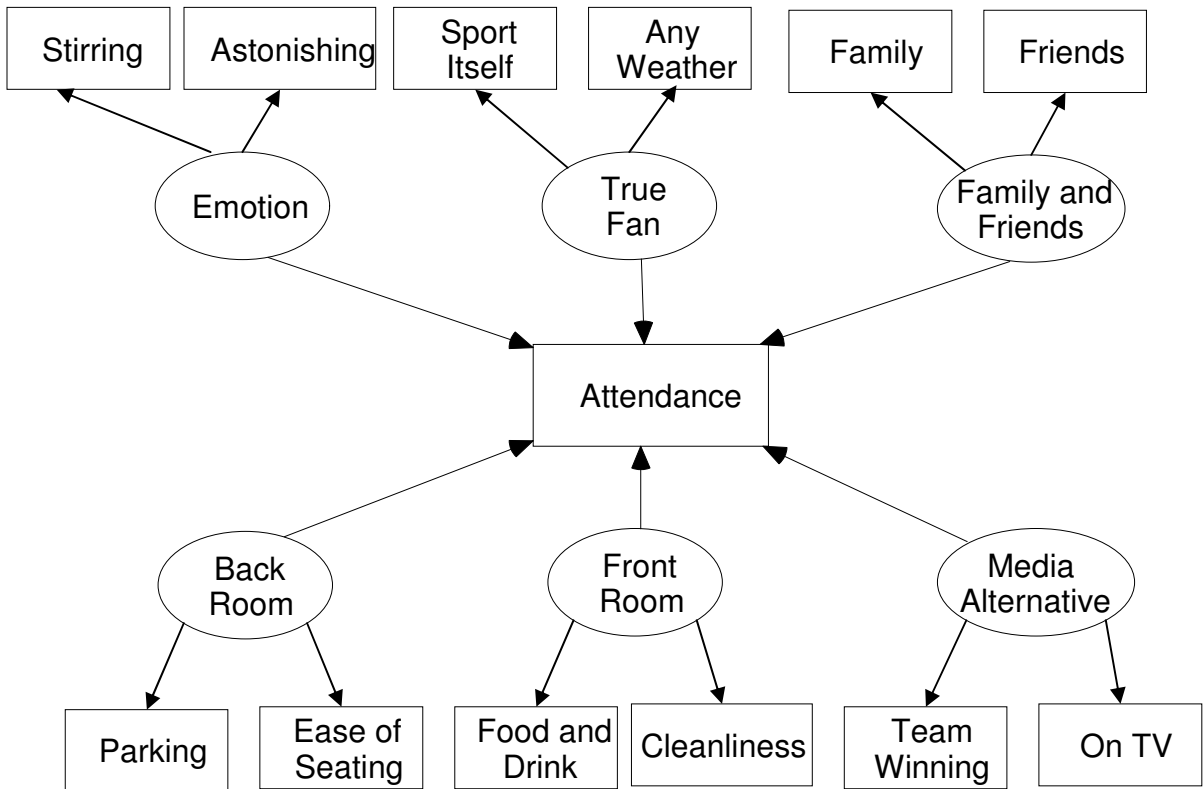


Figure 1 Model of Sports Attendance

After Bollen-Stine bootstrapping was employed, a probability level of 0.05 was achieved. Other fit indices suggested a reasonable fit to the data (Hair et al., 2006; Kline 2005). The model of attendance motivations at major sporting events showed a clear relationship between emotion ($\beta = 0.33, p < 0.05$), backroom ($\beta = 0.15, p < 0.05$), media alternatives ($\beta = -0.30, p < 0.05$), front room ($\beta = 0.47, p < 0.05$), family and friends ($\beta = 0.30, p < 0.05$), true fan ($\beta = 0.32, p < 0.05$) and the attendance construct.

These measures were related positively to the facilities construct. The attendance construct was represented by items that represented the intention to attend a major sporting event within the next 12 months and intention to attend a major sporting event in the future. Overall the model of motivations to attend sporting events indicated a good fit with the data. All of the indices represented (See Table 1) were within the acceptable range for the sample size.

Table 1: Key SEM Indices

Min	DF	P	CMIN/DF	GFI	AGFI	CFI	RMR	RMSEA
128	47	.00	2.72	0.96	0.93	0.95	0.08	0.06

Discussion and Implications

In line with the overall aim of this study a conceptual understanding of the significant predictors of event attendance has been generated with the constructs relating to emotion ($\beta = 0.33, p < 0.05$), backroom ($\beta = 0.15, p < 0.05$), media alternatives ($\beta = -0.30, p < 0.05$), front room ($\beta = 0.47, p < 0.05$), family and friends ($\beta = 0.30, p < 0.05$), true fan ($\beta = 0.32, p < 0.05$) all proving to be significant predictors of attendance at sporting events. These constructs reflect the dimensions of the sportscape (Robertson and Pope 1999), and entertainment (Kahle and Riley 2004). Indeed, the sportscape and entertainment have an effect on the perceived

willingness of spectators to attend future sporting events. Aligned with the social aspects of sports events are the atmospherics, which are the backroom and front of house elements of the event (Wakefield and Blodgett 1996). These facilities constructs (backroom and front of house) are represented by accessibility of the venue through parking at the venue and the ability of respondents to gain a seat within the venue. These key concerns for these respondents are supported by previous research (see Brokaw 2000; Buttle et al. 1995; Robertson and Pope 1999; Shank 2001; Wakefield and Sloan 1995). The emotion construct consists of the arousal of a spectator's emotions and it includes variables such as whether the sports event was found to be stimulating and satisfying though an astonishing and stirring event. The emotion construct has a strong relationship with intention to attend a sporting event. The build up of an event, the desirability of attending the event, and the level of satisfaction and stimulation with the event all contribute to the emotion construct. If spectators perceive that the event will be fun, challenging, stimulating and satisfying, then they are much more likely to want to attend an event in the future. The implications for these findings are that event organisers can focus on creating a sense of anticipation and excitement surrounding the event, and provoke stirring emotions via the sense of fun and excitement involved with attending events. As a part of this, events should promote the social atmosphere and the level of escapism that can be experienced with sporting events. In addition, providing facilities for the event, such as accessibility, parking and being able to gain a seat at the event will enhance spectators' intention to attend sports events in the future. With sponsorship dollars, attendance revenue and television rights tied to attendance (Brokaw 2000), it is in the interests of sports event organisers to make attending the event as easy and comfortable as possible for the spectators.

In conclusion, the facilities on offer as well as the social, entertainment and fun aspects of the event influence attendance at sporting events. The model presented provides a better understanding of sport events attendance that can be used to direct future academic research and sports marketing applications. The findings highlight that there are emotional, social, facilities (backroom and front room) and alternative entertainment aspects associated with attending sporting events, with spectators interested in having a positive emotional escape with family and friends while being comfortable at the event. These results will be valuable to event managers because these significant predictors of attendance presented in this model are amenable to management manipulation and control.

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