Sportscape Features and Team Quality: Implications on spectators’ satisfaction and future attendance

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ABSTRACT

The purpose of this study was to examine the relationship between stadium factors (sportscape) and team quality on spectators’ satisfaction and their intentions to attend soccer matches in Malaysia. The subjects comprised of 371 spectators attending a Malaysian Super League soccer match. The subjects completed the sportscape instrument (Wakefield, Blodgett, & Sloan, 1996) to measure perceptions of the physical facility while the quality of the team was measured using items from Zhang, Pease, Smith, Lee and Lam (1997) scale. Multiple linear regression analysis revealed that team quality and sportscape variables together predicted spectators’ satisfaction (R² = 0.289, adjusted R² = 0.285) and their intentions to attend future matches (R² = 0.278, adjusted R² = 0.274). The results of the study were discussed in light of earlier findings concerning sportscape features and team quality. Practical implications of the results of the study to facility managers and sport marketers were also discussed.

Keywords: sportscape, team quality, spectator satisfaction

INTRODUCTION

A favorite pastime of many people around the world is to watch competitive sports. One of the main reasons for watching sporting events is the unique nature of athletic competition which is, the outcomes are unknown before the start of the competition, and as such the emotions felt when watching a sporting event may be hard to determine. The type and extent of cognitions and emotions that one is likely to experience as a result of watching an athletic competition is dependent upon the individual’s dispositions towards the team or it’s participants (Madrigal (1995).

Besides the individual’s dispositions towards the team or its participants, there have been various studies that have examined major issues related to spectators’ decisions to attend sporting events, such as fan motivation factors, game attractiveness, economic factors, competitive factors, demographic factors, stadium factors, value of sport to the community, sport involvement, and fan identification (Shank, 2005). It is important for sport marketers to understand and analyze the types of factors influencing people to make a decision to attend a sporting event, and how satisfied the spectators are from that experience. Satisfactory experience resulting from attending sporting events would appear to be an important predictor of a fan’s likelihood to attend future events. For many sports organizations and professional teams, spectators’ attendance is one of the main sources of revenue.

Greenwell (2001) stated that spectators’ satisfaction with a match will have an effect on the team’s profitability and he defined the customer perception of the core product as related to the attractiveness of the game in terms of the winning percentage of the participating teams, number of star players and the level of rivalry. Zhang et al. (1997) also stated that the quality of the home team is a main factor affecting winning percentage and is also positively related to game attendance level. Branvold, Pan and Gabert (1997) also found that winning percentage is also important in predicting spectators’ attendance. Likewise, various studies conducted by Welki and Zlatoper (1994), Madrigal (1995) and DeSchrive and Jensen (2002), also found that the quality of the game strongly influences spectators’ decision to attend a sporting event. Hill and Green (2000) noted that winning teams are more attractive to fans than losing teams.

Leeuwen, Quick and Daniel (2002) also found that customer satisfaction is influenced by win/lose phenomena and this plays a role in a spectator’s decision to attend a sport event. If spectators are satisfied with the quality of the game they will have intentions to repatronize the games and this will increase the games’ attendance. It is also important to note that whilst sport managers possess minimal ability to control and influence the technical quality of team performance...
but they can have a great impact on functional quality with regards to the event experience, including accessibility to parking, pre and post game activities, arena and on-field promotions, concessions and merchandise, public address announcements and musical selections during the game, interaction with game operations staff, amenities of the venue, and other aspects of the event experience (Miloch, 2005). Miloch (2005) also stated that most of these aspects fall into Wakefield, Blodgett and Sloan’s (1996) “sportscape” model and suggested that these also add value to the fan’s entertainment experience. Hill and Green (2000) also noted that the sports facility should be an important element in the marketing mix, since the sport is dependent on the facility for its production and services, predominantly the experience within the stadium. Numerous studies conducted on the relationship between physical environment or sportscape features and the customers’ intentions to re-patronize (attendance) (Wakefield & Blodgett, 1994; Wakefield & Sloan 1995; Wakefield & Blodgett, 1996; Wakefield, Blodgett & Sloan 1996, Hill & Green, 2000; Westerbeek, 2000; Chang, 2000; and Lee, Ryder & Shin, 2003), have shown that sportscape features do influence spectators’ attendance.

Research has found that another important factor which can influence attendance at football games is the quality of the team. Numerous studies have found that there is a relationship between team quality (team performance, quality of opponents, rivalry rank and star players) and spectators’ attendance (Baade & Tiehen, 1990; Welki & Zlatoper, 1994; Madrigal, 1995; Zhang et al., 1997; Pan et. al., 1999; Bernthal & Graham, 1999; and DeSchriver & Jensen; 2002). The fall in FIFA rankings for the Malaysia football team since the early 1990s until now is a rough indication of the fall in the quality of the football teams in Malaysia. There is also a corresponding drop in the attendance of spectators for the FAM league games and the FA Cup and Malaysia Cup games. The number of spectators attending the football games for the Super League matches in 2004 was 534,089 spectators but in 2005, the attendance was only 322,958 spectators, meaning that there is about a 65% decrease in attendance. The drop in the number of spectators attending football games in Malaysia has raised questions regarding the relationship between attendance and team quality. Hence, this study examined the extent Malaysian spectators’ satisfaction and their intentions to re-patronize future football games, is related to the sportscape features of the stadium and the quality of the team.

The primary purpose of this study is to examine the relationship between team quality and the sportscape features (physical facility) on spectators’ satisfaction and their intentions to re-patronage. This line of analysis is important as this would be the first time that research is conducted to look at the relationship between the key elements of team quality and sportscape features on satisfaction and intentions of spectators to repatronize the games. This study would also identify the profile of the average Malaysian football spectator. Specifically, this study would gather the demographic variables such as gender, age, ethnicity, education levels and economic status of the average Malaysian football spectator.

This study is partly based on the theoretical framework known as the Sportscape model proposed by Wakefield, Blodgett and Sloan (1996) as illustrated in Figure 1. Wakefield, Blodgett and Sloan (1996) defined sportscape as the fixed elements in a built environment (i.e., those that remain the same from game to game). Satisfaction of the users towards the sportscape would directly affect the intentions of users to attend and their desire to stay. The sportscape model proposed that the sportscape factors are expected to influence spectators’ pleasure or satisfaction with the sportscape, and subsequently influence spectators’ desire to stay and return to the stadium.

In addition to the above Sportscape Model proposed by Wakefield, et al (1996), this research also examined the role of team quality on spectators’ satisfaction and repeat attendance at the stadium. Greenwell (2001) stated, “In sport, the core product usually consists of the quality of the team, the quality of the opponent and the quality of the event itself. Also it is generally accepted that there is a positive relationship between core product quality and customer satisfaction”. Greenwell (2001) examined the role of the service experience (which comprised of core product, physical facility and service personnel) and how it contributes to customer satisfaction and profitability. This research focuses on the role of team quality (as defined by Greenwell, 2001) and physical facility (which are the Sportscape features defined by Wakefield et al, 1996) and how it contributes to spectators’ satisfaction and future attendance.
The following hypotheses were developed and tested at the 0.05 level of significance as follows:

**H1:** There is no relationship between spectators’ perceptions on sportscape features and spectators’ satisfaction.

**H2:** There is no relationship between spectators’ perceptions on team quality and spectators’ satisfaction.

**H3:** There is no relationship between spectators’ perceptions on sportscape features and spectators’ intention to attend future matches.

**H4:** There is no relationship between spectators’ perceptions on team quality and spectators’ intention to attend future matches.

**METHOD**

Data were collected from spectators who attended a Super League soccer game at Shah Alam stadium. Using a convenience sampling method, spectators were requested to complete the questionnaires before the game and during the half time interval period. A total of 400 questionnaires were distributed and 371 (92.8%) were returned usable for this analysis. Out of the total 371 spectators, a few of them opted not to answer one or two of the demographic questions. Questionnaires were completed by 304 male (81.9%) and 67 female (18.1%) spectators. The mean age of the spectators was 28.62 (SD = 8.50 years). Spectators were from various age groups; 138 (37.2%) were less than 24 years old (only spectators 18 and older were sampled), 162 (43.7%) were aged 25 – 34, 47 (12.7%) were aged 35 – 44, 19 (5.1%) were aged 45 – 54, and five (1.3%) were 55 or older. As for ethnicity, 335 (90.3%) were Malays, 10 (2.7%) Chinese, 23 (6.2%) Indians and another three (0.8%) from other ethnic groups. 355 spectators indicated their monthly household income. One hundred and twenty seven (34.2%) listed their monthly household income as less than RM 1000, 112 (30.2%) had income in the range of RM 1001 – RM 2000, 66 (17.8%) were in the range of RM 2001 – RM 3000, 19 (5.1%) were in the range of RM 3001 – RM 4000, 16 (4.3%) were in the range of RM 4001 – RM 5000 and 15 (4.0%) listed their household income as more than RM 5001. As for the educational qualification, about 234 (63.1%) spectators had at least a secondary school education, 13 (3.5%) had upper secondary school qualifications, 8 (2.2%) had pre-university level qualifications and 65 (17.5%) had diploma qualifications. Only 49 (13.8%) had either a bachelor’s degree or higher qualifications.
Instrumentation

The questionnaires consisted of two main sections; one section on demographic variables and another section consisted of several subscales designed to measure perceptions of the physical facility and perceptions of team quality. The dependent variables investigated were spectators’ satisfaction and their intentions’ to attend the soccer game. The perceptions of the physical facility were measured using the scales developed by Wakefield, Blodgett and Sloan (1996) which was a 26 items sportscape scale. Spectators responded to seven subscales of sportscape, namely four items from each sub-scale of stadium accessibility, facility aesthetics, scoreboard quality, seating comfort, layout accessibility, space allocation and two items from signage. The items were added up to form a total sum of spectators’ perceptions of the physical facility (sportscape). The subscales were found to be internally consistent with alpha levels ranging from .74 to .95 in Wakefield et al., (1996) study and .85 to .93 in Greenwell, (2001) study. Each of the subscales was found to be internally consistent, with reliability scores ranging from .62 to .90 in the present study. The perceptions of team quality were measured using items from Zhang et al.’s (1997) scale, which included items that measured home team quality, star players, win/lose record, placing in standing, team history, quality of the opponent and whether opponent team has star players. The items were summed to yield a sum of spectators’ perceptions of the team quality. The reliability coefficient for team quality in Greenwell study was .80. The subscales were found to be internally consistent with alpha ranging from .54 to .68 in this present study. Spectators’ satisfaction was measured by three items from Madrigal, (1995) instrument and this scale has reliability coefficients of .95 and .90 in Madrigal (1995) study and Greenwell (2001) study respectively. The Cronbach’s alpha of spectators’ satisfaction in this present study was .60. Intentions to attend future matches was measured using three items adopted from Zhang et al. (1997) scale which had a reliability consistency of .62 in the present study. All the dependent variables and independent variables in the current study were measured on a five – point Likert Scale ranging from strongly disagree (1) to strongly agree (5).

RESULTS

The research hypothesis required tests of relationships among the variables. Specifically, the data analysis tested the ways in which the independent variables (overall team quality or overall sportscape) predicted spectators’ satisfaction and intention to repatronize the football game. Consequently, two regressions were performed for each dependent variable (spectators’ satisfaction and their intention to repatronize).

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SEB</th>
<th>Standard Beta</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team quality</td>
<td>.204</td>
<td>.023</td>
<td>.448</td>
<td>.01*</td>
</tr>
<tr>
<td>Sportscape</td>
<td>.022</td>
<td>.007</td>
<td>.154</td>
<td>.01*</td>
</tr>
</tbody>
</table>

Notes: $R = .537; R^2 = .289; Adj. $R^2 = .285, *p < .05$

The above table showed that the two independent variables, team quality and sportscape features, significantly predicted spectators’ satisfaction. Hypotheses H1 and H2 were rejected, team quality and sportscape affect spectators’ satisfaction. The R square of .289 implied that team quality and sportscape features predictors’ variables explained 28.9% of the variance/variation in the spectators’ satisfaction. As depicted in Table 1, the largest standardized beta values is .448 which is team quality. This means that this variable contribute most to predicting dependent variable (spectators’ satisfaction) as compared to the sportscape features (beta values = .154), when the variance explained by all other predictor variables in the model is controlled for. It is suggested that one standard deviation increase in team quality is followed by .448 standard deviation increase in spectators’ satisfaction. The results showed that team quality is an important variable in predicting spectators’ satisfaction as spectators emphasized more on the quality of the team than on sportscape features.
Table 2: Multiple Linear Regression Analysis for Predictor Variables Spectators’ Future Attendance

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SEB</th>
<th>Standard Beta</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team quality</td>
<td>.184</td>
<td>.026</td>
<td>.351</td>
<td>.01*</td>
</tr>
<tr>
<td>Sportscape</td>
<td>.043</td>
<td>.008</td>
<td>.263</td>
<td>.01*</td>
</tr>
</tbody>
</table>

Notes: R = .527; R² = 0.278; Adj. R² = 0.274, *p < .05

Inspection of the table 2 revealed that team quality and sportscape variables significantly predicted spectators’ intention to repatronize the football game. H3 and H4 were rejected as showed in the above table; team quality and sportscape affect spectators’ intention to repatronize to football game. Both predictors explained 27.8% of the variance/variation in the spectators’ intention to repatronize. As depicted in Table 2, the standardized beta value of team quality was .351 and for the sportscape features, it was .263. This showed that team quality has slightly more importance/impact in predicting the spectators’ intention to repatronize than sportscape features.

A hierarchical multiple linear regression method was used to address the influence of the two independent variables (team quality and sportscape) on spectators’ satisfaction. Based on previous studies, it has been shown that team quality (core product) did explain the greatest amount of variance in spectators’ satisfaction (Greenwell, 2002, Madrigal 1995). In this study, the researcher wanted to find out whether the model can be improved by adding another independent variable (sportscape features) to the model. The sportscape features (variable under investigation) was entered in the second model to determine whether the predictability of the criterion can be improved.

Table 3: Hierarchical Regression Analysis for Predictor Variables and Spectators’ Satisfaction

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>R²</th>
<th>R² change</th>
<th>F change</th>
<th>Standard Beta</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Team quality</td>
<td>.270</td>
<td>.270</td>
<td>136.463</td>
<td>.520</td>
<td>.01*</td>
</tr>
<tr>
<td>2</td>
<td>Team quality</td>
<td>.289</td>
<td>.019</td>
<td>9.647</td>
<td>.448</td>
<td>.01*</td>
</tr>
<tr>
<td></td>
<td>Sportscape</td>
<td>.154</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: R = .537; R² = .289; Adj. R² = .285, F = 74.654, *p < .05

Results of the hierarchical regression were significant and accounted for 28.9% of variance in spectators’ satisfaction (F = 74.654, p = .01). As shown in table 3, the team quality variable had already explained about 27.0% of the variance in spectators’ satisfaction. The R square change showed that sportscape features did contribute to the total variance in spectators’ satisfaction, even though it only explained 1.9% of the variance in spectators’ satisfaction.

**DISCUSSION**

Results from this study showed both sportscape and team quality influenced spectators’ satisfaction in attending the games. The result in this study was consistent with Greenwell (2001) who surveyed ice hockey games spectators. The results of his study also showed that team quality and physical facility (sportscape) significantly predicted 25% of variance in customers’ satisfaction. Another study by Greenwell, Fink and Pastore (2002) also showed that spectators’ perception of overall sportscape significantly predicted spectators’ satisfaction (F(5,197) = 8.83, p < 0.001), explaining 16.2% of the variance. In both studies by Wakefield and Blodgett (1994), they also found that customer satisfaction was directly affected by the quality of the facility that is the higher the perception of facility quality, the higher the customer satisfaction with the facility. Chang (2000) also found that the physical environment had a strong effect on customer satisfaction (standardized coefficient of .28). The physical environment of the stadium is important to spectators’ satisfaction because spectators attending the games would normally spend hours at a time experiencing the event at that facility, thus a pleasant and positive experience with the facility would encouraged the satisfied spectators to continue to return to the facility. Besides the sportscape feature that was found to predict spectator satisfaction in this study, the game itself/team quality was another important element in predicting spectator satisfaction. This result is similar to other studies in which the spectators based their satisfaction judgments on their perception of the team’s performance (Baade & Tienhen, 1990; Branvold et. al., 1997). In addition, Madrigal (1995) also found that the core service (the game itself) contributed directly to customers’ satisfaction.
The current study found that the combination of both overall sportscape and team quality variables contributed 27.8% to the variance in explaining spectators’ future attendance. A possible explanation for this might be that spectators’ perception of the sportscape feature and team quality as a whole did influence their future attendance. Spectators placed importance on sportscape features as the game is played within the facility, of which a well-designed stadium would make the spectators experience a satisfying one, and together with a winning team would further enhance the spectators’ satisfaction and their future attendance. Madrigal (1995) had noted that winning teams are important to spectators as these individuals may for intrapersonal reasons draw connections between themselves and the success of their sport team. The spectators who derive a sense of enjoyment from following their sport team, would return regularly to support their team. The researcher combined the two variables in predicting future return of spectators to the games/stadium as the sports itself depended on the venue for its production and most of the revenue/income came from the sale of tickets derived from spectators’ regular attendance. In previous studies, researchers had examined sportscape or team quality separately with other variables when they relate it with spectators’ intentions to attend future matches. In most of the studies noted below the results indicated that sportscape or team quality strongly predicted spectators’ repeat attendance at the stadium. In a study by Wakefield, Blodgett and Sloan (1996), spectators’ pleasure (satisfaction) with the sportscape strongly influenced spectators’ future attendance at that facility. Similarly, Hill and Green (2000) found that sportscape features improved prediction for future attendance intentions at three sport contexts. Robertson and Pope (1999) also found that sportscape (physical facility) predicted spectators’ intentions to attend future games in a sample of Brisbane Lions home games. The Wakefield and Sloan (1995) study also indicated that stadium factors explained 25.7% of the variation in spectators’ attendance intentions. Wakefield and Blodgett (1994) study also demonstrated that perceived quality of the servicescape factor had a significant and positive effect on respondents’ satisfaction with the sportscape. Satisfaction, in turn, had the anticipated positive effect on respondents’ intentions to attend future games. Similarly for the team quality factor, quality of the games has also been found to predict spectators’ future attendance (Pan et al., 1999; Welki & Zlatoper, 1994). Pan et al. (1999) in a study on major league baseball found that team performance (winning percentage) is an important determinant on attendance improvement. Likewise, Welki & Zlatoper (1994) in a study on US professional soccer games concluded that the expected quality of the game strongly influenced attendance.

CONCLUSIONS

Two conclusions can be drawn based on the data from this study. First, sportscape and team quality were important variables in predicting spectators’ satisfaction, and each were found to predict a significant portion of the variance in spectators’ satisfaction. This finding lends credence to the sport marketing principle that spectators’ evaluate both the product and product extensions in making satisfaction judgments. Second, the sportscape and team quality were also found to be important in predicting spectators’ intentions future attendance. Both of these independent variables contributed significant variance in predicting spectators’ intentions to attend future games. This finding is important to sport marketers and managers in that it could help them consider strategies to increase the revenue of the sport team or stadium. An important implication of this study is that it is the combination of the individual sportscape features that made the overall sportscape encounter for the spectators a satisfying experience and increased the chances of future attendance. Sport marketers and stadium managers should invest their efforts and resources to increase the probability of the customer experiencing a positive outcome from participating or from watching a game in the stadium.

REFERENCES


