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The relationship between stadium factors on spectators' satisfaction in Greek Soccer Super League

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ABSTRACT

The purpose of the present study was to investigate the relationship between stadium factors (sportscape) on spectators' satisfaction in Greek Soccer Super League. 255 spectators attending two Greek Super League football matches volunteered to participate in this study. Measurements included the use of two questionnaires: a demographic form and the sportscape instrument (Wakefield et al., 1996) to measure perceptions of the physical facility. Correlation and Regression analysis were used to identify the relationship and predictive variables of spectators' satisfaction. Results indicated from the five variables of sportscape model, stadium security and cleanliness were the most predictive variables of spectators' satisfaction. In conclusion, security during soccer game and cleanliness of the stadium have strong positive effects in spectators satisfaction and intention not to attend soccer games in Greece in the future. **Key words:** SOCCER, SERVICE, SPORTS INDUSTRY, PLACE ATTACHMENT, SOCCER FANS

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INTRODUCTION

Sports industry has demonstrated service as a significant and essential part of the strategic, operational and tactical management of the organizations working in this field (Svenson, 2003). According to Mullin et al. (2000) sports industry occupies a pivotal place in the service industry, entertainment and enjoy.

One of the main parts of sports industry is soccer, which advantages are the attraction and motivation of spectators, sponsors and media (Aycan et al., 2014). According to Kim and Trail (2011), the budget of soccer clubs depends on media and on attendance fees. In Europe especially, professional soccer generates huge amount of money and sponsorship (Giulianotti & Robertson, 2004).

Professional soccer clubs are basically service organizations. The concept of quality plays a critical role in the success of service organizations. Definition and meaning of quality is complicated, due to different meanings to goods and services by individuals (Hoyer & Hoyer, 2001). Service quality as a concept has aroused great interest in the literature (Wisniewski, 2001). Some definitions of quality in services have to do with accessibility. Based on the view of Chelladurai and Chang (2000), these definitions include core service, physical environment and interaction among individuals in service-performance. During the last few decades, the role of service quality in the overall economic activities has become more significant (Oman et al., 2016). Sport club management due to this impact focus on providing higher service quality among customers.

Satisfaction as a meaning refers to any judgments about qualification of products and services which completes the enjoyable level of consuming (Van Leeuwen et al., 2002). According to that, fan satisfaction and services are key factors in the sports industry. In the soccer industry and specific at soccer stadiums, fan satisfaction is of high importance (Greenwell et al., 2006). On the other side, quality of services is one of the most important factors leading to satisfaction of spectators and their attention to be present in soccer matches (Beyrami & Najafzadeh, 2015).

A valuable tool to service spectators and fans in their quest for image uniqueness is the physical environment or sportscape-stadium factors (McGoldrick & Pieros, 1998). It is actually the physical environment where the core service is being present and consumed by the fans of the team (Wakefield et al., 1996). According to them, it includes the interior and the exterior elements such as environment of stadium, beauty of facilities, quality of scoreboard, rest seats, decoration of stadium, space of stadium, signs inside the stadium and quality of staff. It is generally encompasses aspects of spatial layout, functionality and elements related to the aesthetic appeal of the physical environment (Wakefield & Blodgett, 1994).

According to Wakefield et al. (1996), and Bitner (1992), sportscape can be considered as one important factor influencing spectators' attendance levels and satisfaction. Spectators, who perceive sportscape quality in higher level of satisfaction, are more encouraged to return to stadium for future events (Wakefield & Blodgett, 1994). In soccer, a positive perception of the sportscape can enhance future attendance intentions for some spectators (Hill & Green, 2000). Instead, poor soccer stadium factors may play a significant role on fans' satisfaction and decrease their attendance (Douvis, 2007).

Review of literature has showed that there is a significant relationship between some of the sportscape factors and customers' satisfaction during soccer games. More specifically, factors such as staff and quick-easy access, have found to be the most important dimensions for spectators' satisfaction in a study in Greek Soccer Super League (Athanasopoulou et al., 2012). Also in a study in South Africa, sportscape factors such as space allocation and refreshments were found to be significant related to spectators' desire to stay within

a stadium (Dhurup et al., 2010). Instead, a study in Belgium soccer showed that fans that considered the sportscape a stronger constraint on their attendance were the fans that they were less attached to their club (de Carvalho et al., 2015). Furthermore, sportscape factors such as signposting inside the stadium and video score boards have great influence on customers' satisfaction during soccer matches (Sarstedt et al., 2009). In a study in Malaysia Soccer Cup, predictors of customers' satisfaction and intention of re-viewing games were signboards and stadium's aesthetic (Pilus et al., 2010).

Only few studies in Greece have focused in the relationship between sportscape factors and the influence of the physical environment on fans' satisfaction during soccer games (Athanasopoulou et al., 2012). Therefore the purpose of the present study is to investigate the relationship between stadium factors (sportscale) on spectators' satisfaction during two soccer matches in Greek Soccer Super League.

MATERIALS AND METHODS

Participants

A total of 255 spectators who attended two soccer games of the Super League in Greece participated in the present study. Demographic characteristics of spectators are presented in Table 1. Out of the total 255 spectators, 169 of them (66.2%) were male and 86 (33.7%) were female. Mean age of the spectators was 36.6 (SD = 7.9years) for males and 27.4 (SD = 5.3 years) for females.

Procedure

Data were collected from spectators who attended two football games of the Super League in Northern Greece, during football period 2015-2016. Participants were selected with the design of random sampling. A total of 300 questionnaires were distributed and 255 (83.3%) were returned usable for the analysis and the purpose of the present study. In order to ensure representation of all fans in the stadium, questionnaires were distributed in all the parts of the stadiums (Robinson et al., 2005). All questionnaires were collected prior to the beginning of the football game, before the fans enter the stadium, by a team of five experienced interviewers and one supervisor.

Data instruments

Spectators completed a questionnaire packet containing two sections: the first section included a demographic form and the second section consisted of several subscales designed to measure perception of physical facility (sportscape). Perceptions of the physical facility were measured using the scales developed by Wakefield et al. (1996) which is a 26 items sportscape scale with five components: stadium access, facility aesthetics, layout accessibility, stadium security and cleanliness. Inclusion of the non-fixed stadium elements (stadium security and cleanliness) in the sportscape questionnaire is in accordance with the work of previous researchers (Hill & Green, 2000; Wakefield & Sloan, 1995).

To measure sportscape as a constraint for attendance, spectators had to answer the question "To what extent the following motives affect your decision not to attend the game?" The five items were scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Reliability of the questionnaire using Cronbach Alpha was calculated at 0.93.

Statistical Analysis

For the purposes of the present study, the statistic package program IBM SPSS Statistics 22.0 version was used. Descriptive statistics were used in order to summarize the mean and standard deviation of variables. Pearson's correlation analysis was used to examine the relationship between sportscape variables and

customers' satisfaction. Regression analysis was used furthermore to investigate the predictive relationship between sportscape variables and customers' satisfaction. Level of significance was set at $p < 0.01$.

RESULTS

Table 1 shows the number of participants, examined according to their gender and age. As it shown in most of the soccer fans were males.

Table 1. Descriptive characteristics of participants examined as gender and age. Values are presented as mean \pm standard deviation.

Spectators	Gender	Age	Total
Male	197	32.6 \pm 7.9	197
Female	58	27.4 \pm 5.3	58

Pearson's correlation coefficient (r) was used to analyze the relationship between the five variables of sportscape scale and customers' satisfaction. As it shown in Table 2, from the five variables of sportscape scale, correlation of customers' satisfaction was statistically significant only with stadium security ($r=0.486$, $p < 0.01$) and with cleanliness ($r=0.402$, $p < 0.01$). The other factors of sportscape scale did not have a statistical significant relationship with customers' satisfaction.

Table 2. Correlation analysis between sportscape variables and customers' satisfaction.

Factors	Stadium Access	Facility Aesthetics	Layout Accessibility	Stadium Security	Cleanliness
Customers' Satisfaction	.172	.203	.196	.486**	.402**

** $p < 0.01$ level

Furthermore, regression analysis was used to determine the predictive model of customers' satisfaction from the five selected variables of sportscape scale. As it shown in Table 3, from all the variables entered the model, only stadium security and cleanliness were the most predictive variables of spectators' satisfaction. Stadium security could explain and predict the model and spectators' satisfaction approximately at $R^2=23.6\%$ ($r=0.486$, $p < 0.01$). Both variables of stadium security and cleanliness could explain and predict spectators' satisfaction at a percentage of $R^2=28\%$ respectively.

Table 3. Regression analysis between spectators' satisfaction and sportscape factors.

Model	Factors	R	R Square Change	Beta	Sig. Value
Spectators' satisfaction	1	.486	.236	.123	.003
	2	.530	.280	.147	.043

1: Stadium Security, 2: Stadium security, Cleanliness

DISCUSSION

The purpose of the present study was to examine which of the variables of sportscape scale most influence spectators' satisfaction during soccer games in Greek Super League (premier division).

According to Mullin et al. (2000), sport organizations need to focus on product extensions due to customers' satisfaction is crucial in the sport industry. Physical environment of the stadium is included in the product extension and sportscape variables are a significant factor for spectators' satisfaction and intention to return to stadium in future events (Bitner, 1992; Wakefield & Blodgett, 1994).

Review of the literature has shown that sportscape variables enhance spectators' satisfaction in a variety of sports like professional golf, (Lambrecht et al., 2009), baseball (Hightower et al., Brady, & Baker, 2002; Wakefield & Blodgett, 1994) and basketball (Cant & Wiid, 2012). Some other surveys also investigated the relationship between sportscape variables and spectators' satisfaction in professional football (Gustafson, 2005) and soccer (de Carvalho et al., 2015; Dhurup et al., 2010; Pilus et al., 2010).

In Greece a survey in soccer in first division (Super League) has shown that sportscape factors such as staff and quick-easy access, have found to be the most important dimensions for spectators' satisfaction (Athanasopoulou et al., 2012). However the investigation of sportscape variables and their relationship on spectators' satisfaction in soccer and specifically in Greece is not enough examined.

In the present study spectators were asked, to which extend sportscape motives affect their decision not to attend in the future soccer games. Our results showed that from the five variables of the sportscape instrument, only stadium security and cleanliness had the strongest relationship with spectators' satisfaction. The relationship between stadium security and spectators' satisfaction was significant ($r=0.486$, $p<0.01$), while cleanliness had the second significant relationship with spectators' satisfaction ($r=0.402$, $p<0.01$). Furthermore, regression analysis showed that the model of spectators' satisfaction could be explained by the combination of stadium security and cleanliness at a percentage of 28%.

Of the five variables of sportscape instrument, stadium security was the factor with the strongest relationship with spectators' satisfaction and explained the model of at a percentage of 23.6%. This finding is in agreement with the results of Correia and Exteves (2007), which stated that football spectators will be satisfied only when there are stadium's facilities, car park and stadium's safety.

In the present study the variable cleanliness was the second significant factor related to spectators' satisfaction. According to Rosenquist (2005), spectators demand a high level of cleanliness regarding levels of sanitation and hygiene in the physical environment of the stadium. Importance of cleanliness has also been referred in the literature as an essential component of servicescapes (Marinucci, 2002; Wakefield & Blodgett, 1994). Results of the present study indicate that cleanliness as a sportscape variable is important in the servicescape industry and more specific in soccer.

In the present study, other variables of sportscape instrument such as stadium access, facility aesthetics and layout accessibility did not have significant relationship and impact on spectator's intention not to attend in the future soccer games. It seems that spectators in Greek Soccer super League are satisfied well by those variables. This result is in agreement with an earlier study in Greek soccer where factor such as quick and easy access was strong related to spectators' satisfaction (Athanasopoulou et al., 2012) and also in other surveys in soccer where signposting was important factor for future re-view of the game (Pilus et al., 2010; Sarstedt et al., 2009).

CONCLUSIONS

A complex mix model of physical environment may influence spectators' satisfaction during a soccer game. More studies should focus in the relationship between sportscape variables and fans' satisfaction in Greek Soccer Super League of lower divisions. It seems that factors such as security-safety and cleanliness are important to spectators' intention not to re-view in the future soccer games in Greece. According to that, safety-security and cleanliness issues should be considered in the future by the Greek Football Federation to create a pleasant soccer environment and enhance spectators' positive reactions.

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