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Developing and validating a scale to measure the perceived value of sport spectators

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Abstract: This study was purposed to develop and validate a questionnaire to measure the perceived value of sport spectators. Reviewing the theoretical background of perceived value in the marketing management and semi-structured qualitative interviews were two deemed methods used to identify components and items of the questionnaire. The results have demonstrated six main factors including: product, service, brand, personal, psychological and social benefits which affect the perceived benefits of spectators. Also, they have revealed other five main factors including financial, time, physical, psychological and social costs affecting the perceived costs of the spectators. Therefore, sport managers are advised to improve factors associated with the stadium, such as effective management, spectator safety, facilities and welfare.

Keywords: perceived value; spectators; cost-benefit; football; attendance.

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1 Introduction

Benefited by high public participation around the world, football is a sport activity which spectator's express remarkable dependence on their teams (Scharf et al., 2016). In recent years, the attention of sport managers has been devoted to attract and retain spectators as one of the most important financial strategies in the field of professional and recreational sports (Lee et al., 2008). Scientific studies have emphasised on the economic role of spectators and fans in developing sports clubs. In terms of economic, the role of sport and its ability as an efficient subsector, apart from its health aspect, has become more and more evident in commerce (Theodorakis et al., 2013). It has been reported that the top five European football leagues generated more than 52 million of the fond spectators within the 2016–2017 season (EPFL, 2018). Furthermore, the global market value made by sports spectators was reported to be 234 billion Euros in 2017 (Cision, 2018). As for the US market, the input revenue was predicted to be some € 18.4 billion for 2020 (PWC, 2016). When it comes to the costs related to planning and using well-known sport fields and stars by non-sport organisations to introduce their products, it is challenging how marketing professionals and managers turn potential sports fans into the permanent consumers [Gustafson, (2005), p.331]. Therefore, in order to foster the financial and economic programs, the club managers and marketers have always been seeking to promote the factors affecting the number of spectators in the tournaments. Apart from understanding spectators' interests and motivation, the club managers and marketers must investigate the factors to fascinate spectators (Kim et al., 2013). Regarding the potential ability of sport in income generation and early return of capital, Lee et al. (2008) believe that organisations and sports clubs should provide grounds for attracting and increasing new spectators by designing strategic programs focused on spectators in addition to retaining previous spectators. Given such extensive and inclusive popularity, providing high quality services is reckoned significant in spectator sports management (Yoshida, 2017). In this regard, previous studies have often revealed the association of high quality services received by this population with positive spectator-related outcomes, including increased perceived value, satisfaction and behavioural intentions measured in the spectators toward their teams (Moreno et al., 2015; Theodorakis et al., 2013). Therefore,

tendency to perform a particular behaviour and evaluate it among sports spectators to understand whether the mentioned relationship between the spectator and the related team is going to continue in the future is reckoned to be crucial and make more revenue (Yoshida and James, 2010). As further matter, chain theory suggests that consumers consider evaluations of their desired service quality (such as players' superior performance and stadium atmosphere) as a means to achieve their expected outcomes, including strong sustainable commitment (Biscaia et al., 2021). Accordingly, researchers have repeatedly examined three outcome variables related to service quality, including perceived value, consumer satisfaction and behavioural intentions (Byon et al., 2013).

A review of previous studies confirms that the overall quality of sporting events includes the quality of access, the quality of sports stadium and the quality of the sporting event itself. Moreover, satisfaction is deemed the main component and ultimately, the further attendance of spectators is given a significant place among such main components (Moreno et al., 2015). In fact, this discussion is not just about providing services with high quality as what has greater importance in this regard is spectators' perception of the gained value against the costs affecting the spectator attendance at the stadiums. This concept has attracted the attention of many researchers in the field of marketing management under the title of 'perceived value or value for customers'. Thus, one of the variables that have been proposed as a result of the success in sports services is the perceived value, but shortcomings are evidently felt in collecting all the information about the perception of spectators as its outcomes are discussed to be evaluated (Hervás et al., 2020). For such reasons, perceived value has attracted the deep attention of involved researchers in recent years. Given such an interest, perceived value has been defined in different ways. One of the mostly used definitions is the overall consumer assessment of the usefulness of a product or a service based on perceiving what is received and what is offered (Zeithaml, 1988).

The value concept for customers is nowadays considered as a central core in business. Perceived value can be considered as a source of long-term competitive advantage for companies if conceptualisation, measurement and analysis are appropriately done and then become future company activities. Understanding the importance and nature of created value, communicating and presenting services to customers are crucial to change this knowledge into long-term and sustainable success in business (Stępień, 2017). It seems that constructing a measurement tool for perceived value can play an important role so that organisations can achieve their goals. Hence, marketing managers are encouraged to control strategies related to optimal value through customers in order to promote and enhance their long-term success [quoted by Demirgünescedil, (2015), p.6]. Rahi (2016) have defined the customers' perceived value as a customer assessment process from what they have paid in return for what they have received [quoted by Rahi, (2016), p.1].

In general, perceived value is determined as a judgement or assessment by the customer through comparison between the benefits gained from a product, service, communication, losses or costs (Zithamel, 1988). To survey the concept of perceived value in customers, two basically conceptual and dimensional approaches can be identified. The first approach (conceptual approach) identifies perceived value structurally with the two factors of received benefits (economic, social, and relational) and paid costs (price, time, effort, risk, and ease of use) (Cronin et al., 2000). Kotler and Keller (2012) have defined perceived value as the difference between the overall benefits

and services of a product. They believe that the overall benefits of a product include the total product benefits, product services, personalised benefits of purchasing and using products, and product brand benefits, and the overall costs of a product include the total costs of purchasing and using a product and its brand benefits. Moreover, the overall costs of a product include the total financial, time, physical, and psychological costs for the customer.

Today, perceived value is evidently considered as an important factor in predicting consumers' behavioural consequences (Baek et al., 2020) so that both academic researchers and marketing specialists have recognised the major impact of perceived value on consumer behaviour, and reckoned it as the heart of the marketing approach (Gallarza and Gil-Saura, 2006). Researchers have considered perceived value as a key variable in their studies as Moon et al. (2013) stated that there is a close relationship between perceived value and satisfaction and future intentions, and it predicts future intentions better than satisfaction (Calaboing et al., 2015). As a further matter, since the number of sports events and competitions continues to increasingly grow in many communities, it is becoming promptly important for organisers to improve spectators' perception of value in order to sustain their competitive fortunes, and build loyal relationships. Initially, sports organisers have little effect on spectators' identity or their emotional relationship with sport, but they can make and reflect unique and creative concepts of the event, thereby increasing perceived value and attracting more spectators (Snelgrove et al., 2019). Hence, managers need to focus on the value of the services they provide because negligence in this regard can have adverse consequences for sports; it could be stated that decrease in attendance at games in various sports has been caused in recent years by a form of such negligence. For example, more than 60% of NBA teams reported a drop in attendance or non-attendance of spectators (Lachowetz et al., 2001). Moreover, Solomon (2016) reported that spectators' attendance has been declining in great football colleges in recent years. In 2015, for instance, it decreased by 3% as compared to the previous year, and totally decreased by 14% compared to the previous year (Harrolle et al., 2010). According to the mentioned topics, it seems that making a tool to measure and identify dimensions of perceived value can play a significant role in realising the goals and ideals intended by many clubs and sports organisations to increase the audience. According to this point of view, perceived value deemed as a multidimensional variable helps specific information similar to perceived quality could be gathered, and allows negative dimensions to be also included so that more elements to be judged are thereby considered to understand consumers' behaviour (Gallarza and Gil-Saura, 2006). However, a limitation observed in the present study is that most of the scales used to measure perceived value are one-dimensional (e.g., Calabuig et al., 2010), and do not sufficiently reflect the nature of the sports experience (Kunkel et al., 2017; Kunkel et al., 2017). For example, Hightower et al. (2002) consider the perceived value scale to include five dimensions that focus solely on the cost-effectiveness received by consumers from services in a baseball game. Calabuig et al. (2010) also used a one-dimensional scale to measure value perceived by sports spectators, focused on the relationship between price and quality. Furthermore, Cronin et al. (2000) used different scales containing two items to measure perceived value; one relating to the overall value of the facility services and the other relating to the relationship of self-devotions which one makes to receive services and satisfaction.

In addition, in the latest research conducted by Konkel et al. (2017), they developed consumers' perceived value of multidimensional sports to five dimensions, including

functional, economic, social, cognitive and emotional ones. Also, Hervás et al. (2020) explored the perceived value in sports events, and showed that social value, performance value, entertainment value, price and monetary value, perceived risk value, value of time and effort are six factors of perceived value in sports events. As observed, however, all of these scales have been proposed based on the price/service ratio, and do not provide useful information by which specific aspects of perceived value among football spectators can be improved. Moreover, even in the field of sports in general, especially among football spectators, multidimensional scales to measure perceived value are scarce. Research to date has preferred to use one-dimensional conceptualisation of perceived value. This fact means an opportunity for more works, which encompasses a wider range of areas that contribute to consumers' perceived value in the field of sports (Kunkel et al., 2017).

Finally, in sports marketing, football spectators as customers are considered one of the ways to earn revenue, and identifying components of spectators' perceived value can play a major role in this revenue generation. Accordingly, more than one million spectators went to the stadium for each match of the 20 European football teams from 2002 to 2007, of which some 1.1 billion of match day revenue were generated as economic income taken into account. Moreno et al. (2016) also found that perceived value is the best predictor of viewers' satisfaction and their future goals. The importance of perceived value has been considered in various marketing scientific and research works in recent years because assessing spectators' perceived value can provide useful information to ensure the success of a sporting event, and can help organisers implement various marketing strategies improving their perception. Moreover, the concept of perceived value can be effective in clarifying the behavioural decisions of consumers, including football spectators.

Considering the gap observed in the related literature in terms of multidimensional scales of perceived value among football spectators, the present study is aimed to determine certain components of football spectators' perceived value that provide football managers and officials with information to improve sports events, and ensure their sustainability. Few studies on multidimensional value have been found among football spectators, which make it necessary to conduct the present study, and compare it with studies in other fields in the sports marketing of services and sports services.

In this research, the Kotler and Keller (2012) approach was used as the main basis. On one hand, it should be reminded that perceived value is not merely meant as acquisition of true value, but it is what the customer perceives, and this perception may differ from reality. What customers perceive is very effective in their behaviour and performance, and in fact, forms their actions. Therefore, the attention of the world's football trusted organisations to spectators' perceived value has paramount importance because they determine their performance and this performance plays an active role in the profitability and prosperity of football.

2 Materials and methods

2.1 Participants

All the spectators in the Iranian Football Premier League who attended the Azadi Stadium were included the population of this study. It should be noted that the number of

sample in the factor analysis method is determined on the basis of the number of items (at least twice and up to ten times the number of items) [Kline, (2011), p.58]. Therefore, 610 spectators of the match of Perspolis and Esteghlal teams in Tehran (Iran's the most famous derby) were selected as a sample of research based on non-random sampling method (according to willingness to complete the questionnaire).

2.2 Procedure

The present study was aimed to develop and validate a tool to measure the perceived value of the spectators of Iranian football premier league; therefore, it was conducted with a quantitative approach. It should be additionally noted that quantitative research involves identifying data and analysing them in order to measure individuals' knowledge, understanding, perception, or opinions of and about a phenomenon. Having reviewed academic books and numerous scientific articles as well as performed interviews with experts and stakeholders (sports management professors, marketing managers and spectators), a list of the most important variables related to the perceived value of football spectators was provided, and these listed variables were recognised to be valid in terms of scientific documentation and in terms of number, as they were the most repetitive and emphasised in related articles. Therefore, 61 items were identified based on spectators' perceived value. Having extracted these items and obtained the specialised opinions of the group of experts (ten faculty members of sport management) about the face and content validity of the questionnaire and making corrections, the final questionnaire with five-point Likert scale (one = completely disagree; two = disagree; three = no opinion; four = agree; five = completely agree) was conducted. Afterwards, in a preliminary study, the reliability of the questionnaire was estimated using Cronbach's alpha coefficient $(\alpha = 0.827)$. Finally, the questionnaire in two parts involving the demographic and the main part of the questions (perceived value of spectators), was distributed among the samples.

2.3 Statistical analysis

To analyse the data, the SPSS and AMOS were used. The raw data obtained from the questions were analysed using descriptive statistics such as frequency. Moreover, in order to analyse the construct validity, the exploratory and confirmatory factor analysis of the first and second orders was used.

2.4 Results

According to the number of questionnaires' items and the spectators' conditions as attending the stadium, 610 questionnaires were distributed among samples. Having deleted incomplete questionnaires, 482 questionnaires were analysed. Accordingly, the return rate of the questionnaires was 79.1%. The demographic information of the research samples is shown in Table 1.

Using exploratory factor analysis with varimax rotation, the variables determining the main factors of the perceived value of the spectators of the Iranian Football Premier League were specified. In this method, some of the invalid variables were deleted and the remaining cases were classified into related factors. In addition, the statistics of the KMO and Bartlett Tests shows the adequacy of the sample and the appropriateness for

conducting factor analysis. In this regard, the KMO varies between zero and one, and values greater than (0.7) are considered as an acceptable level, and indicate the fit of the data to analyse the exploratory factor. It is worth noting that the amount of KMO's statistics for this research was equal to (0.703). Moreover, it should be noted that the significance of the Bartlett test in the level (0.05) was deemed to be another indication of the data suitability in performing exploratory factor analysis (Table 2).

Marital status	Single	333	69.4
	Married	147	30.6
Age	18 to 33 years old	335	69.8
	34 to 49 years old	65	13.5
	Older than 50 years	80	16.7
Education level	Diploma	97	20.2
	Associate degree	160	33.3
	Bachelor	178	37.1
	Master's degree and higher	45	9.4
Annual attendance at stadium	Once a year	23	4.8
	2 to 5 times a year	95	19.8
	6 to 9 times a year	140	29.2
	9 to 17 times a year	111	23.1
	More than 17 times a year	111	23.1
Table 2 Bartlett test results			
Bartlett test statistics	DF	Р	
1,744.918	1.830	≤ 0.001	

 Table 1
 Demographic statistics of the sample

Hair et al. (2006) suggest that the factor loadings of the exploratory factor analysis calculated above 0.40 are acceptable results of the exploratory factor analysis showed that 35 out of 61 research questions regarding the spectators' perceived value in terms of factor load which was reckoned equal to or greater than 0.40 were classified into eleven factors. The factor load of these areas varied from 0.874 to 0.40 (Tables 3 and 4). In addition, 11 known factors explain the 80.27% of the variance in the spectators' perceived value in this study.

In this section, the results of the assumed model fit indices in the whole sample including, the index of chi-square on the degree of freedom (χ^2/df), the comparative fit index (CFI), the goodness of fit index (GFI), the adjusted goodness of fit index (AGFI) and root mean square error of approximation (RMSEA) were equal to 3.678, 0.869, 0.863, 0.821 and 0.086 respectively. According to the viewpoint of Meyers et al. (2016), the numerical value to be higher than 3 for the chi-square index on the degree of freedom (χ^2/df), the numerical value to be higher than 0.08 for the RMSEA Index as calculated less than 90% of CFI and AGFI emphasise the necessity to modify the hypothesised model aimed to increase its fit with the aggregated data. In order to correct the hypothesised model with covariance between the residuals of error, the reduction of the freedom degree and the value of Chi square are considered. Moreover, the questions of

each component that led in reducing composite reliability (CR) were deleted. Finally, this research modified model can be shown in Figure 1.

The results of the corrected confirmatory factor analysis of the scale, and the spectators' perceived value scale of Iran professional football league, are presented in Tables 3 and 4. According to Hair et al. (2006), if the load factor is more than 0.4, it can be acceptable. Based on the load factor, the confirmatory factor analysis standard to measure the power of the relationship between each factor (hidden variable) and its visible variables (questionnaire items) were above 0.4 in all of the cases. Therefore, the factor structure of the spectators' perceived value scale in Iran professional football league can be confirmed. Having calculated the standard factor load, a meaningful test should be made. Based on the results observed in Table 5, all of the factor loads are significant (p < 0.01).

Construct reliability means measuring the reliability degree and internal consistency of the measured variables that represent the hidden structure (Hair et al., 2016).

Factor	Item	λ	R^2	Eigen value
Product benefit	An appropriate and high-quality sitting place has been provided for me.	0.833	32.853	21.354
	Appropriate welfare and sanitary facilities have been provided for me.	0.571		
	Appropriate transportation services have been provided for me.	0.695		
	Cultural programs tailored to my spirit have been provided for me between the halves of the match.	0.817		
	I can see my favourite players closely.	0.581		
Services benefit	As with the stadium attendance, I enjoyed the financial benefits allocated to the members of the club's stadium fans (such as season free tickets).	0.632	10.101	6.566
	As with the stadium attendance, I enjoyed the motivational benefits of membership in the fan club (attending the exercises of favourite team).	0.628		
	As with the stadium attendance, access to information and resources, and close connection with the club granting membership in the fan club have been provided for me (being informed of the days of the exercises of favourite team,)	0.821		
Image benefit	As with the stadium attendance, I will have the sense of belonging and mental affiliation to the name and logo of a stadium.	0.689	8.488	5.517
	As a fan, I can show fanatical behaviours from myself.	0.805		
	I can experience the spirit of partnership and commitment to a social institution.	0.689		

 Table 3
 Factor analysis of the main questionnaire components in the benefit section

Factor	Item	λ	R^2	Eigen value
Psychological benefit	As attending the stadium and watching my favourite team, conditions to express excitements and positive and negative energies have been provided for me.	0.699	6.043	3.928
Psychological benefit	At the stadium, I can show my real character.	0.673	6.043	3.928
	Attending the stadium and watching my favourite team match, emotional attachment conditions to one or more specific players have been created for me.	0.687		
	The quality of the game and its process give pleasant and enjoyable feeling to me.	0.751		
	I am sympathetic to the critical situations created at the stadium. (I feel upset with the defeat of my team and feel happy with its victory).	0.766		
Personal benefit	As I am attending the stadium, I have enough fun and the conditions of spending leisure time have been provided for me.	0.816	5.007	3.254
	As I am attending the stadium, I have enough fun and the conditions of spending leisure time have been provided for me.	0.617		
Social benefit	By attending the stadium, I would get social and ethnic identity.	0.624	4.518	2.937
	As I am attending the stadium, the ground to learn social skills has been provided for me.	0.762		
	Attending at the stadium and watching matches have promoted my social reputation.	0.755		

 Table 3
 Factor analysis of the main questionnaire components in the benefit section (continued)

Furthermore, the structure reliability is measured using the CR. In other words, it can be said that the stability of the structure is good when the structural variables have a CR greater than 0.7 (Hair et al., 2016). The CR domain of the variable dimensions of the spectators' perceived value scale for the professional football league is between 0.701 and 0.842 in Iran, which indicates the appropriate structure reliability of the spectators' perceived value questionnaire in the Iranian professional football league (Table 6).

Convergent validity shows how a measurement has a positive relationship with the alternative measurements of the same construct (Hair et al., 2016). In fact, a convergent validity is established when a CR is higher than 0.7 and the amount of extracted variance (AVE) is greater than 0.5 as well as CR is more than the amount of extracted variances (Hair et al., 2016).

The amounts of variances extracted from the product, service and brand benefits, and the mental, personal and social benefits were calculated to respectively be 0.502, 0.501, 0.532, 0.516, 0.523 and 0.513. Also, the financial, time, mental, physical and social costs respectively were 0.522, 0.568, 0.558, 0.538 and 0.610. In fact, these amounts indicate that the extracted variance is higher than 0.5. Moreover, all the AVE values of the

spectators' perceived value questionnaire dimensions for Iran professional football league have been calculated to be less than the CR. Therefore, the convergent validity condition has been established.

Factor	Questions	λ	R^2	Eigen value
Monetary cost	The ticket price for matches is reasonable for me.	0.648	3.961	2.257
	The cost of transportation to watch matches is reasonable for me.	0.701		
	The parking cost to watch matches is reasonable for me.	0.832		
	The cost of foods and drinks is reasonable for me.	0.800		
Time cost	The time I spend going and coming backing the stadium is appropriate for me.	0.846	2.984	1.940
	The time taken to use a personal vehicle is appropriate for me.	0.646		
Psychological cost	As attending the stadium and watching my favourite team match, psychological pressures have inflicted me due to the lack of desired results.	0.724	2.256	1.467
	Attending the stadium has caused a negative mentality in me.	0.678		
	Attending the stadium has caused the sense of insecurity from the structure and safety of the stadium in me.	0.831		
Energy cost	As I am attending the stadium and watching my favourite team match, I'm hurt by the inappropriate structure and safety of the stadium.	0.881	2.108	1.370
	As I am attending the stadium and watching my favourite team match, I am hurt by the struggles related to side-events.	0.628		
	As I am attending the stadium and watching my favourite team match, I am damaged by lack of order and the incorrect management of spectators.	0.667		
Social cost	As I attend the stadium and watch matches, I may be negatively influenced by inappropriate behavioural patterns of players and coaches.	0.778	1.956	1.251
	By attending the stadium and watching my favourite team match, my social reputation is damaged.	0.737		
	Attending the stadium and watching my favourite team match cause social fears in me because of the bad result of my favourite team.	0.825		

 Table 4
 Factor analysis of main components of the questionnaire in the cost section

Fit indices	Observed values	Favourable values
Chi-square	873.250	-
Df	483	-
Chi-square/Df	1.736	Less than 2
RMSEA	0.039	Less than 0.05
GFI	0.930	Between 0.9 and 1
AGFI	0.921	Between 0.9 and 1
CFI	0.963	Between 0.9 and 1
NFI	0.921	Between 0.9 and 1
RMR	0.076	Less than 0.08
IFI	0.076	Between 0 and 1

 Table 5
 Fit indices of the second order confirmatory factor analysis model

Figure 1 The second-order model of standard estimation of the perceived value questionnaire for Iranian Football Premier League (see online version for colours)

Question no.2 0.833 Product benefit Question no.3 0.635 0.635 Question no.4 0.817 0.632 Question no.5 0.632 Services benefit Question no.7 0.628 Services benefit Question no.8 0.632 Services benefit Question no.8 0.632 Services benefit Question no.1 0.689 Image benefit Question no.13 0.669 Psychological benefit Question no.14 0.689 Psychological benefit Question no.15 0.677 0.731 Question no.16 0.687 Personal benefit Question no.24 0.624 Personal benefit Question no.25 0.733 Personal benefit Question no.24 0.648 Social benefits Question no.33 0.649 Monetary cost Question no.34 0.648 Social benefits Question no.35 0.724 Time cost Question no.34 0.649 Social benefits Question no.35			The second se
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In addition, Cronbach's alpha coefficient was used to examine the reliability or internal consistency of the tool, and the overall questionnaire reliability was gained $\alpha = 0.802$ based on Cronbach's alpha. Moreover, the reliability of each factor varied from 0.701 to 0.838. Accordingly, the obtained values indicate an acceptable level for instrument reliability and a relatively high correlation between the items of each agent. It is should be reminded that deleting each of those items does not increase the reliability of these factors. In Table 6, the alpha coefficient is analytically shown for each factor.

Factor	Number of items	Cronbach's alpha	CR	AVE
Product benefit	5	0.797	0.831	0.502
Services benefit	3	0.753	0.739	0.501
Image benefit	3	0.761	0.773	0.532
Psychological benefits	5	0.838	0.842	0.516
Personal benefit	2	0.704	0.701	0.523
Social benefits	3	0.820	0.758	0.513
Monetary cost	4	0.799	0.813	0.522
Time cost	2	0.732	0.721	0.568
Psychological cost	3	0.737	0.790	0.558
Energy cost	3	0.701	0.774	0.538
Social costs	3	0.759	0.824	0.610

Table 6Reliability statistics

3 Discussion and conclusions

Perceived value is deemed an essential variable to evaluate the sports consumer behaviour in order to increase spectators' future satisfaction and intentions. Nonetheless, there is a lack of multidimensional scales in the sports management field, which are to provide sports managers with sufficient specific information to be able to recognise certain dimensions of football spectators' perceived value. By identifying these multidimensional scales of perceived value in the field of sports competitions, therefore, more specific information about sports spectators' perceived value could be collected. In addition, such scales consider not only the benefits of the related positive aspects, but also the costs or negative elements, and they can provide very enriching information about sports spectators' perceived value.

This research has sought to identify the spectators' perceived value components with tool construction and credit acquisition for this purpose; hence, eleven factors, including product benefits, service benefits, brand benefits, psychological benefits, personal benefits, social benefits, financial costs, time costs, psychological costs, physical costs and social costs were extracted and verified through factor analysis. The first extracted factor which was the product-related benefits, explained the 32.853% of the variance of the spectators' perceived value.

The five items of this factor reflect the benefits that spectators expect from watching live football at the stadium. A suitable and high-quality sitting place that is the most basic need of spectators has been noticed in most studies. For example, Lenhart (2017) found out that the satisfaction of spectators was important because their further attendance

relied on this factor, and it was subject to the quality of facilities in order to meet their needs. Wakefield and Sloan (1995) also argued that entrance design, the stadium seats and waiting rooms can directly affect spectators' opinions and feelings. Appropriate welfare and sanitary facilities, appropriate transportation services, cultural programs tailored to the spirit of spectators and seeing their favourite players are considered as other items of product benefits, and some of these benefits are consistent with the conclusions of the research by Patton (2002) which identified factors such as recreational stadium activities, reasonable prices, ticket distribution methods, suitable weather, stadium design, and the availability of amenities and facilities for the presence of spectators from the University Football Association of the District 1 in the USA, and with the conclusions of Hall et al. (2010) who pointed out that if the spectators were satisfied with facilities such as availability and parking lots, they would more likely attend there again. Moreover, they have been consistent with some studies such as those conducted by Theodorakis et al. (2013) and Yoshida (2017).

Based on the results, the service benefits are considered to be the second factor with three items, which explains the 6.56% of the football spectators' perceived value, and they include the financial benefits allocated to the spectators who are of the membership in the stadium fan club, the incentive benefits of membership in the fan club, easy access to information, resources and close ties with the stadium for the members of the fan club, participation in club decisions, provision of extra services to non-attendance ticket buyers. Moreover, the spectators who attend the stadium more than one time and generally have the membership of their favourite team fan club benefit from these services. These benefits can include the subscribed tickets of competitions for the members of fan clubs, club gifts as bonus and financial advantage in fan clubs' drawings. Attending the training exercises of their favourite team and watching coach and player activities at the stadium for the members of the fans club, accompanying domestic and foreign trips with their favourite team in camps and outdoor competitions for the members of the fan club, participating in the club's decisions including: choosing the colour of the dress, flag and club manager, attending the celebrations and team meetings of their favourite team by the members of the fan club and so forth, are better to be included in such preferred benefits. However, in the studies carried out by Trail et al. (2003), only special discounts on tickets and gifts have been mentioned; moreover, Wakefield and Sloan (1995) demonstrated that loyalty to their favourite team was the most important factor in their return, and found out that loyalty to a team could increase through access to team members and ticket discounts.

The third factor confirmed by exploratory analysis was the brand benefits which with three items, explained the 5.51% of the variance of spectators' perceived value, and included the sense of belonging and mental affiliation to the name and address of a club, the appearance of the fanatical behaviours of the club fans, the spirit experience of partnership and commitment to a club. In this regard, Fanatical fans were spending the most cost on buying tickets for matches and other club products, and his research findings demonstrated the benefits of a club brand. Gallan et al. (2012) also pointed out that team affiliation had a significant role in increasing the spectator attendance at the stadium, and the findings of this study are consistent with those of researches. The suggestion in this regard seems to be the high level of spectators' affinity to their favourite team which can have a great impact on their perceived value; therefore, clubs should use motives that have strong links with the team identity to improve the attendance of spectators. One of the benefits that a spectator perceives from affiliation to a team and a brand is the experience of the spirit of partnership and commitment to their favourite team in its triumphs and results. In England, most of fans are in a situation that they can indirectly earn a lot of profits, such as the ticket provision of domestic and foreign competitions, and contribute to their club's economy which gives them the sense of partnership involved in the life of their club team. Another benefit to spectators from their club name is the appearance of fanatical behaviours such as wearing clothes in the colour and flag of the team; for example, in Spain a club named 'Real Madrid', a cemetery near the Santiago Bernabeu Stadium is bought and those who are buried there are the fans of Real Madrid, and even they choose the model and shape of their coffin before they die. This shows that the professional and successful clubs of the present era are taking steps in this field, and enter the lives of their fans more and more and in return, clubs also benefit from them.

The fourth factor confirmed in the general benefits of the spectators' perceived value was psychological benefits which, with five items, explained the 3.92% of the variance of football spectators' perceived value. These psychological benefits included evacuation of emotions and positive and negative energies, getting out of dramatic character framework and revealing real character, emotional attachment to one or more specific players, and enjoying the process of the game and empathy with the emotional situations created in the stadium. In most researches, the motivational and mental factor of spectators is the first factor of their attendance at the stadiums, and the results of the researches of Kim et al. (2009) confirm this matter. Based on such contents, Kunkel et al. (2017) in their research demonstrated that one of the dimensions of perceived value in sports is the emotional dimension, which can be consistent with the present study.

As a result, these motivations can be considered as the psychological benefits generated by spectators. In a study, Biscaia et al. (2012) explored the relationship between the feelings of the spectators and their satisfaction and the intention of behaviour in football matches, and during a poll through the sports sentimental questionnaire among the spectators of the Portuguese professional football league in eight games, assessed the feelings of 466 spectators. As a result, findings of this study demonstrate that the feeling of excitement of happiness has a positive direct impact on satisfaction as well as indirect impact on behavioural intentions through satisfaction. Personal benefits were considered as the fifth benefits identified in the general benefits of the perceived value of the spectators which, with two orders, explained the 3.25% of the variance in the perceived value of the football spectators, and included leisure time filling, the unique experience of watching live football, betting benefits, attending at the stadium along with friends and family in order to have fun. Spectators who enjoy spending their leisure time at the stadium are more likely to attend at other matches. Consistent with the present study, Cronin et al. (2000) revealed that the overall value of facility services and individualrelated sacrifices to receive services and satisfaction is one of significant perceived value dimensions.

Similarly, comparing the two Japan and Korea Leagues, Won and Kitamura (2006) showed that the motivation to get rid of routine daily life was the strongest predictor of the attendance of spectators in these two leagues. They suggested that the recreational aspect of the league should increase in order to attract more spectators considering the strong motivation to get rid of routine daily life. All of these cases are strong incentives for spectators to benefit from going to the stadium, and it seems that they can increase their perceived value by providing suitable conditions for recreation and enriching their

leisure time, and direct their own decisions to watch more matches at the stadium in the future. Furthermore, the present research results are consistent with those of studies conducted by Sweeney and Soutar (2001), Kunkel et al. (2017) and Hervás et al. (2020) who identified the social dimension as one of the significant dimensions of perceived value in sports.

Of the other components in the general benefit of the spectators' perceived value, social benefit was noticed with three items which explained the 2.93% of the variance in the spectators' perceived value, and it included the promotion of social interactions resulting from watching live football, the acquisition of racial identity by attending the stadium and social identity with the stadium attendance are considered as the promotion of the social reputation. One of other factors that were identified in the research of Won and Kitamura as the predictor of the attendance at the stadiums was social interaction. Correia and Esteves (2007) also found out that social variables, especially those related to identity formation, had particular importance. The social benefits include that spectators can talk days and hours about watching matches and live events, and can have the most interaction with different people; such a benefit can be rarely gained in any places. In his research, Techakittiroj (2015) examined the factors that influenced the attendance intention of Thai football fans in the Premier League Clubs. The results of this research showed that perceived pride and social reputation were effective factors influencing their attendance.

Perceived benefits are reckoned the advantages of perceived value, and if benefits increase, the perceived value of the customer will increase as well (Kotler and Keller, 2012; Patterson and Spreng, 1997; Moreno et al., 2015). But perceived costs are what we lose to have a product (Zitamil, 1998). In general, customers estimate the cost value of a product based on monetary value related to acceptable quality and quantity. If the perceived price is higher than the acceptable quality and quantity of the customer, the perceived value will be reduced. Price is an important variable in business markets as purchasing decisions are generally based on economic factors rather than emotional factors (Zitamil, 1998). In this research, the components of the perceived costs of the spectators have been identified, and they include financial, time, psychological, physical and social costs; the first four components matched with the Cutler and Clare diagrams, and social costs were identified for the football spectators.

According to Zitamil's (1998) definition, customers encode prices with methods that are meaningful to them. This means that in a business environment, customers may not always remember the true price of the product, but recognise the value of the product in the aspect of its revenue which can lead to a difference in the customer perceptions of the price. However, Teo says that a profit-oriented business should concentrate on reducing perceived costs rather than decreasing prices. In addition to value-related monetary costs, perceived costs include non-monetary costs such as time, energy, and psychological costs (Kotler and Keller, 2012). Petrick (2002) also identified time, effort, search costs, brand image, and convenience as non-monetary costs. Overall perceived costs including all non-monetary and monetary costs that a buyer faces such as purchase price, purchase cost, transportation, installation, order, relocation and repair, maintenance, purchase risk or risk of poor performance. There is no doubt that the most important part of a sporting event is the attendance of spectators at the stadium. Throughout the world, millions people spend their time, energy and money watching sports, and to show their passion for sport, they sometimes pass long distances to reach the venue and spend a large portion of their income on accommodation, provision of ticket, food and cost of parking. These researches generally acknowledge the components of financial costs and some of the time costs incurred by spectators to watch football at the stadium, and pay less attention to the rest of the costs expressed in Cutler and Claire's theory. These costs which generally may even have a greater impact on spectators' perceptions are classified as physical, psychosocial, social, financial, time, psychological, physical and social costs explained the 2.25, 1.94, 1.64, 1.37 and 1.25% of the variance of the spectators' perceived value respectively. In their study, Birim et al. (2016) attempted to validate a scale involving perceived value, satisfaction, brand value, and behavioural intentions associated with a college football team in the USA.

Ultimately they provided a questionnaire with 26 questions of which six questions were asked about perceptual values which included the financial cost and the benefits of the product.

The probable limitations of this study are related to the nature of the data. The data are merely based on the spectators' opinions that may be varied from one match to other according to results of game. So, the future researches would be planned by controlling the results of match.

Studies that have been so far carried out in relation to perceived value have focused on identifying its dimensions or have more focused on the area of the relationship of perceived value with other components such as satisfaction and the intention of spectator revisit, but the present study, by considering the perceived value of football fans, has provided a tool so that sports managers can use it to provide the best conditions for spectators at the stadium. It can be suggested that, due to research limitations, it is better to measure the perceived value of spectators during the season of competition in the future in order to be less affected by the outcome of match. In the end, it can be said that giving the credibility of this scale can have an important role in improving the management of sporting events.

References

- Babin, B.J., Darden, W.R. and Griffin, M. (1994) 'Work and/or fun: measuring hedonic and utilitarian shopping value', *Journal of Consumer Research*, Vol. 20, No. 4, pp.644–656, https://doi.org/10.1086/209376.
- Baek, W.Y., Kim, K.A., Kim, D.H. and Byon, K.K. (2020) 'The impacts of the perceived golf course brand globalness on customer loyalty through multidimensional perceived values', *Sustainability*, Vol. 12, No. 3, p.978, DOI: 10.3390/su12030978.
- Birim, B., Anitsal, M.M. and Anitsal, I. (2016) 'Perceived value, satisfaction, brand equity and behavioral intentions: scale development for sports spectatorship in US College Football', *Academy of Strategic Management Journal*, Vol. 15, No. 1, p.1.
- Biscaia, R., Correia, A., Rosado, A., Maroco, J. and Ross, S. (2012) 'The effects of emotions on football spectators' satisfaction and behavioral intentions', *European Sport Management Quarterly*, Vol. 12, No. 3, pp.227–242.
- Biscaia, R., Yoshida, M. and Kim, Y. (2021) 'Service quality and its effects on consumer outcomes: a meta-analytic review in spectator sport', *European Sport Management Quarterly*, Review Article | Published Online: 13 June, pp.1–25.
- Byon, K.K., Zhang, J.J. and Baker, T.A. (2013) 'Impact of core and peripheral service quality on consumption behavior of professional team sport spectators as mediated by perceived value', *European Sport Management Quarterly*, Vol. 13, No. 2, pp.232–263, https://doi.org/ 10.1080/16184742. 2013.767278.

- Calabuig, F., Burillo, P., Crespo, J., Mundina, J.J. and Gallardo, L. (2010) 'Satisfacción, calidad y valor percibido en espectadores de atletismo', *Int. J. Med. Sci. Phys. Act. Sport*, Vol. 10, No. 40, pp.577–593.
- Cision (2018) Spectator Sports Global Market Report 2018, New York, PRNewswire/Executive Summary, 3 October 2018 [online] https://www.prnewswire.com/newsreleases/spectatorsports-global-market-report-2018-300723870.html.
- Correia, A. and Esteves, S. (2007) 'An exploratory study of spectators' motivation in football', International Journal of Sport Management and Marketing, Vol. 2, Nos. 5–6, pp.572–590.
- Cronin Jr, J.J., Brady, M.K. and Hult, G.T.M. (2000) 'Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments', *Journal of Retailing*, Vol. 76, No. 2, pp.193–218.
- Demirgünescedil, B.K. (2015) 'Relative importance of perceived value, satisfaction and perceived risk on willingness to pay more', *International Review of Management and Marketing*, Vol. 5, No. 4, p.6.
- European Professional Football Leagues (EPFL) (2018) *European Leagues Fan Attendance Report*, Association of European Professional Football Leagues.
- Gallan, A.S., Jarvis, C.B., Brown, S.W. and Bitner, M.J. (2012) 'Customer positivity and participation in services: an empirical test in a health care context', *Journal of Academy of Marketing Science*, Vol. 41, pp.338–356.
- Gallarza, M. and Gil-Saura, I. (2006) 'Value dimensions, perceived value, satisfaction and loyalty: an investigation of university students' travel behaviour', *Tour. Manag.*, Vol. 27, No. 1, pp.437–452.
- Gustafson, M.W. (2005) *The Relative Importance of the Sports Cape in Football Game Attendance at a NCAA Division IA University*, PhD thesis, Texas Tech University, Texas, USA.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2006) *Multivariate Data Analysis*, 6th ed., MacMillion Publishing Company, New York, USA.
- Hall, J., O'Mahony, B. and Vieceli, J. (2010) 'An empirical model of attendance factors at major sporting events', *International Journal of Hospitality Management*, Vol. 29, No. 2, pp.328–334.
- Harrolle, M.G., Trail, G.T., Rodríguez, A. and Jordan, J.S. (2010) 'Conative loyalty of Latino and non-Latino professional baseball fans', *Journal of Sport Management*, Vol. 24, No. 4, pp.456–471, DOI: 10.1123/jsm.24.4.456.
- Hervás, J.C. et al. (2020) 'Perceived value in sporting events (PVSP): a further step for the strategic management', *Sustainability*, Vol. 12, p.5498, DOI: 10.3390/su12145498.
- Hightower Jr., R., Brady, M.K. and Baker, T.L. (2002) 'Investigating the role of the physical environment in hedonic service consumption: an exploratory study of sporting events', *J. Bus. Res.*, Vol. 55, No. 1, pp.697–707.
- Kim, J.W., James, J.D. and Kim, Y.K. (2013) 'A model of the relationship among sport consumer motives, spectator commitment, and behavioral intentions', *Sport Management Review*, Vol. 16, No. 2, pp.173–185.
- Kim, S., Andrew, D.P. and Greenwell, T.C. (2009) 'An analysis of spectator motives and media consumption behaviour in an individual combat sport: cross-national differences between American and South Korean mixed martial arts fans', *International Journal of Sports Marketing and Sponsorship*, Vol. 10, No. 2, pp.53–66.
- Kim, W.G., Jin-Sun, B. and Kim, H.J. (2008) 'Multidimensional customer-based brand equity and its consequences in mispriced hotels', *Journal of Hospitality & Tourism Research*, Vol. 32, No. 2, pp.235–254.
- Kline, R.B. (2011) *Principles and Practice of Structural Equation Modeling*, 3rd ed., Guilford Press, New York.
- Kotler, P. and Keller, K.L. (2012) Marketing Management, in Amir Jafari, M. (Ed.), Nas, Tehran.

- Kunkel, T., Doyle, J.P. and Berlin, A. (2017) 'Consumers' perceived value of sport team games a multidimensional approach', J. Sport Manag., Vol. 31, No. 1, pp.80–95.
- Lachowetz, T., McDonald, M., Sutton, W. and Clark, J. (2001) 'The National Basketball Association: application of customer lifetime value', *Sport Marketing Quarterly*, Vol. 10, No. 2, pp.181–184.
- Lee, M.J., Kim, S.S. and Lo, A. (2008) 'Perceptions of hospitality and tourism students towards study motivations and preferences: a study of Hong Kong students', *Journal of Hospitality, Leisure, Sports and Tourism Education* (Pre-2012), Vol. 7, No. 2, p.45.
- Lenhart, B. (2016) Analysis of Factors that Influence Satisfaction of Fans at Division II Basketball Games, Doctoral dissertation, Indiana University of Pennsylvania.
- Meyers, L.S., Gamst, G. and Guarino, A.G. (2016) *Applied Multivariate Research: Design and Interpretation*, 3rd ed., SAGE Publications, Inc.
- Moon, K-S., Ko, Y.J., Connaughton, D.P. and Lee, J-H. (2013) 'A mediating role of destination image in the relationship between event quality, perceived value, and behavioral intention', *J. Sport Tour.*, Vol. 18, No. 1, pp.49–66.
- Moreno, F.C., Hervas, J.C., Pomar, J.N., Valantine, I. and Butiene, I.S. (2016) 'Role of perceived value and emotions in the satisfaction and future intentions of spectators in sporting events', *Engineering Economics*, Vol. 27, No. 2, pp.221–229.
- Moreno, F.C., Prado-Gascó, V., Hervás, J.C., Núñez-Pomar, J. and Sanz, V.A. (2015) 'Spectator emotions: effects on quality, satisfaction, value, and future intentions', *Journal of Business Research*, Vol. 68, No. 7, pp.1445–1449, https://doi.org/10.1016/j.jbusres.2015.01.031.
- Patterson, P.G. and Spreng, R.A. (1997) 'Modelling the relationship between perceived value, satisfaction and repurchase intentions in a business-to-business, services context: an empirical examination', *International Journal of Service Industry Management*, Vol. 8, No. 5, pp.414–434.
- Patton, R. (2002) Factors Affecting Spectator Attendance at Men's NCAA Division One Soccer Games, A dissertation submitted to the faculty of the United States Sports Academy in partial fulfillment of the requirement for the degree of Doctor of Education in Sports Management Burlington, Vermont, July.
- Petrick, J.F. (2002) 'Development of a multi-dimensional scale for measuring the perceived value of a service', *Journal of Leisure Research*, Vol. 34, No. 2, pp.119–134.
- PwC (2016) 'At the gate and beyond', Outlook for the Sports market in North America through 2020 [online] https://www.pwc.com/gx/en/about/corporate-governance/networkstructure.html.
- Rahi, S. (2016) 'Impact of customer perceived value and customer's perception of public relation on customer loyalty with moderating role of brand image', *Journal of Internet Banking and Commerce*, April, Vol. 21, No. 2, pp.2–14.
- Scharf, E.R., Sousa, R.P.L., Sarquis, A.B. and Belz, E. (2016) 'A experiência e mais dez: Uma estratégia para vencer na Champions League', *Gestão & Regionalidade*, Vol. 32, No. 96, pp.21–34, https://doi.org/10.13037/gr.vol32n96.3461.
- Snelgrove, R. et al. (2019) 'Attracting spectators to youth sport events: the case of the international children's games', *Journal of Amateur Sport*, Vol. 5, No. 2, pp.138–159.
- Solomon, J. (2016) College Football Attendance in 2016: Crowds Decline for Sixth Straight Year, 16 December [online] https://www.cbssports.com/college-football/news/college-footballattendance-in-2016-crowds-decline-for-sixth-straight-year/ (accessed 28 July 2020).
- Stępień, B. (2017) 'In search of apprehending customers' value perception', *International Journal* of Management and Economics, Vol. 53, No. 1, pp.99–117.
- Sweeney, J.C. and Soutar, G.N. (2001) 'Consumer perceived value: the development of a multiple item scale', *Journal of Retailing*, Vol. 77, No. 2, pp.203–220.
- Techakittiroj, R. (2015) 'Factors affecting thai football fans' purchase intention towards Thailand's premier league club jerseys', *International Journal of Management and Applied Science (IJMAS)*, Special Issue 2, October, Vol. 1, No. 9, pp.153–158.

- Theodorakis, N.D., Alexandris, K., Tsigilis, N. and Karvounis, S. (2013) 'Predicting spectators' behavioral intentions in professional football: the role of satisfaction and service quality', *Sport Management Review*, Vol. 16, No. 1, pp.85–96, https://doi.org/10.1016/ j.smr.2012.05.004.
- Trail, G.T., Fink, J.S. and Anderson, D.F. (2003) 'Sport spectator consumption behavior', *Sport Marketing Quarterly*, Vol. 12, No. 1, pp.8–18.
- Wakefield, K.L. and Sloan, H.J. (1995) 'The effects of team loyalty & selected stadium factors on spectator's attendance', *Journal of Sport Management*, Vol. 9, No. 2, pp.153–172.
- Won, J-U. and Kitamura, K. (2006) 'Motivational factors affecting sports consumption behavior of K-league and J-league spectators', *International Journal of Sport and Health Science*, Vol. 4, pp.233–251.
- Yoshida, M. (2017) 'Consumer experience quality: a review and extension of the sport management literature', Sport Management Review, Vol. 20, No. 5, pp.427–442, https://doi.org/10.1016/j.smr.2017.01.002.
- Yoshida, M. and James, J.D. (2010) 'Customer satisfaction with games and service experiences: antecedents and consequences', *Journal of Sport Management*, Vol. 24, No. 3, pp.338–361, https://doi.org/10.1123/jsm.24.3.338.
- Zeithaml, V.A. (1988) 'Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence', *Journal of Marketing*, July, Vol. 52, No. 3, pp.2–22, DOI: 10.1177/002224298805200302.