

Determination of Importance Levels of Event Quality Dimensions According to Typologies Using AHP Method

Tipolojilere Göre Etkinlik Kalitesi Boyutlarının Önem Derecelerinin AHP Yöntemi ile Belirlenmesi

Research Article / Araştırma Makalesi

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Received / Geliş Tarihi : 17.03.2025
Accepted / Kabul Tarihi : 29.06.2025
Published / Yayın Tarihi : 30.06.2025

Ethical Statement / Etik Bilgilendirme
Ethical approval was obtained from the
Gazi University Ethics Commission's
decision dated 30.07.2024 and
numbered 13.

DOI: 10.53434/gbesbd.1638040

Abstract

This research aims to examine the degree of importance of fan typologies for the dimensions that constitute the quality of the event using the Analytical Hierarchy Process (AHP) method, which is one of the multi-criteria decision-making techniques. In the study, the survey model, one of the quantitative research methods, and criterion sampling, one of the purposeful sampling methods, were used to select the research group. The criteria of being a fan of a team and watching the match of that football team at least 3 times in the stadium in the 2023-2024 season were sought from the participants who would participate in the research. In this context, 476 football fans were included in the study. The "Fan Typology Scale" and "Sports Events Quality Scale" were data collection tools. Data were collected from the researchers face to face. Descriptive statistics, a two-stage hierarchical cluster analysis, and an analytical hierarchy process were used to analyze the data. According to the hierarchical cluster analysis, the fans were divided into four clusters. These clusters were named hooligan, fanatic, classic, and social fans. When the analytical hierarchy process was examined, it was determined that the importance levels were similar according to the fan typologies; the most critical dimensions were performance, entertainment, and access to the facility in all typologies, and the least essential dimensions were design and buffet dimensions. It can be said that these results are significant in terms of providing a guide for sports club managers to use their limited resources correctly.

Keywords: Football, Fan, Quality, Importance level, Fan expectations

Öz

Bu araştırmanın amacı, taraftar tipolojilerinin etkinliğin kalitesini oluşturan boyutlara yönelik önem derecesini çok kriterli karar verme tekniklerinden Analitik Hiyerarşi Süreci (AHS) yöntemi kullanılarak incelenmesidir. Nicel araştırma yöntemlerinden tarama modelinin kullanıldığı çalışmada araştırma grubunun seçiminde amaçlı örnekleme yöntemlerinden ölçüt örnekleme kullanılmıştır. Araştırmaya katılacak katılımcılarda, bir takımın taraftarı olma ve 2023-2024 sezonunda taraftarı olduğu futbol takımının maçını stadyumda en az 3 kez izleme ölçütleri aranmıştır. Bu kapsamda 476 futbol taraftarı çalışmaya dahil edilmiştir. Veri toplama aracı olarak, "Taraftar Tipolojisi Ölçeği" ve "Spor Etkinlikleri Kalite Ölçeği" kullanılmıştır. Veriler araştırmacılar tarafından yüz yüze toplanmıştır. Verilerin analizinde tanımlayıcı istatistik, iki aşamalı hiyerarşik kümeleme analizi ve analitik hiyerarşi süreci tekniği kullanılmıştır. Hiyerarşik kümeleme analizine göre taraftarlar dört kümeye ayrılmıştır. Bu kümeler; hooligan, fanatik, klasik ve sosyal taraftar olarak isimlendirilmiştir. Analitik hiyerarşi süreci incelendiğinde, taraftar tipolojilerine göre önem düzeylerinin benzer olduğu; önem derecesi en yüksek boyutların tüm tipolojilerde performans, eğlence ve tesise erişim olduğu, en az öneme sahip boyutların ise tasarım ve büfe boyutları olduğu belirlenmiştir. Bu sonuçların spor kulübü yöneticilerinin sınırlı kaynaklarını doğru kullanmaları için bir rehber sağlaması açısından önemli olduğu söylenebilir.

Anahtar Kelimeler: Futbol, Taraftar, Kalite, Önem düzeyi, Taraftar beklentileri

Introduction

Businesses are in intense competition to continue their activities. To be successful in a competitive environment, increasing customer satisfaction has become an essential strategic priority (Halıcı & Yetim, 2024). In cases where businesses cannot provide customer satisfaction, they may face the risk of losing customers. This situation, which is experienced in general companies, may not be explicitly experienced in sports clubs. The probability of fans leaving a sports club and moving to another club is generally lower than the risk of losing customers in other sectors. Fans rarely choose to change clubs, usually due to emotional ties and a sense of belonging. In addition, football clubs see fans as individuals who support their team regardless of the conditions (Salman, 2008). In such cases, it may lead club management to constantly ignore the need to monitor and improve fan satisfaction. However, even if the club does not make a team change, if the fans are not satisfied, the club may be affected financially and morally by this situation (Halıcı & Ötkan, 2024).

Fans who lose interest may decrease match attendance, negatively affecting matchday revenues, product sales, sponsorship agreements, and television broadcast revenues. Fan dissatisfaction affects not only the financial performance of the club but also morale. Considering the driving force of fans on team performance, empty stadiums can directly affect team performance (Halıcı, Karacif & Doğan, 2024; Kuyzu & Lökçü, 2019; Silveira, Cardoso & Quevedo-Silva, 2019). In addition, some fans prefer sports competitions for entertainment and socializing, which can lead fans to meet these needs in other entertainment sectors when their expectations are not met (Çimen, Halıcı & Aktaş, 2022; Fillis & Mackay, 2013). For these reasons, fan satisfaction is essential for sports club managers. Scientific studies (Kim, Ko & Rhee, 2024; Ko, Zhang, Catani & Pastore, 2011; Phonthanukitithaworn & Sellitto, 2018) also show that fans expect quality. In this regard, detailed scientific studies are necessary to measure fan satisfaction and develop improvement strategies accurately.

When scientific studies are examined, many national and international studies investigate fan satisfaction. These studies focus on what fans expect for the event and perceptions of quality elements (Calabuig-Moreno et al., 2016; Foroughi, Iranmanesh, Gholipour & Hyun, 2019; Halıcı & Çimen, 2021; Jones, Byon & Huang 2019; Ko et al., 2011; Wakefield, Blodgett & Sloan, 1996). In these studies, it was determined that in addition to the quality of team performance, physical elements such as buffet, design, seats, in-facility access, scoreboard, and complementary elements such as entertainment and buffet are also important. In addition, with the prediction that conducting quality studies based on a single type of fan would yield incomplete results (Halıcı & Yetim, 2024), scientific studies classifying fans in quality studies have been conducted and it has been determined that expectations and perceptions can vary according

to different fans (Halıcı & Ötkan, 2024; Halıcı & Yetim, 2024; Hunt, Bristol & Bashaw, 1999; Kearney, 2003; Quick, 2000; Sutton, McDonald, Milne & Cimperman, 1997). However, these studies analyze the current situation by measuring the expectations and perceptions of fans, in which quality dimensions are measured independently of each other. Therefore, although the results of these studies contribute to sports club managers' strategy for fan satisfaction, they cannot provide results on which is more important.

Considering that sports clubs have limited resources, knowing which elements are more important will contribute to efficiency in using limited resources. Club managers can create strategies by analyzing which areas they should prioritize. For example, suppose fans think seat comfort, access to the facility, and buffet services are more important than other quality elements. In that case, they can use club resources to increase the quality of these elements. Thus, they can increase the hit rate of the services provided.

The "performance" dimension, called the leading service, is expressed as the core product determining the quality of the event in many studies (Kim, Ko & Park 2013; Lee & Kang, 2015; Sutton et al., 1997). For some fans, the team's success may be much more important than the services provided in the stadium. In the study of Halıcı (2018), some fan opinions argue that other quality elements can be ignored if the team's performance is good. Although team success is significant for some fans, it is known that some fans perceive the matches as an event and that the high perception of quality of other services contributes to the audience's enjoyment of the event even if the score of the match is negative (Kuenzel & Yassim, 2007; Wakefield & Sloan, 1995; Zhang, Lee, Judge & Johnson, 2014). In addition, the lack of entertainment elements in football matches at the national level has been associated with low fan expectations (Halıcı, 2018; Mahony & Moorman, 2000). Based on these elements, comparing quality elements with each other and determining which elements are more important forms the basis of this study.

Considering that quality expectations and perceptions can vary according to fan types, in addition to knowing which elements are important, prioritization according to fan typologies is also necessary to reach more detailed results. For example, while classic and social fans with lower fan loyalty want fun events before the match and during half-time, supporting the team can motivate fanatic and hooligan fans. Determining the prioritization according to typologies will cause club strategies to differ according to each fan type. Thus, it may be easier for sports clubs to increase fan satisfaction with target-oriented marketing strategies. In light of this information, the fact that football fans have different quality expectations and that sports

clubs must respond to these expectations to ensure their sustainability necessitates prioritizing these expectations according to fan types, considering the limited resources of the clubs.

In this context, the study aims to determine the importance levels of fan typologies regarding the dimensions that constitute the quality of the event by using the Analytical Hierarchy Process (AHP), which is one of the multiple decision-making techniques.

Method

Research Model

The survey model, one of the quantitative research methods, was used in the design of this research. Karasar (2012) defined the survey model as "all the processes applied to describe a situation in the past or present as it is, for learning to take place and for the development of desired behaviors in the individual." A general survey model is the scanning conducted on the whole universe or a sample to reach a general judgment about the universe, which consists of many elements.

Research Group

The criteria sampling method, one of the purposeful sampling methods, was used to determine the research group. Criteria sampling is the study of all situations that meet predetermined criteria. The researcher creates the criterion, or a previously prepared list of criteria can be used (Marshall & Rossman, 2014). In this context, the criteria to be included in the research were sought from the participants to be a team fan and to have watched at least three matches of the football team they supported at the stadium in the 2023-2024 season. Individuals who attended 1 or 2 matches were required to have attended at least three matches due to the possibility of not being able to make sufficient observations about the stadium, affecting the perception of quality. The sample size table determined by Çiğrı (1994) was used to determine the sample group. In this context, at least 383 units represent the universe size of 100,000 with a 95% probability. In line with the methods and analyses performed, the research group consisted of 476 football fans. Descriptive information about the research group is presented in Table 1.

Table 1. Descriptive information about the participants

Variables	Categories	f	%
Gender	Female	136	28,6
	Male	340	71,4
Education	Primary school	21	4,4
	High school (studying)	38	8
	High school (graduate)	133	27,9
	Undergraduate (studying)	49	10,3
	Undergraduate (graduate)	188	39,5
	Postgraduate (studying)	20	4,2
	Postgraduate (graduate)	27	5,7
Watching a match in the stadium		Mean=10,2	
Age		Mean=32,0	

Data Collection Tool

The data collection tool was applied to the participants face-to-face. First, voluntary participation was taken as the basis, and the researchers informed the participants verbally and through the instructions in printed sources. The data collection process was completed in 45 days. The data collection tool of the research consists of 3 parts. The first section of the data collection tool includes descriptive questions. The demographic information form created within this scope consists of 4 questions, including age, gender, education status, and the number of matches watched in the stadium in the 2023-2024 season.

In the second part of the data collection tool, the "Fan Typology Scale" was used to determine the typologies of the fans. The Fan Typology Scale was developed by Halıcı and Yetim (2024). The scale consists of 7 dimensions: product use, watching behavior, sensitivity to the score, tendency to violence, following, information collection, and belonging. The related study stated that the factor loadings of the items varied between 0.43 and 0.83 as a result of Exploratory Factor Analysis (EFA). It was noted that the subdimensions explained approximately 60% of the total variance. As a result of confirmatory factor analysis (CFA), it was reported that the Root Mean Square Error of Approximation (RMSEA) value of the current structure was 0.061, and other goodness-of-fit indices were at an acceptable level. It was stated that the Cronbach's alpha values of the subdimensions ranged between 0.751 and 0.908. The Fan Typology scale is rated on a five-point Likert type (Always-Never).

After determining the fan typologies, the Analytic Hierarchy Process (AHP) technique, developed as an estimation and decision-making technique, was used to determine the importance levels of the event quality dimensions. Analytic Hierarchy Process (AHP) is a decision-making method individuals and organizations use to rank the alternatives they consider based on pairwise comparisons (Saaty, 1977). AHP is a measurement theory based on priority values from pairwise comparison of specific criteria and/or alternatives (as cited in Yılmaz, Özgüven, 2011). In order to use the AHP method, the event quality dimensions were first determined. In this context, the dimensions used in the Sports Event Quality Scale (SEQS) developed by Çimen et al. (2022) were included in the study. The scale has 10 dimensions: design, buffet, output, performance, fan-fan interaction, fan-employee interaction, facility access, in-facility access, seat, and entertainment. However, the output quality, which means the general evaluation after the activity, was not included in the study because the researchers thought it would not be appropriate to compare it with other dimensions. In this direction, nine dimensions were included in the study and designed by the AHP method. Fans were asked to compare each dimension with another to determine which paired comparisons were more important. Then, fans were asked to score from 1 to 9 (1 Equally Important - 9 Very Important) to determine how important their choice was compared to the other dimension.

Table 2. Sample representation of the data collection tool created with AHP

Which dimension is more important to you?		Please mark the level of importance								
		1	2	3	4	5	6	7	8	9
More important	More important									
Access to the facility	Design									
Access to the facility	Buffet									
Access to the facility	Entertainment									
Access to the facility	Performance									
Access to the facility	Fan-employee interaction									
Access to the facility	Fan-fan interaction									
Access to the facility	In-facility access									
Access to the facility	Seat									

Data Analysis

A total of 491 fans were reached in this study to determine the event quality of fan typologies. The obtained data was first transferred to the digital environment without any intervention. Afterward, 15 missing, incorrect forms that created an extreme value problem in the data set were not included in the analysis using data review and cleaning methods. The research was conducted on 476 data with this cleaning method.

Two methods were used to analyze the data within the scope of the research. These methods were two-stage hierarchical cluster analysis and analytic hierarchy period (AHP) technique.

A two-stage hierarchical cluster analysis was used to reveal fan typologies. One of the cluster analysis methods, two-stage hierarchical cluster analysis, as defined by Ceylan, Gürsev and Bulkan (2017), is “a hybrid clustering technique formed by combining the non-hierarchical clustering techniques “k Means” and the hierarchical techniques “Ward’s Least Variance.” Dalmaijer, Nord and Astle (2022) stated that each cluster should have at least 30 participants. In this context, it was determined that the data collected from 476 fans was sufficient to apply the two-stage hierarchical clustering analysis.

Within the scope of the research, the Analytical Hierarchy Process (AHP) was used to create an alternative in determining the event quality dimensions according to the fan typologies. In this context, the data obtained from the fans were transferred to the Excell program. The fans' answers were first normalized

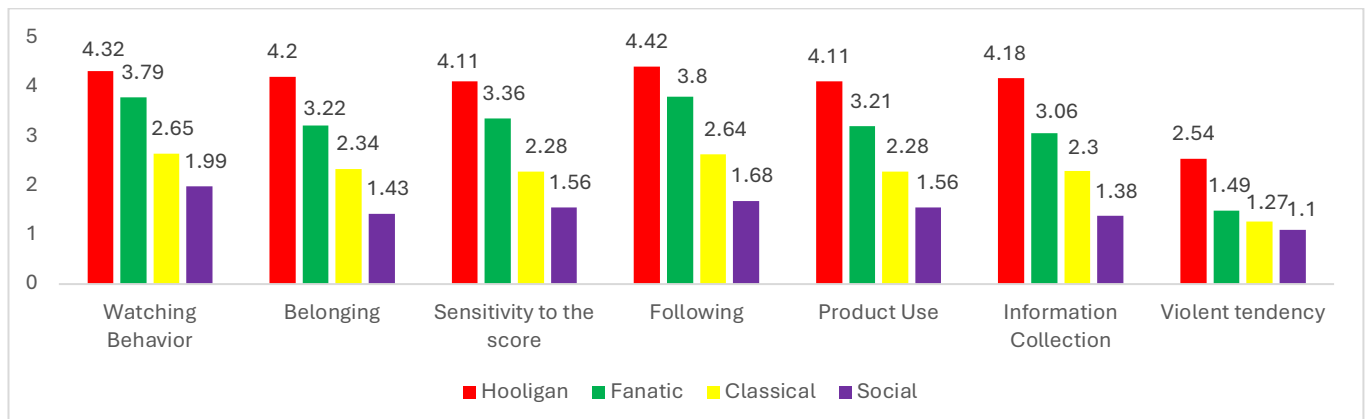
with pairwise comparison matrices. Consistency was calculated for each participant, and it was determined that the consistency rates were lower than the value of 0.10 determined in the literature (Saaty, Vargas & Dellmann, 2003). Then, the criteria weights of the participants were determined. The determined criteria weights were brought together, and the average weights were taken.

Ethics Statement

This research was initiated by Gazi University Ethics Commission’s decision dated 30.07.2024 and numbered 13, with approval that there was no ethical objection.

Findings

This section will present the fan typologies resulting from the cluster analysis and the findings revealing the importance levels of these typologies regarding event quality dimensions. Firstly, a two-stage clustering analysis was used to examine how many clusters the fans were grouped under the dimensions of product use, sensitivity to the score, watching behavior, violence tendency, information collection, belonging, and following. Accordingly, when the coefficients were analyzed, the Euclidean difference showing the distance between the cluster coefficients of 476 participants revealed four clusters. These clusters are named hooligan, fanatic, classical, and social based on the literature and expert opinion. The average scores regarding the distributions of the clusters are shown in Figure 1.

**Figure 1.** Mean score distributions of the clusters for the dimensions

When Figure 1 is analyzed, it is determined that the averages of hooligan and fanatical fans are higher than the averages of classical and social fans.

Table 3. Importance weights for event quality dimensions of all fan typologies

	Hooligan	Fanatic	Classic	Social
Performance	0,16	0,17	0,17	0,14
Access to facility	0,15	0,14	0,17	0,15
Entertainment	0,14	0,13	0,16	0,14
Seat	0,12	0,13	0,14	0,12
In-facility access	0,10	0,11	0,9	0,11
Fan-employee interaction	0,8	0,9	0,8	0,10
Fan-fan interaction	0,12	0,10	0,8	0,10
Design	0,7	0,8	0,6	0,7
Buffet	0,6	0,5	0,5	0,6

When the Table 3 is examined, it is evident that the most important dimensions ensuring event quality across different fan typologies exhibit both consistency and variation. For hooligan, fanatic, and classic fans, performance and access to the facility emerge as the most critical dimensions, while design and buffet are consistently rated as the least important. Similarly, for social fans, access to the facility, performance, and entertainment are identified as the most important dimensions, with design and buffet again ranking lowest. Overall, considering all fan typologies together, performance and access to the facility stand out as the most important dimensions ensuring event quality, whereas design and buffet remain the least important aspects.

Discussion

When the importance levels of the quality of the event were examined according to the typologies, it was determined that the "performance" criterion representing the "performance of the team and the athletes" came first. Regarding this dimension, which is also called game quality in the literature (Ko et al., 2011), and Kelley and Turley (2001) determined that the most essential element in service quality perceptions is game quality. Many studies support these findings (Kim et al., 2013; Ko et al., 2011; Lee & Kang, 2015; Phonthanukitithaworn & Sellitto, 2018). In addition to the studies conducted on a single type of fan, when the studies classifying the fans are examined, there is evidence that reveals the importance of the expectation of performance quality in the satisfaction of fans with high team loyalty (Quick, 2000; Salman, 2008). In this context, it can be said that the performance quality of hooligan and fanatic fans with high team loyalty obtained in the study is an expected result. However, it can be said that it is an unexpected result that classical and social fans, who are less committed to their team and less sensitive to the score, prioritize the performance dimension. Although some results indicate that fans with lower team loyalty prioritize the performance criterion (Kim, Rogol & Lee, 2022), studies indicate that fans focused on socialization and entertainment put performance in the background (Halıcı &

Yetim, 2024; Sutton et al., 1997). Although it contradicts the typology literature, the fact that performance is the main element can be associated with stadium occupancy rates. An increase in team performance can cause stadiums to fill up. Studies in the literature show that team success is related to stadium occupancy rates (Kuyzu & Lökçü, 2019; Silveira et al., 2019). A decrease in team performance can cause the number of fans in stadiums to decrease. In the study by Özgen (2015), 73.8% of the fans stated that the occupancy rates in the stadiums decreased due to the low quality of the football played. The increased and decreased stadium occupancy rates may be due to classical and social fans. Although studies show they are less sensitive to the score than other fans (Halıcı & Yetim, 2024), classical and social fans may have moved away from the stadiums due to poor team performance and insufficient other quality elements. Hooligan and fanatic fans, who have high team loyalty, may not be affected by the team performance, even if it is poor, due to their sense of belonging to the team, and may continue to support their team in the stadium. However, as the literature states, sports managers have limited control over performance (Foroughi, Mohammad Shah, Nikbin & Hyun, 2014; Halıcı & Yetim, 2024; Kelley & Turley, 2001; Phonthanukitithaworn & Sellitto, 2018; Zhang et al., 2014). Many variables affect the team's or the athlete's performance, and many elements are not under control, such as climate conditions, opponents, and referees. As stated in the literature (Foroughi, Nikbin, Hyun & Iranmanesh, 2016; Silveira et al., 2019), sports managers need to focus on other service areas they can control rather than elements such as performance, which have limited control.

In addition to performance, another dimension that comes to the fore in quality expectations is entertainment. Although it is frequently preferred in measurement studies in the international literature (Kim et al., 2013; Yoshida & James, 2011), it is less preferred as a factor determining the quality of the event in the national literature (Çimen et al., 2022). The literature provides much evidence that the primary motivation sources of fans with lower team commitment are entertainment and socialization rather than supporting the team and,

therefore, expect more entertainment (Funk, Mahony & Ridinger, 2002; Halıcı & Ötcan, 2024; Halıcı & Yetim, 2024; Kim et al., 2022; Lough & Kim, 2004). The research results also show that classic and social fans attach high importance to the entertainment dimension. In this direction, these findings reinforce the evidence from the literature. Due to this expectation, these fans must organize entertaining activities before the match and during half-time. It can be said that the failure to meet this expectation of social fans, whose primary motivation is entertainment, causes their commitment to the team to be less than others. However, considering that the primary motivation of hooligan and fanatic fans with high team commitment is to support the team and performance, it can be said that the emphasis on the entertainment dimension is an unexpected result. These results may indicate that the fans' expectations have started to change due to entertainment elements that have a limited number of equivalents at the national level but have started to be used frequently in the international arena. Considering that one of the reasons why hooligan fans exhibit violent behavior is negative match scores, as stated by Halıcı and Yetim (2024), bringing entertainment elements to the forefront may allow these fan groups to be less affected by the score. Thus, the tendency of this fan group to violence may be reduced, and they may be transformed into fanatic fans. In addition to these inferences, these findings may have emerged due to the different perceptions of the concept of entertainment stated in the study by fanatic and hooligan fans. The "entertainment" dimension included in the study covers the activities carried out by the club before the match and during half-time. The fans participating in the study may have perceived entertainment as the atmosphere they created, such as choreography and cheering, rather than the shows presented by the club.

In addition to the performance and entertainment dimensions, access to the facility has been determined to be among the most important in all fan typologies. Many studies show that access to the facility quality affects fans' expectations (Foroughi et al., 2019; Ko et al., 2011; Wakefield & Blodgett, 1996). However, it is remarkable that the quality of access to the facility is more important than quality elements such as seats, In-facility access, fan-fan interaction, fan-employee interaction, design, and buffet for all types of fans. This result shows that fans should take precautions regarding access to the facility to the stadium regardless of their loyalty to the team.

It can be said that seat quality perception is of average importance in all fan types. Although there are scientific studies in the international literature that seat comfort affects the perception of quality (Dhurup, Mofoka & Srujalal 2010; Foroughi et al., 2019; Yusof & See, 2008), some studies in the national literature have determined that seat comfort does not affect the quality process (Argan, Özgen & Koç, 2018). Especially since our country's fans usually watch the matches standing, they may not have expectations regarding seat comfort. In fact, in the study by Halıcı and Çimen (2021), most of the fans stated that

they had no expectations regarding seat comfort and that seats should be without seats. When the results in the literature are examined, it can be said that although it is thought to be the dimension with the least importance level, the results obtained from the study do not show parallelism with the national literature, as the results are at a medium importance level. Although these results are considered normal for classical and social fans, it can be said that it is an unexpected result that they are at a medium level of significance for fanatic and hooligan fan groups with high viewing behavior averages, including standing and cheering. These results show that scientific research on seat quality should be increased for fanatic and hooligan fans.

There are many studies indicating that the services provided in areas where fans can purchase food and beverages within the stadium affect the quality perceptions of the fans (Bulgurcuoğlu, 2014; Çimen et al., 2022; Gençer, 2005; Ko et al., 2011). However, although the study results show that buffet quality affects the quality of the event, it shows that buffets have the least importance compared to other dimensions. This situation is expected since buffet services are also described as complementary in the literature (Ko et al. 2011; Wakefield and Sloan, 1995).

Conclusion

As a result, the study determined that the importance levels are similar according to the fan typologies; the most important dimensions are performance, entertainment, and transportation in all typologies, and the least important dimensions are design and buffet. It can be said that the importance of the entertainment dimension is particularly high in all types of fans, which is an important finding in terms of contributing to the literature. It can also be said that the performance quality, described as the leading service in the literature, is the most important quality element for classical and social fan types with higher socialization and entertainment motivation, which is a remarkable finding. It can be said that these results are significant in terms of providing a guide for sports club managers to use their limited resources correctly.

Practical Implications

These results show that all fans attach great importance to the performance quality. However, it is difficult for sports club managers to control team performance due to many factors, such as climate conditions, opponents, referees, etc. Poor performance can have devastating effects, especially for fan types sensitive to the score, such as hooligans and fanatic fans. However, despite its destructive effects, high commitment will cause these fans to continue watching the matches. However, poor performance may cause classic and social fans to leave the stadiums. Therefore, it would be a logical strategy for sports clubs to invest in an enjoyable game approach and a quality game system to create long-term fan satisfaction. It is thought

that it is a significant finding that all fan types attach great importance to the entertainment dimension. In order for fans to increase their match experience, the number of pre-match and half-time events such as concerts, competitions, and fan zone applications to be organized by the club should be increased. Including the entertainment element can increase the participation of classic and social fans in matches. In addition, sustainable fan participation can be achieved by ensuring that fans with high score sensitivity get out of their win-lose-focused mindset. Considering that one of the reasons for violence by hooligan fans is negative match scores, entertainment-oriented activities of clubs can contribute to reducing the violent tendencies of hooligan fans. Events such as pre-match and half-time competitions may have limited effect on hooligan and fanatic fans. Elements such as choreography, sound, acoustics, and lighting systems that will improve the atmosphere of the stands can be targeted. Another dimension that has a high level of importance according to typologies is the transportation dimension. Since fanatic and hooligan fans are the fans who watch the most matches and go to away games, the club can make organizations for both home and away games to ensure the continuity of these habits. In addition, parking services must be problem-free to ensure the participation of all typologies. However, since expanding the parking area after the construction of the stadium will be challenging, the parking problem can be eliminated by agreements with surrounding parking lots.

Limitations

The developed scale designed for fans watching the match in the stadium. However, different types of fans may be loyal to their team at different levels, even if they do not watch the match in the stadium. For this reason, future studies can reveal fan types without looking for criteria for watching matches in the stadium. In this study, comparisons between dimensions were made using the AHP method. In future studies, criteria weights can be determined by using the pairwise comparison method in the items that make up the dimensions. In addition, the relatively long data collection tool prepared with the AHP method may have tired the participants. Therefore, other comparison methods such as SWAR, which is shorter than the AHP method, may be preferred.

Author notes

This study was presented at the 22nd International Sports Sciences Congress held at Gazi University between 21-24th of November 2024.

Financial Resources

No financial support was received from institutions and/or organizations during the preparation and writing of this study.

Conflict of Interest

There is no conflict of interest among the authors regarding the publication of this article.

Author Contributions

Research Idea: AH; Research Design: AH, AK; Data Analysis: AH; Article Writing: AH, AK; Critical Review: AH

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