



Evaluation of Security Measures Taken in Stadiums from the Perspective of Spectators (Security in Sport Study)

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Abstract

The safety of the spectators watching the competitions in the stadiums is of great importance in terms of the security measures taken in the competition area. In this context, the aim of our research is to examine how the security measures taken in stadiums are evaluated by the spectators. The population of our research consists of fans in professional football league competitions in the 2022-2023 season. The sample group consists of a total of 1540 fans, 406 women and 1134 men, who were randomly selected from the universe and who voluntarily agreed to participate in our research. As a data collection tool, the personal information form created by the researchers and the "Security in Sport Scale" were used to measure the evaluation of the security measures taken in the stadiums by the spectators. As a result of the normality analysis of the scale and its sub-dimensions, it was determined that the significance values were $p > 0.05$ and accordingly, nonparametric tests (Mann-Whitney U Test, Kruskal-Wallis H Test) were applied. As a result, it was determined that gender, marital status, educational status, participation in away competitions, self-identification as a football spectator, responsibility for violence in stadiums and frequency of going to the stadium had statistically significant effects on the sub-dimensions of the scale and general security perception.

Keywords: Stadium, Security Measures, Spectators.

Stadyumlarda Alınan Güvenlik Önlemlerinin Seyirciler Açısından Değerlendirilmesi (Sporda Güvenlik Çalışması)

Özet

Stadyumlarda müsabakaları izleyen seyircilerin güvenliği, müsabaka alanında alınan güvenlik önlemleri açısından büyük önem taşımaktadır. Bu bağlamda, çalışmamızın amacı, stadyumlarda alınan güvenlik önlemlerinin seyirciler tarafından nasıl değerlendirildiğini incelemektir. Çalışmamızın evrenini 2022-2023 sezonunda profesyonel futbol ligi müsabakalarındaki taraftarlar oluşturmaktadır. Örneklem grubu ise, evren içerisinden rastgele seçilen ve çalışmamıza gönüllü olarak katılmayı kabul eden 406 kadın ve 1134 erkek olmak üzere toplam 1540 taraftardan oluşmaktadır. Veri toplama aracı olarak, araştırmacılar tarafından oluşturulan kişisel bilgi formu ile stadyumlarda alınan güvenlik önlemlerinin seyirciler tarafından değerlendirilmesini ölçmek amacıyla "Sporda Güvenlik Ölçeği" kullanılmıştır. Ölçek ve alt boyutlarına ilişkin normallik analizi sonucunda anlamlılık değerlerinin $p > 0.05$ olduğu saptanmış ve bu doğrultuda parametrik olmayan testler (Mann-Whitney U Testi, Kruskal-Wallis H Testi) uygulanmıştır. Sonuç olarak, cinsiyet, medeni durum, eğitim durumu, deplasman müsabakalarına katılım, futbol seyircisi olarak kendini tanımlama, stadyumlarda yaşanan şiddetin sorumluluğu ve stadyuma gitme sıklığı değişkenlerinin ölçeğin alt boyutları ve genel güvenlik algısı üzerinde istatistiksel olarak anlamlı etkileri olduğu belirlenmiştir.

Anahtar Kelimeler: Stadyum, Alınan Güvenlik Önlemleri, Seyirci.

INTRODUCTION

The participation of spectators in sportive competitions is shown as an effective role of the competitions. It is stated that the areas where sportive competitions have the highest number of spectators are stadiums (16). It is included in the literature studies that the competitions held in stadiums are generally hooliganised in fan groups around the world, safe areas in stadiums are restricted as a result of hooliganism and individuals do not want to come to watch competitions in stadiums (1; 17; 24; 12).

Hooliganisation and the quarrels between fan groups have led to the restriction of security areas in sports. It is explained in the literature studies that there are many aspects of violent incidents in the competitions played in stadiums. In the stadium, the provocative actions and insults of the fans in the opposite groups against each other, the media's reflection of bad events, the harsh interventions of the athletes during the competition, the critical decisions of the referees, the cheerleaders' provocation of the fans, the opposing discourses of the sports administrators against each other, the wrong and faulty design and public order deficiencies of the security officers in their duty places (11).

As a result of the incidents of violence in the stadiums, the TFF announced the security instruction in the stadiums. In the circular, in order to minimise the incidents of violence in stadiums and to prevent violent incidents, the authority to take security measures in stadiums has been given to the general directorate of security, the general directorate of gendarmerie and private security units in accordance with the regulation on the prevention of violence and irregularity in sports numbered 2012/4018, the law on the prevention of violence and irregularity in sports numbered 6222 and the instruction published by the TFF. A security committee has been established by TFF in stadiums. This committee evaluates the incidents of violence in the stadiums and imposes financial penalties on individuals and sports clubs, and it is stated that if the stadiums comply with the articles in the security instructions published by the TFF that there will be no weakness in terms of security in the stadiums, a certificate of conformity is given, and if this certificate of conformity is obtained, competitions can be played in the stadiums (28).

When the studies in the literature were analysed, it was seen that there are almost no security studies in sports and no project related to security areas in sports has been put into operation (30). When the researches conducted in general are examined, it is stated in the research results that the incidents of violence in the stadium have increased over the years and that the violent incidents in the stadiums cause material damages as well as moral damages (27). Considering the researches in the literature and the TFF security instruction, it was aimed to evaluate the security measures taken in the stadiums from the perspective of the spectators.

METHOD

Materials and Methods

In this part of the study, explanations about the research model, population and sample size, data collection process and data analysis are given. During the current research, the Directive on Scientific Research and Publication Ethics of Higher Education Institutions was followed.

Research Model

In our research, the descriptive survey model, which is within the scope of the survey model, was used. In general, researches aiming to determine any situation in a subject are defined as descriptive research model (21).

Research Group

The study group of our research consists of a total of 1540 (n=406 women, n=1134 man) volunteer fans who came to the professional football league competitions in 2022-2023.

Data Collection Tools

The data collection tools in our study consist of two parts. In the first part, the personal information forum created by the researchers), and in the second part, the "Safety in Sport" scale developed by Taştan and Ataman Yancı (2016) was used.

Personal Information Forum

A personal information forum consisting of 11 questions such as gender, marital status, age, education level, which team are you a fan of, do you have a season-pass, do you go to away matches, how do you define your spectatorship as a football spectator, with whom do you go to the stadium to watch a match, how often do you go to the stadium to watch a match, who do you think is responsible for the violence in stadiums was used.

Safety in Sport Scale

The "Safety in Sport" scale developed by Taştan and Ataman Yancı (2016) was graded in 5 stages as (1) strongly agree, (2) agree, (3) undecided, (4) disagree and (5) strongly disagree. The scale of safety in sport consists of 20 questions and 4 sub-dimensions. The sub-dimensions are as follows: Perception of the adequacy of the security measures taken: 12, 10, 13, 11, 20 (Dimension 1), Perception of prevention of violent incidents by security forces: 16, 15, 18, 14, 17, 19 (Dimension 2), Perception of the use of security systems in stadiums: 5, 4, 8, 9, 6 (Dimension 3), Perception of controls at the entrance to the stadiums: 1, 2, 3, 7 (Dimension 4). According to the Cronbach's Alpha reliability coefficient analysis to determine the reliability of the scale, Cronbach's Alpha value was calculated as .880 in the whole scale (27). The Cronbach's Alpha value of the scale in this study was found to be .815.

Data Analysis

The data of our research were collected face-to-face. Within the scope of the research, a total of 1564 participants were reached and the outliers in the data set and whether the multivariate normality assumption was met were examined with the help of Mahalanobis distance values and 24 data showing outlier outliers were removed from the data set and statistical analysis of 1540 participants was performed.

In this study, SPSS 25.0 package programme was used to analyse the data. Outliers in the data set and whether the assumption of multivariate normality was met were analysed with the help of Mahalanobis distance values and 24 data showing outlier outliers were removed from the data set. The kurtosis-skewness

coefficients were found to be between +2-2 and non-parametric tests were used in the analysis (21). Statistically, frequency, percentage and reliability coefficient calculations, Kruskal Wallis H Test and Man Witney U Test were performed. The analyses were performed according to 95% confidence interval.

FINDING

Tablo 1. Demographic Variables

Variables		f	%
Gender	Woman	406	26,4
	Man	1134	73,6
	Total	1540	100
Marital Status	Married	658	42,7
	Single	882	57,3
	Total	1540	100
Age	18-25 age range	364	23,6
	26 to 33 years old	602	39,1
	34-41 age range	294	19,1
	42- 49 age range	280	18,2
	Total	1540	100
Education Status	High School Graduate	1316	85,5
	University Graduate	224	14,5
	Total	1540	100
Which team are you a fan of	Sivas spor	396	25,7
	Kayseri spor	369	24,0
	Konya spor	387	25,1
	Antalya spor	388	25,2
	Total	1540	100
Do you have a season ticket?	Yes	210	13,6
	No	1330	86,4
	Total	1540	100
Do you go to away competitions?	Yes	252	16,4
	No	1288	83,6
	Total	1540	100
How would you define your spectatorship as a football spectator?	Very Bad	154	10,0
	Bad	154	10,0
	Centre	504	32,7
	Good	434	28,2
	Very Good	294	19,1
	Total	1540	100
With whom do you go to the stadium to watch a match?	Alone	252	16,4
	With My Friends	1064	69,1
	With My Family	224	14,5
	Total	1540	100
Who do you think is responsible for the violence in stadiums?	Hooligans	896	58,2
	Athletes	644	41,8
	Total	1540	100
How often do you go to the stadium to watch a match?	Every Two Months	434	28,2
	Once a Month	154	10,0
	Two Weeks One	112	7,3
	Every Week	840	54,5
	Total	1540	100

Table 1 shows that most of the participants were in favour of male participants (73.6%). When we examine the highest variables in the categories, single participants (57.3%) in the marital status variable, 26-33 age range

participants (39.1%) in the age variable, high school graduate participants (85.5%) in the education status variable, Sivas sport participants (25.7%) in the variable of which team are you a fan, participants who said no in the variable of do you have a season-pass (86.4%), do you go to away competitions? (83,6%), how do you define your spectatorship as a football spectator? (32,6%), who do you go to the stadium to watch a competition with? (69,1%), who do you think is responsible for the violence in stadiums? (58,2%) and how often do you go to the stadium to watch a competition? (54,5%).

Table 2. Descriptive Values Related to Scales

Variables	Minimum	Maksimum	\bar{x}	Ss	Cronbach alpha
Perception of Adequacy of Security Measures Taken (Dimension 1)	5,00	25,00	14,3455	4,48260	,776
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	6,00	30,00	14,0818	4,79764	,753
Perception of the Use of Security Systems in Stadiums (Dimension 3)	5,00	23,00	12,3818	4,10007	,781
Perception Of Controls at Entrances to Stadiums (Dimension 4)	4,00	20,00	8,1273	3,32074	,795
Safety Scale in Sport	23,00	98,00	48,9364	13,50407	,815

According to the descriptive statistics results of the scales in Table 2, it is seen that the Cronbach Alpha values of the scale total score and scale sub-dimensions are high.

Table 3. Safety Scale in Sport Normality Analysis

	Kolmogorov-Smirnova		
	Statistic	df	Sig.
Perception of Adequacy of Security Measures Taken (Dimension 1)	,082	1540	,000
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	,089	1540	,000
Perception of the Use of Security Systems in Stadiums (Dimension 3)	,084	1540	,000
Perception Of Controls at Entrances to Stadiums (Dimension 4)	,194	1540	,000
Safety Scale in Sport	,070	1540	,000

In Table 3, as a result of the normality analysis of the scale and its sub-dimensions, it was seen that the significance values were greater than 0.05 and it was decided to use nonparametric analyses in the analysis.

Table 4. Participants' Views on "Gender" Man Witney U Test Results According to Variable

Scale and Subscale Dimensions	Gender	n	Sequence Centre.	Ranking Total	U Value	z	p
Perception of Adequacy of Security Measures Taken (Dimension 1)	Woman	406	26,4	755,64	213346,000	-2,199	,028*
	Man	1134	73,6	812,02			
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	Woman	406	26,4	805,02	190414,000	-5,190	,000*
	Man	1134	73,6	672,50			
Perception of the Use of Security Systems in Stadiums (Dimension 3)	Woman	406	26,4	776,72	305767,000	-,921	,357
	Man	1134	73,6	753,12			
Perception Of Controls at Entrances to Stadiums (Dimension 4)	Woman	406	26,4	761,25	863261,000	-1,380	,168
	Man	1134	73,6	769,33			
Safety Scale in Sport	Woman	406	26,4	773,18	309785,000	-,395	,693
	Man	1134	73,6	763,02			

p<0.05*

When the results of the Man Witney U Test results of the participants' opinions according to the "gender" variable in Table 4 are examined, it is seen that there is a statistically significant difference (p<0.05) in the perception of the adequacy of the security measures taken (dimension 1) and the perception of the prevention of violent incidents by the security forces (dimension 2), while the perception of the use of security systems in stadiums (dimension 3), the perception of the controls at the entrance to the stadiums (dimension 4) and the SSI were found to be statistically insignificant (p>0.05).

Table 5. Participants' Views on "Marital Status Man Witney U Test Results According to Variable

Scale and Subscale Dimensions	Marital Status	n	Sequence, Centre.	Ranking Total	U Value	z	p
Perception of Adequacy of Security Measures Taken (Dimension 1)	Married	658	42,7	800,50	263718,000	-3,034	,002*
	Single	882	57,3	730,29			
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	Married	658	42,7	770,39	290080,000	-,011	,991
	Single	882	57,3	770,65			
Perception of the Use of Security Systems in Stadiums (Dimension 3)	Married	658	42,7	765,17	285474,000	-,547	,585
	Single	882	57,3	777,65			
Perception Of Controls at Entrances to Stadiums (Dimension 4)	Married	658	42,7	770,83	289884,000	-,034	,973
	Single	882	57,3	770,05			
Safety Scale in Sport	Married	658	42,7	779,83	281946,000	-,954	,340
	Single	882	57,3	757,99			

p<0.05*

When the results of the Man Witney U Test results of the opinions of the participants according to the "marital status" variable in Table 5 are examined, it is seen that there is a statistically significant difference ($p < 0.05$) in the perception of the adequacy of the security measures taken (dimension 1), while there is no statistically significant difference ($p > 0.05$) in the perception of the prevention of violent incidents by the security forces (dimension 2), the perception of the use of security systems in stadiums (dimension 3), the perception of the controls at the entrance to the stadiums (dimension 4) and the SSI ($p > 0.05$).

Table 6. Participants' Views on "Age" Kruskal Wallis H Test Results According to Variable

Scale and Subscale Dimensions	Age	n	Sequence Average	Chi-square Value	df	p
Perception of Adequacy of Security Measures Taken (Dimension 1)	18-25 age range	364	23,6	12,292	3	,006
	26 to 33 years old	602	39,1			
	34-41 age range	294	19,1			
	42- 49 age range	280	18,2			
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	18-25 age range	364	23,6	26,895	3	,001*
	26 to 33 years old	602	39,1			
	34-41 age range	294	19,1			
	42- 49 age range	280	18,2			
Perception of the Use of Security Systems in Stadiums (Dimension 3)	18-25 age range	364	23,6	30,736	3	,001*
	26 to 33 years old	602	39,1			
	34-41 age range	294	19,1			
	42- 49 age range	280	18,2			
Perception Of Controls at Entrances to Stadiums (Dimension 4)	18-25 age range	364	23,6	62,591	3	,001*
	26 to 33 years old	602	39,1			
	34-41 age range	294	19,1			
	42- 49 age range	280	18,2			
Safety Scale in Sport	18-25 age range	364	23,6	27,148	3	,001*
	26 to 33 years old	602	39,1			
	34-41 age range	294	19,1			
	42- 49 age range	280	18,2			

$p < 0.05^*$

When the Kruskal Wallis H Test results of the opinions of the participants according to the "age" variable in Table 6 are examined, it is seen that there is no statistically significant difference ($p > 0.05$) in the perception of the adequacy of the security measures taken (dimension 1), while there is a statistically significant difference ($p < 0.05$) in the perception of the prevention of violent incidents by security forces (dimension 2), the perception of the use of security systems in stadiums (dimension 3), the perception of controls at the entrance to the stadiums (dimension 4) and SSI.

Tablo 7. "Education Status" of Participants' Opinions Man Witney U Test Results According to Variable

Scale and Subscale Dimensions	Education Status	n	Sequence, Centre.	Ranking Total	U Value	z	p
Perception of Adequacy of Security Measures Taken (Dimension 1)	High Scholl Graduate	1316	85,5	742,20	110152,000	-6,070	,001*
	University Graduate	224	14,5	936,75			
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	High Scholl Graduate	1316	85,5	760,74	134554,000	-2,093	,003*
	University Graduate	224	14,5	827,81			
Perception of the Use of Security Systems in Stadiums (Dimension 3)	High Scholl Graduate	1316	85,5	751,36	122206,000	-4,106	,001*
	University Graduate	224	14,5	882,94			
Perception Of Controls at Entrances to Stadiums (Dimension 4)	High Scholl Graduate	1316	85,5	790,46	121128,000	-4,320	,001*
	University Graduate	224	14,5	653,25			
Safety Scale in Sport	High Scholl Graduate	1316	85,5	753,52	125048,000	-3,634	,001*
	University Graduate	224	14,5	870,25			

p<0.05*

When the results of the Man Witney U Test results of the participants' opinions according to the "education status" variable in Table 7 are analysed, a statistically significant difference (p<0.05) was found in the perception of the adequacy of the security measures taken (dimension 1), the perception of the prevention of violent incidents by the security forces (dimension 2), the perception of the use of security systems in stadiums (dimension 3), the perception of the controls at the entrance to the stadiums (dimension 4) and SSI.

Table 8. Participants' Opinions on the Question "Which Team Are You a Fan of? Kruskal Wallis H Test Results According to Variable

Scale and Subscale Dimensions	Which Team Are You a Fan Of?	n	Sequence Average	Chi-square Value	df	p
Perception of Adequacy of Security Measures Taken (Dimension 1)	Sivas spor	396	25,7	4,021	3	,259
	Kayseri spor	369	24,0			
	Konya spor	387	25,1			
	Antalya spor	388	25,2			
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	Sivas spor	396	25,7	5,801	3	,122
	Kayseri spor	369	24,0			
	Konya spor	387	25,1			
	Antalya spor	388	25,2			
Perception of the Use of Security Systems in Stadiums (Dimension 3)	Sivas spor	396	25,7	11,336	3	,001*
	Kayseri spor	369	24,0			
	Konya spor	387	25,1			
	Antalya spor	388	25,2			
Perception Of Controls at Entrances to Stadiums (Dimension 4)	Sivas spor	396	25,7	6,151	3	,105
	Kayseri spor	369	24,0			
	Konya spor	387	25,1			
	Antalya spor	388	25,2			
Safety Scale in Sport	Sivas spor	396	25,7	1,287	3	,732
	Kayseri spor	369	24,0			
	Konya spor	387	25,1			
	Antalya spor	388	25,2			

P<0.05*

When the Kruskal Wallis H Test results of the opinions of the participants according to the variable "which team you are a fan of" are examined in Table 8, it is seen that there is no statistically significant difference in the perception of the adequacy of the security measures taken (dimension 1), the perception of the prevention of violent incidents by the security forces (dimension 2), the perception of controls at the entrance to the stadiums (dimension 4) and SSI ($p>0.05$), while a statistically significant difference was found in the perception of the use of security systems in stadiums (dimension 3) ($p<0.05$).

Table 9. The Opinions of the Participants According to the Variable "Do You Have a Combined Card? Man Witney U Test Results According to Variable

Scale and Subscale Dimensions	Do You have a Combined Card?	n	Sequence, Centre.	Ranking Total	U Value	z	p																																												
Perception of Adequacy of Security Measures Taken (Dimension 1)	Yes	210	13,6	822,77	128674,000	-1,838	,066																																												
	No	1330	86,4	762,25				Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	Yes	210	13,6	867,57	119266,000	-3,414	,001*	No	1330	86,4	755,17	Perception of the Use of Security Systems in Stadiums (Dimension 3)	Yes	210	13,6	772,83	139160,000	-,082	,935	No	1330	86,4	770,13	Perception Of Controls at Entrances to Stadiums (Dimension 4)	Yes	210	13,6	664,10	117306,000	-3,775	,001*	No	1330	86,4	787,30	Safety Scale in Sport	Yes	210	13,6	803,63	132692,000	-1,162	,245
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	Yes	210	13,6	867,57	119266,000	-3,414	,001*																																												
	No	1330	86,4	755,17				Perception of the Use of Security Systems in Stadiums (Dimension 3)	Yes	210	13,6	772,83	139160,000	-,082	,935	No	1330	86,4	770,13	Perception Of Controls at Entrances to Stadiums (Dimension 4)	Yes	210	13,6	664,10	117306,000	-3,775	,001*	No	1330	86,4	787,30	Safety Scale in Sport	Yes	210	13,6	803,63	132692,000	-1,162	,245	No	1330	86,4	765,27								
Perception of the Use of Security Systems in Stadiums (Dimension 3)	Yes	210	13,6	772,83	139160,000	-,082	,935																																												
	No	1330	86,4	770,13				Perception Of Controls at Entrances to Stadiums (Dimension 4)	Yes	210	13,6	664,10	117306,000	-3,775	,001*	No	1330	86,4	787,30	Safety Scale in Sport	Yes	210	13,6	803,63	132692,000	-1,162	,245	No	1330	86,4	765,27																				
Perception Of Controls at Entrances to Stadiums (Dimension 4)	Yes	210	13,6	664,10	117306,000	-3,775	,001*																																												
	No	1330	86,4	787,30				Safety Scale in Sport	Yes	210	13,6	803,63	132692,000	-1,162	,245	No	1330	86,4	765,27																																
Safety Scale in Sport	Yes	210	13,6	803,63	132692,000	-1,162	,245																																												
	No	1330	86,4	765,27																																															

p<0.05*

In Table 9, when the results of Man Witney U Test are analysed according to the variable "Do you have a season-pass?", it is seen that there is no statistically significant difference in the Perception of Adequacy of Security Measures Taken (Dimension 1), Perception of Use of Security Systems in Stadiums (Dimension 3) and SSI (p>0.05), while there is a statistically significant difference in the Perception of Prevention of Violent Incidents by Security Forces (Dimension 2) and Perception of Controls at the Entrance to the Stadiums (Table 4) (p<0.05).

Table 10. Participants' Opinions on "Do you go to away competitions? Man Witney U Test Results According to Variable

Scale and Subscale Dimensions	Do you to Away Competitions	n	Sequence Centre.	Ranking Total	U Value	z	p																																												
Perception of Adequacy of Security Measures Taken (Dimension 1)	Yes	47	46,5	942,78	118874,000	-6,744	,001*																																												
	No	24	23,8	736,79				Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	Yes	47	46,5	922,56	123970,000	-5,953	,001*	No	24	23,8	740,75	Perception of the Use of Security Systems in Stadiums (Dimension 3)	Yes	47	46,5	692,33	142590,000	-3,061	,002*	No	24	23,8	785,79	Perception Of Controls at Entrances to Stadiums (Dimension 4)	Yes	47	46,5	777,50	160524,000	-,276	,728	No	24	23,8	769,13	Safety Scale in Sport	Yes	47	46,5	855,67	140826,000	-3,326	,001*
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	Yes	47	46,5	922,56	123970,000	-5,953	,001*																																												
	No	24	23,8	740,75				Perception of the Use of Security Systems in Stadiums (Dimension 3)	Yes	47	46,5	692,33	142590,000	-3,061	,002*	No	24	23,8	785,79	Perception Of Controls at Entrances to Stadiums (Dimension 4)	Yes	47	46,5	777,50	160524,000	-,276	,728	No	24	23,8	769,13	Safety Scale in Sport	Yes	47	46,5	855,67	140826,000	-3,326	,001*	No	24	23,8	753,84								
Perception of the Use of Security Systems in Stadiums (Dimension 3)	Yes	47	46,5	692,33	142590,000	-3,061	,002*																																												
	No	24	23,8	785,79				Perception Of Controls at Entrances to Stadiums (Dimension 4)	Yes	47	46,5	777,50	160524,000	-,276	,728	No	24	23,8	769,13	Safety Scale in Sport	Yes	47	46,5	855,67	140826,000	-3,326	,001*	No	24	23,8	753,84																				
Perception Of Controls at Entrances to Stadiums (Dimension 4)	Yes	47	46,5	777,50	160524,000	-,276	,728																																												
	No	24	23,8	769,13				Safety Scale in Sport	Yes	47	46,5	855,67	140826,000	-3,326	,001*	No	24	23,8	753,84																																
Safety Scale in Sport	Yes	47	46,5	855,67	140826,000	-3,326	,001*																																												
	No	24	23,8	753,84																																															

P<0.05*

In Table 10, the views of the participants according to the variable "Do you go to away competitions?" variable, a statistically significant difference ($p < 0.05$) is observed in the perception of the adequacy of the security measures taken (dimension 1), the perception of the prevention of violent incidents by the security forces (dimension 2), the perception of the controls at the entrance to the stadiums (dimension 4) and the SSI, while no statistically significant difference is detected in the perception of the use of security systems in stadiums (dimension 3) ($p > 0.05$).

Table 11. Participants' Opinions on "How Would You Define Your Spectatorship as a Football Spectator? Variable According to Kruskal Wallis H Test Results

Scale and Subscale Dimensions	How Would You Define Your Spectatorship as a Football Spectator?	n	Sequence Average	Chi-square Value	df	p
Perception of Adequacy of Security Measures Taken (Dimension 1)	Very Bad	154	10,0	109,005	4	,001*
	Bad	154	10,0			
	Centre	504	32,7			
	Good	434	28,2			
	Very Good	294	19,1			
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	Very Bad	154	10,0	41,751	4	,001*
	Bad	154	10,0			
	Centre	504	32,7			
	Good	434	28,2			
	Very Good	294	19,1			
Perception of the Use of Security Systems in Stadiums (Dimension 3)	Very Bad	154	10,0	46,864	4	,001*
	Bad	154	10,0			
	Centre	504	32,7			
	Good	434	28,2			
	Very Good	294	19,1			
Perception Of Controls at Entrances to Stadiums (Dimension 4)	Very Bad	154	10,0	113,902	4	,001*
	Bad	154	10,0			
	Centre	504	32,7			
	Good	434	28,2			
	Very Good	294	19,1			
Safety Scale in Sport	Very Bad	154	10,0	110,270	4	,001*
	Bad	154	10,0			
	Centre	504	32,7			
	Good	434	28,2			
	Very Good	294	19,1			

P<0.05*

When the Kruskal Wallis H Test results of the participants' opinions according to the variable "How would you define your spectatorship as a football spectator?" are analysed in Table 11, a statistically significant difference was found in the perception of the adequacy of the security measures taken (dimension 1), the perception of the prevention of violent incidents by the security forces (dimension 2), the perception of the use of security systems in stadiums (dimension 3), the perception of the controls at the entrance to the stadiums (dimension 4) and SSI ($p < 0.05$).

Table 12. Participants' Opinions on the Question "With whom do you come to the competitions in the stadium?
According to Variable Kruskal Wallis H Test Results

Scale and Subscale Dimensions	With Whom do You the Competitions in the Stadium	n	Sequence Average	Chi-square Value	df	p
Perception of Adequacy of Security Measures Taken (Dimension 1)	Alone	252	16,4	6,708	3	,035
	With My Friends	1064	69,1			
	With My Family	224	14,5			
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	Alone	252	16,4	29,336	3	,001*
	With My Friends	1064	69,1			
	With My Family	224	14,5			
Perception of the Use of Security Systems in Stadiums (Dimension 3)	Alone	252	16,4	5,536	3	,006
	With My Friends	1064	69,1			
	With My Family	224	14,5			
Perception Of Controls at Entrances to Stadiums (Dimension 4)	Alone	252	16,4	22,887	3	,001*
	With My Friends	1064	69,1			
	With My Family	224	14,5			
Safety Scale in Sport	Alone	252	16,4	24,075	3	,001*
	With My Friends	1064	69,1			
	With My Family	224	14,5			

P<0,05*

When the Kruskal Wallis H Test results are analysed in Table 12 according to the variable "with whom do you come to the competitions in the stadium" of the participants' opinions, no statistically significant difference was found in the perception of the adequacy of the security measures taken (dimension 1), the perception of the use of security systems in stadiums (dimension 3) ($p>0.05$), while a statistically significant difference was detected in the perception of preventing violent incidents by security forces (dimension 2), perception of controls at the entrance to the stadiums (dimension 4) and SSI ($p<0,05$).

Table 13. Participants' Opinions "Who do you think is responsible for the violence in the stadiums?" Man Witney U Test Results According to Variable

Scale and Subscale Dimensions	Who dou Think is Responsible for the Violence in the Stadium?	n	Sequence Centre.	Ranking Total	U Value	z	p																																												
Perception of Adequacy of Security Measures Taken (Dimension 1)	Hooligans	896	58,2	829,24	250684,000	-4,4007	,001*																																												
	Athletes	644	41,8	728,28				Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	Hooligans	896	58,2	828,48	251174,000	-4,351	,001*	Athletes	644	41,8	728,83	Perception of the Use of Security Systems in Stadiums (Dimension 3)	Hooligans	896	58,2	747,37	273616,000	-1,736	,083	Athletes	644	41,8	787,13	Perception Of Controls at Entrances to Stadiums (Dimension 4)	Hooligans	896	58,2	844,61	240786,000	-5,610	,001*	Athletes	644	41,8	717,23	Safety Scale in Sport	Hooligans	896	58,2	820,41	256368,000	-3,736	,001*
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	Hooligans	896	58,2	828,48	251174,000	-4,351	,001*																																												
	Athletes	644	41,8	728,83				Perception of the Use of Security Systems in Stadiums (Dimension 3)	Hooligans	896	58,2	747,37	273616,000	-1,736	,083	Athletes	644	41,8	787,13	Perception Of Controls at Entrances to Stadiums (Dimension 4)	Hooligans	896	58,2	844,61	240786,000	-5,610	,001*	Athletes	644	41,8	717,23	Safety Scale in Sport	Hooligans	896	58,2	820,41	256368,000	-3,736	,001*	Athletes	644	41,8	734,63								
Perception of the Use of Security Systems in Stadiums (Dimension 3)	Hooligans	896	58,2	747,37	273616,000	-1,736	,083																																												
	Athletes	644	41,8	787,13				Perception Of Controls at Entrances to Stadiums (Dimension 4)	Hooligans	896	58,2	844,61	240786,000	-5,610	,001*	Athletes	644	41,8	717,23	Safety Scale in Sport	Hooligans	896	58,2	820,41	256368,000	-3,736	,001*	Athletes	644	41,8	734,63																				
Perception Of Controls at Entrances to Stadiums (Dimension 4)	Hooligans	896	58,2	844,61	240786,000	-5,610	,001*																																												
	Athletes	644	41,8	717,23				Safety Scale in Sport	Hooligans	896	58,2	820,41	256368,000	-3,736	,001*	Athletes	644	41,8	734,63																																
Safety Scale in Sport	Hooligans	896	58,2	820,41	256368,000	-3,736	,001*																																												
	Athletes	644	41,8	734,63																																															

P<0.05*

In Table 13, when the results of the Man Witney U Test are analysed according to the variable "Who do you think is responsible for the violence in the stadiums? " variable, a statistically significant difference (p<0.05) is observed in the perception of the adequacy of the security measures taken (dimension 1), the perception of the prevention of violent incidents by security forces (dimension 2), the perception of controls at the entrance to the stadiums (dimension 4) and the SSI, while no statistically significant difference (p>0.05) is detected in the perception of the use of security systems in stadiums (dimension 3).

Table 14. Participants' Opinions on the Variable "How Often Do You Go to the Stadium to Watch a Competition?" Variable According to Kruskal Wallis H Test Results

Scale and Subscale Dimensions	How Often do You go to the Stadium to Wach a Competition?	n	Sequence Average	Chi-squar Value	df	p
Perception of Adequacy of Security Measures Taken (Dimension 1)	Every Two Months	434	28,2	94,189	3	,001*
	Once a Month	154	10,0			
	Two Weeks One	112	7,3			
	Every Week	840	54,5			
Perception of Prevention of Violent Incidents by Security Forces (Dimension 2)	Every Two Months	434	28,2	27,607	3	,001*
	Once a Month	154	10,0			
	Two Weeks One	112	7,3			
	Every Week	840	54,5			
Perception of the Use of Security Systems in Stadiums (Dimension 3)	Every Two Months	434	28,2	14,831	3	,002*
	Once a Month	154	10,0			
	Two Weeks One	112	7,3			
	Every Week	840	54,5			
Perception Of Controls at Entrances to Stadiums (Dimension 4)	Every Two Months	434	28,2	114,342	3	,001*
	Once a Month	154	10,0			
	Two Weeks One	112	7,3			
	Every Week	840	54,5			
Safety Scale in Sport	Every Two Months	434	28,2	75,335	3	,001*
	Once a Month	154	10,0			
	Two Weeks One	112	7,3			
	Every Week	840	54,5			

p<0.05*

When the Kruskal Wallis H Test results of the participants' opinions according to the variable "how often do you go to the stadium to watch the competition?" are examined in Table 14, a statistically significant difference was found in the perception of the adequacy of the security measures taken (dimension 1), the perception of the prevention of violent incidents by the security forces (dimension 2), the perception of the use of security systems in stadiums (dimension 3), the perception of the controls at the entrance to the stadiums (dimension 4) and SSI ($p < 0.05$).

DISCUSSION AND CONCLUSION

In this research, the results of the evaluation of the security measures taken in the stadiums in terms of the spectators in terms of gender, marital status, age, educational status, which team are you a fan of, do you have a season-pass, do you go to away matches, how do you define your spectatorship as a football spectator, with whom do you go to the stadium to watch a match, how often do you go to the stadium to watch a match, who do you think is responsible for the violence in the stadiums are explained below.

When demographic variables were analysed, it was seen that male participants were in the majority. When the highest variables are examined in our research; in the marital status variable of singles, in the age variable of 26 -33 age range, in the educational status variable of high school graduates, in the variable of which team are you a supporter of Sivasspor, in the variable of do you have a season-pass for those who do not have a season-pass, in the variable of do you go to away competitions for those who do not go to away competitions, When the level of football spectatorship was evaluated by the individual himself/herself, it was seen that the level of football spectatorship was at a moderate level, in the variable of with whom do you go to the competitions in the stadiums, it was seen that the participants who said with friends, hooligans were evaluated as responsible for the violence experienced in the stadium, and the frequency of going to the competitions in the stadiums every week (Table 1).

When the gender variable is examined in Table 4, it is seen that there is a statistically significant difference in the sub-dimensions of the perception of the adequacy of the security measures taken and the perception of the prevention of violent incidents by the security forces, while there is no statistically significant difference in the sub-dimensions of the perception of the use of security systems in stadiums, the perception of the controls at the entrance to the stadiums and the SSI. When the studies conducted in the literature are examined, as seen in the demographic variables in our research, there is a statistical difference in the perception of security adequacy in the sub-dimensions of the scale in which male participants are at a higher level than females in the researches, and in the perception of the adequacy of preventing the violent incidents by the security forces, and this difference is the result that the security guards working in the stadiums are sufficient in number and that the security forces are insufficient in preventing the violent incidents (7; 5; 10; 3; 6; 2; 23).

When the marital status variable is analysed, a statistical difference is observed in the perception of the adequacy of the security measures taken, while no statistical difference is observed in the total score of the scale and other sub-dimensions (Table 5).

When the results of the age variable of the participants are analysed in Table 6, a statistically significant difference was found in the sub-dimensions of the perception of the prevention of violent incidents by security forces, the perception of the use of security systems in stadiums, the perception of the controls at the entrance to the stadiums and the SSI. However, no statistically significant difference was found in the sub-dimension of the perception of the adequacy of the security measures taken in the same variable. In the research conducted by Taştan (2019), Yücel et al. (2018), statistical difference was not observed in the age variable. When the studies in the literature are examined, there are results that there is a statistical difference in the sub-dimensions of the perception of being prevented by security forces, the perception of the use of security systems in stadiums, and the perception of controls at the entrance to stadiums (9; 29; 20; 19; 18; 14; 13; 30).

In Table 7, it was seen that there was a statistical difference in all sub-dimensions of the scale and in the total score of the scale. When the studies in the literature are examined, it is seen that there are statistical differences in individuals with higher education level in the education level variable (25; 22; 15).

In Table 8, while there is a statistical difference in the sub-dimension of the perception of the use of security systems in stadiums, there is no statistical difference in the total score of the scale and other sub-dimensions. When the results of the studies in the literature are examined, it is stated that there is a statistical difference in the sub-dimension of the perception of the use of security systems in stadiums and this difference is related to technological sports devices (4; 5; 8; 10).

When the results of the variable "Do you have a season ticket?" are analysed in Table 9, it is seen that there is no statistically significant difference in the perception of the adequacy of the security measures taken, the perception of the use of security systems in the stadiums and the perception of the use of security systems in the stadiums, while there is a statistically significant difference in the perception of the prevention of violent incidents by the security forces and the perception of the controls at the entrance to the stadiums.

When the results of the variable "Do you go to away matches?" are analysed in Table 10, it is seen that there is a statistically significant difference in the perception of the adequacy of the security measures taken, the perception of the prevention of violent incidents by the security forces, the perception of the controls at the entrance to the stadiums and the SSI, while there is no statistically significant difference in the perception of the use of security systems in the stadiums.

When the variable "How would you define your spectatorship as a football spectator?" is analysed in Table 11, a statistical difference was found in the sub-dimensions and total score of the scale.

In Table 12, a statistically significant difference was found in the sub-dimensions of the perception of prevention of violent incidents by security forces, perception of controls at the entrance to the stadiums and SSI according to the variable of who you come to the competitions in the stadium.

When the results of the variable "Who do you think is responsible for the violence in stadiums?" are analysed in Table 13, it is seen that there is no statistically significant difference in the sub-dimension of the perception of the use of security systems in stadiums, while there is a statistically significant difference in the total score of the scale and other sub-dimensions.

When the results of the variable "How often do you go to the stadium to watch a competition?" are analysed in Table 14, a statistically significant difference was found in the scale sub-dimensions and the total score of the scale ($p < 0.05$).

As a result; in dimension 1 of the scale sub-dimensions, gender, marital status, educational status, do you go to away matches, how do you define your spectatorship as a football spectator, who do you think is responsible for the violence in stadiums, how often do you go to the stadium to watch competitions, in dimension 2 of the scale sub-dimensions, gender, educational status, do you have a combine card? do you go to away matches, how do you define your spectatorship as a football spectator, with whom do you go to matches, who do you think is responsible for the violence in stadiums, how often do you go to the stadium to watch a match, in dimension 3, age, education level, which team do you support, how do you define your spectatorship as a football spectator? in dimension 4, age, educational level, do you have a combine card, do you go to away matches, how do you define your spectatorship as a football spectator, who do you come to the matches in the stadium with, who do you think is responsible for the violence in stadiums, how often do you go to the stadium to watch a match? Statistical differences were found in the variables of age, education status, do you go to away matches, how do you define your spectatorship as a football spectator, how do you define your spectatorship as a football spectator, who do you go to the matches in the stadium with, who do you think is responsible for the violence in the stadiums, how often do you go to the stadium to watch a match?

Based on the findings of this research, several recommendations can be proposed:

The study identified significant differences in perceptions of security measures based on gender and age groups, suggesting that different demographic groups have distinct security needs. Security measures should therefore be tailored to address the specific concerns of these groups. For instance, specific arrangements could be made to ensure that female spectators have easier access to security personnel and are more informed about security protocols.

Given the observed differences in security perceptions based on educational background, it would be beneficial to implement educational campaigns and programs aimed at informing spectators about the effectiveness of security measures and stadium regulations. These programs could help increase trust in security measures by ensuring that spectators better understand how these systems function.

The research highlights that some groups perceive the technological security systems in stadiums as inadequate. This perception may indicate that current systems are not meeting expectations. Therefore, it is crucial to upgrade these technologies and enhance their effectiveness. Additionally, educating spectators on how these systems work and their role in ensuring safety could improve their perception and trust in these systems.

Findings related to the frequency of attendance and how spectators define their level of engagement suggest the need for strategies to strengthen fans' connection to the stadium experience. Such strategies could include supporting fan groups, organizing special events, and developing loyalty programs to encourage more frequent attendance and deeper engagement with the sport.

The study indicates that security forces are perceived as insufficient in preventing violence in stadiums. In response, it is recommended to increase the number of security personnel, develop more effective intervention techniques for handling violent incidents, and address the root causes of violence through comprehensive preventative measures.

These recommendations aim to enhance the effectiveness of security measures in stadiums and improve spectators' perceptions of safety, ultimately contributing to a more secure and enjoyable spectator experience.

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